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Management of the plant collection at the Eastwoodhill Arboretum

Volume II: Appendices

A thesis presented in partial fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in Horticultural Science at Massey University.

Marion Brenda MacKay
1996
Abstract

Eastwoodhill Arboretum at Ngatapa, near Gisborne, New Zealand, was developed by the late William Douglas Cook (1884-1967). Between 1920 and 1960, Cook planted an extensive range of exotic woody trees, shrubs and climbers throughout 65 hectares of the 130 hectare property. Considered by many to be an important collection in New Zealand, the Arboretum deteriorated during Cook’s latter years due to diminishing time and resources for maintenance. An Act of Parliament in 1975 established the Eastwoodhill Trust Board and empowered them to ‘maintain and develop the property as an arboretum’. Under the Board’s direction, a clearing strategy was initiated to solve the problems of overcrowding and poor plant condition in the Arboretum and to establish a catalogue of the collection.

To meet their obligations under the Act, the Trust Board had to focus their management on the plant collection. The biological value of the Arboretum had to be sustained, particularly with respect to issues of conservation and biodiversity. The visual value of the Arboretum, an important factor for attracting public support, had deteriorated and required intervention. Moreover, as the landscape of the Arboretum was not a natural system and lacked self-regulating processes for renewal of important plants or plant groupings, systematic management was needed to sustain the collection within this human-made landscape. The Trust Board’s efforts to address these issues were hampered by a lack of resources and appropriate data.

This research reports the results of an extensive landscape management study of the collection and develops and characterises the data and management processes needed for long term management of the biological value of the Arboretum. Although management frameworks and processes for landscape management have been reported in the literature, most operate at scales inappropriate for single sites and none focus upon the human-made landscape of an arboretum. Thus, while common characteristics of these processes (e.g. inventory, evaluation, development of goals and strategies) provided a basic framework, their application to an arboretum required development.

A complete and current inventory of the plant collection was made. The Arboretum was mapped at 1:200 using a grid square method, and a catalogue formed listing every plant in the collection. A second catalogue recorded the extensive range of accessions that had previously been in the collection but which no longer existed. In addition, about 1200 herbarium samples were made, two potential database formats developed for the data, and a record of management history formulated.

Although the inventory showed that the collection was extensive, its importance could only be established through an evaluation. As an extensive literature search failed to locate a suitable
process for evaluating a plant collection on a single site, a novel process was proposed that evaluated the site using two key concepts, significance and condition, and linked this evaluation to the goals of the Arboretum. Significance, a measure of the importance of a site according to selected landscape values, was determined using various indicators of diversity and rarity. Analysis revealed that Eastwoodhill was the most significant collection of its type in New Zealand, with 1666 species and 962 cultivars of trees, shrubs and climbers, of which 73% were of northern hemisphere origin and 41% of Asian origin. Eighty percent of species and cultivars in the collection were not readily available from commercial sources in New Zealand, and 102 species were on world conservation lists. These data were used to identify the most significant genera in the collection. The second concept, condition, measures health (in the broadest sense) of the site using such indicators as age, density, and maturity. Measurements of age and density showed that condition of the collection was below optimum. Moreover, plant death, particularly of short lived species, had changed the composition of the collection to the extent that about 53% of the plants collected by Cook no longer existed.

The evaluation process also revealed that while the collection had the potential to meet existing goals, condition was not ideal and unless it was improved significance could be lost. This interaction between significance and condition lead to the proposal of a new concept for ‘landscape category’ as a framework for describing the relationship between the two factors. Four categories, each requiring different management actions, were derived and discussed. The mission of the arboretum indicates which category is required, while the evaluation data show which category actually applies. To achieve the role of an arboretum in the long term Eastwoodhill needs to be a category one landscape (i.e. significant and in good condition), but is currently in category two (i.e. significant but with condition below par). This discrepancy between actual category and required category indicated the subsequent management action necessary to bring the Arboretum to category one status.

The second new concept arising from this research was developed as part of the processing stage of the evaluation. As Eastwoodhill is an arboretum, and biological value underpins its primary purpose, both biological significance and condition must be excellent. But vegetation also has aesthetic values, particularly visual qualities, and these play an essential role in many of the human values associated with arboreta. Landscape management paradigms were established to provide a framework for managing the balance between biological and visual value of a site. The paradigms describe a hierarchy for managing the interplay between biological and visual values, and can be configured for either value in the primary position. This concept provides a framework for integrating values and prioritising subsequent management actions. The evaluation data,
landscape category, and landscape management paradigms were used to propose management actions and priorities for those actions.

Three workshops were conducted during the course of this research to address a series of collection management issues. Conducted using a systematic management approach, the workshops involved a panel of experts using the data from inventory and evaluation to prepare three reports outlining plans and decisions for short and long term management of the plant collection. An important long term outcome was an assessment of the collection using botanical and aesthetic rating scales to determine the intrinsic importance of the genera in the collection. These data were used to identify the 'key' genera that would form the focus of collection development and to determine roles for the Arboretum. Detailed operational plans for three parks and two key genera within the Arboretum were also prepared during the workshops. Park plans covered objectives for the park, composition of the park, botanical and aesthetic importance of plants in the park, and future development strategies. Genus plans covered composition of that genus in the collection, status of key plants in the field, and future development policies. A key feature of park and genus plans was a system of rating scales used to determine plant status and prioritise management decisions. Development of park and genus plans led to a proposal for a method for vegetation management in human-made landscapes.

Overall synthesis of the management process led to a proposal for a model for management of a plant collection that could be applied to Eastwoodhill and other plant collections. Understanding of the underpinning principles allows the model to be readily adapted for application to other landscapes.

Keywords: arboretum management, botanic garden management, landscape evaluation, landscape inventory, landscape management, plant collection, vegetation management.
Acknowledgements

I am very appreciative of the efforts of my supervisors in helping me complete this work. Dr David Chalmers was an enthusiastic participant in the workshops, and provided valuable editorial comment on early drafts of this thesis. In more recent times Dr Tony Jackman and Professor Errol Hewett made themselves available for consultation and I am grateful for their patient, thorough and timely edits of this work.

I wish to thank the Department of Plant Science and Massey University for the opportunity to undertake postgraduate study. I am particularly grateful to Professor Robert Anderson, Dean of Agricultural and Horticultural Sciences, for encouraging me to undertake the early visits to Eastwoodhill that led to this work being started.

The Eastwoodhill Trust Board and associates played a key role in this work. I thank them for making the Arboretum and its facilities available for this study, and for their willingness to support and participate in the workshops. The curator, Mr Clapperton, provided hospitality on many occasions and assisted with information and frequent discussions about the Arboretum.

This work would not have been possible without the funding support provided by the Massey University Agricultural Research Foundation, the C. Alma Baker Trust, the New Zealand Lottery Board, the Massey University Research Fund and the Faculty of Agricultural and Horticultural Sciences. I am grateful to these bodies for their support.

Studying the plant collection at Eastwoodhill required considerable field work and regular visits to Gisborne. I am very grateful to Stuart and Jackie Davis, for extending their hospitality to me on numerous occasions and allowing me to use their home as a base for my field work.

My family and friends have continued to give moral support to this endeavour. My parents, and my friends Pam Howell and Elizabeth Patching, deserve special mention for always being available with time to listen and give encouragement.

Finally, and most of all, my husband Bruce deserves the highest praise for his unlimited dedication and patience over many years. He gave energy, drive, and generosity of spirit that helped me complete this work and I am deeply grateful to him for his continued encouragement and contribution throughout this study.
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Introduction to Volume II

This volume contains the appendices that relate to the thesis 'Management of the plant collection at the Eastwoodhill Arboretum' which comprises Volume I. These appendices contain various archival data and documents that relate to the investigations that were carried out to complete the thesis.

Appendices 1, 2 and 3 are inventory documents for the collection and are discussed in Chapter 2 in Volume I.

Appendix 4 is part of the evaluation of the collection and relates to Chapter 3 in Volume I.

Appendices 5, 6 and 7 are the three workshop reports that were completed as part of this study and relate primarily to Chapter 4 in Volume I, but also to Chapters 5 and 6. These reports were written several years before this thesis was completed, and there are sometimes minor differences in detail between them and the main body of the thesis, e.g. numbers of species and cultivars in the collection may have changed slightly due to new data subsequent to the workshops. It should also be noted that, although the author was acting as workshop manager at the time, the workshop reports represent the consensus view of the workshop group, and not the view of the author.

Appendix 8 is the collection assessment data and relates to Chapter 5 in Volume I.
Catalogue of the current collection

EASTWOODHILL ARBORETUM
NGATAPA, GISBORNE

Inventory Part One: The 'current' collection

CATALOGUE OF TREES, SHRUBS AND CLIMBERS

Marion MacKay
Massey University, Palmerston North

First published 1989
Revised but not re-published 1993

Eastwoodhill Publication No. 1
This catalogue is one of three parts which comprise the inventory for the plant collection at the Eastwoodhill Arboretum. This catalogue describes the current collection. Part two is the accompanying set of maps which show the location of each tree. Part three describes the additional plant material which was in the collection but is no longer present. These documents have been prepared following the completion of a comprehensive inventory of all plants at the Arboretum.

Acknowledgements

The author acknowledges the information provided by Mr G.W. Clapperton, Curator, Eastwoodhill, and Mr R.J. Berry, Hackfalls Arboretum, Tiniroto.

The preparation of this catalogue and the accompanying plan set was completed with the support of the Massey University Agricultural Research Foundation, the C.Alma Baker Trust, and the New Zealand Lottery Board.
INTRODUCTION

This catalogue and the associated set of plans are the result of a three year study on the plant material at the Eastwoodhill Arboretum. This project is the founding study of a programme on botanical resources at the Arboretum, and in New Zealand, which has been initiated at the Department of Horticultural Science at Massey University.

Eastwoodhill is 35km from Gisborne in a relatively isolated rural area of undulating to steep hill country. The Arboretum encompasses 65 hectares, with another 65 hectares of land unplanted. The elevation at the Eastwoodhill homestead is 150m a.s.l. with higher ridges to the north and west. Latitude is 38 degrees 33 minutes south, and longitude 177 degrees 40 minutes east. Rainfall averages 1000mm annually. Frosts may be minus 4-7 degrees Celsius.

The Arboretum contains mostly northern hemisphere trees shrubs and climbers, approximately 2600 species and cultivars of plants, with about 8000 trees in all. Northern hemisphere plants make up 75% of the collection, 15% is southern hemisphere flora, 10% horticultural origin. A significant portion of the collection (42%) is of Asian origin.

The Arboretum was the life's work of Mr W.D. Cook (1884-1967), horticulturist, of Gisborne. Douglas Cook came to the property in 1910; he described it as virgin land of mixed grasses and covered in manuka scrub. In 1910 he planted radiata pine and eucalyptus for firewood and an orchard for home use. Many thousands of timber trees were planted on dry ridges and poor places. The framework for park planting included Platanus orientalis, Acer pseudoplatanus, Acer platanoides. He started with what he described as 'bits and pieces', but began planting in quantity in 1917 after returning unfit from World War 1. He was disturbed by what he had seen in Europe and was afraid that the north would destroy itself along with its trees. In 1922-1924 Douglas Cook travelled to England and visited gardens. "I loved the country scene in England and its beautiful parks and wondered how far I could get in the creation of a park in one lifetime. I determined to make a start." He began acquiring plants in earnest in about 1927 and continued to do so until the late 1950s. Glen Douglas was the last planting, in about 1960.

Although Mr Cook obtained some plants from New Zealand sources, the majority of the material came from overseas. The main supplier was Hillier and Sons of England. Over time Mr Cook imported about 5000 different species and cultivars of plants. Although only about half remain today, he had amassed a collection of trees unique in New Zealand. In 1949 he wrote in the Royal Horticultural Society journal, "We hope in the very near future to be growing at Eastwoodhill practically every tree and shrub available in Britain." For his lifelong contribution to horticulture Douglas Cook was awarded the prestigious Veitch Memorial Medal.

In his latter years Mr Cook was anxious that his collection be preserved. Two years before Mr Cook's death Eastwoodhill was purchased by local businessman Mr H.B. Williams of Gisborne. In 1975, after the passing of the Eastwoodhill Trust Act, Mr Williams gifted the Arboretum to the newly formed Eastwoodhill Trust Board. In the initial years after Mr Cook’s death investigation of the collection was done by Mr R.J. Berry of Gisborne. He was a member of the Trust Board and compiled information on the collection by way of a catalogue in 1976, revised in 1980 and 1982.
I became associated with the Arboretum from early 1986. At that time it was apparent that, for planning purposes, a detailed inventory of the collection was needed. The property had not been comprehensively mapped and the full extent of the collection was unknown. Each park within the arboretum was subjected to a detailed study involving field and laboratory work. Initially the only information available was the early work by Mr Berry, and some survey work undertaken about 20 years ago which covered the lower parks of the arboretum; latterly Mr Clapperton constructed a map of the property at 1:2000 from aerial photographs. Using this information as a base I formed plans for each park at a scale of 1:200. These show every tree plus physical features. The name for the tree is shown, its reference number, and the name of the person who has confirmed the identity of that particular tree. Written descriptions and photographs were taken when appropriate. An herbarium of approximately 1200 specimens and considerable written archival material complete the data.

Although the identity of every plant may not be known, the documents provided by this study form a framework for the addition of further information, and the basis for further study of the collection. I wish to thank the Eastwoodhill Trust Board for their goodwill and cooperation for the duration of this project.

Marion MacKay
January 1993

Footnotes
1. Physical information provided by Mr R.J.Berry

2. A review of the material imported for the collection can be found in part three of the inventory.
Appendix 1: Catalogue of the current collection

The catalogue method

This catalogue is an alphabetical listing of all the trees, shrubs and climbers at the Eastwoodhill Arboretum. Each entry follows the pattern:


Not all pieces of information are available for each entry. Location is indicated by number and letter codes, e.g. M3, L4, N9, which refer to a particular grid square on the map. Confirmation of identity is indicated by the + sign, and the initials of the person by whom the identity was confirmed. For example, *Lagunaria patersonii* M3+MM, is located in square M3 and the identity has been confirmed by MM, which in this case is the author.

Confirmation of identity codes
AJ Allan Jellyman
BB Bob Berry
BS Bill Sykes
CN The notebooks of W D Cook
DG Dorothy Grey
DJC David Chalmers
E Eastwoodhill Plant Management Committee
GC Garry Clapperton
HH Dr H Heine
IDS Visiting group of the International Dendrology Society, Feb 1990.
JD John Dean
JN John Nichols
MM Marion MacKay
MT Metal tag attached to the tree
McK Ian McKean
RF Ray Freeman

NM Indicates a plant that is catalogued but not entered onto the maps.
Appendix 1: Catalogue of the current collection

Sources of plant material.

Anderson
Andersons Nursery, Napier, New Zealand.

Appleton
Appletons Tree Nursery, Nelson, New Zealand.

Barrett
Taranaki, New Zealand.

Bayley
R. Bayley, Gisborne, New Zealand.

Berry
Bob Berry, Tintinoto, New Zealand.

Bull
D. Bull, Massey University Grounds Maintenance, Palmerston North, New Zealand.

Bush
Spencer Bush, Arboretum Supervisor.

Cave
Cave’s Tree Nursery, Cambridge, New Zealand.

Cedar Lodge
Cedar Lodge Nursery, New Plymouth, New Zealand.

Collier
Gordon Collier, Taihape, New Zealand.

Costello
Terry Costello, Tairawhiti Polytech, Gisborne, New Zealand.

Denes
Denes Gardenway, Havelock Nth, New Zealand.

D&D
Duncan and Davies Nursery, New Plymouth, New Zealand.

DSIR
Department of Industrial and Scientific Research, New Zealand; Ak, Auckland; Ax Alexandra.

Etherington
G. Etherington, Nelson, New Zealand.

Food Resources Ld
Auckland, New Zealand.

Fraser
Frasers Garden Centre, Kihikihi, New Zealand.

Freeman
Ray Freeman, Albany, New Zealand.

FRI
Forestry Research Institute, Rotorua, New Zealand.

Gallen
Judge Gallen, Havelock Nth, New Zealand.

Gordon
Ron Gordon, Taihape, New Zealand.

Goodwin
Jack Goodwin, New Plymouth, New Zealand.

Goudie
Goudie’s Nursery, New Zealand.

Hamilton
Don Hamilton, Katikati, New Zealand.

Harrison
Harrisons Tree Nursery, Palmerston North, New Zealand.

Hatch
Terry Hatch, Joy Plants, Pupekeoho, New Zealand.

Henderson
Jarrah Park, Tauranga, New Zealand.

Heritage
Heritage Horticulture, New Zealand.

H&S
Hillier and Sons, England.

Hortex
John Stuart-Menzies, Tauranga, New Zealand.

Horsham
John Horsham, Scotland.

Horton
Horton’s Nursery, New Zealand.

IDS
Plants purchased with money donated by the International Dendrology Society.

Jellyman
Allan Jellyman, New Plymouth, New Zealand.

Just
B H Just, Palmerston North, New Zealand.

Karaca
Hayrettin Karaca, Karaca Arboretum, Turkey.

KH

MAF
Ministry of Agriculture and Fisheries, New Zealand.

Martin E.
E. Martin, Hamilton, New Zealand.

Massey
The New Zealand Rhododendron Association Nusery, previously attached to Massey University, New Zealand.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>McKay</td>
<td>Bill McKay, then of Gisborne, New Zealand.</td>
</tr>
<tr>
<td>McKeen</td>
<td>Ian McKeen, Rangiwhaia, New Zealand.</td>
</tr>
<tr>
<td>Millichamp</td>
<td>Millichamp's Nursery, Ashburton, New Zealand.</td>
</tr>
<tr>
<td>Mike Steven</td>
<td>Hamilton, New Zealand.</td>
</tr>
<tr>
<td>Mortimor</td>
<td>Bunny Mortimor, Hamilton, New Zealand.</td>
</tr>
<tr>
<td>Murphy</td>
<td>Peter Murphy, Gisborne, New Zealand.</td>
</tr>
<tr>
<td>MWD</td>
<td>Ministry of Works and Development, Plant Materials Centre, New Zealand.</td>
</tr>
<tr>
<td>Nairn</td>
<td>Nairn Brothers Nursery, Christchurch, New Zealand.</td>
</tr>
<tr>
<td>Nichols</td>
<td>John Nichols, Tauranga, New Zealand.</td>
</tr>
<tr>
<td>NZFS</td>
<td>New Zealand Forest Service, New Zealand.</td>
</tr>
<tr>
<td>NZRA</td>
<td>New Zealand Rhododendron Association.</td>
</tr>
<tr>
<td>Ormond</td>
<td>Peter Ormond, Havelock Nth, New Zealand.</td>
</tr>
<tr>
<td>Overbye</td>
<td>John Overbye, Ormond, Gisborne, New Zealand.</td>
</tr>
<tr>
<td>Platt</td>
<td>Graeme Platt, Platts Nursery, Auckland.</td>
</tr>
<tr>
<td>PS</td>
<td>Private source.</td>
</tr>
<tr>
<td>Puha</td>
<td>Timberlands Puha Nursery, Gisborne, New Zealand.</td>
</tr>
<tr>
<td>Pukeit</td>
<td>Pukeiti Rhododendron Trust, New Plymouth, New Zealand.</td>
</tr>
<tr>
<td>Purdie</td>
<td>John Purdie, Havelock North, New Zealand.</td>
</tr>
<tr>
<td>Read</td>
<td>Nigel Read, Taradale, Napier, New Zealand.</td>
</tr>
<tr>
<td>Rosettead</td>
<td>John Stephenson, Hastings, New Zealand.</td>
</tr>
<tr>
<td>Scrivener</td>
<td>Mollie Scrivener, Geraldine, New Zealand.</td>
</tr>
<tr>
<td>Slocock</td>
<td>Slocock Nursery, England.</td>
</tr>
<tr>
<td>Stevens</td>
<td>Stevens Nursery, New Zealand.</td>
</tr>
<tr>
<td>Tantrum</td>
<td>Don Tantrum, Taihape, New Zealand.</td>
</tr>
<tr>
<td>Thermal</td>
<td>Thermal Nursery, Rotorua, New Zealand.</td>
</tr>
<tr>
<td>Toptrees</td>
<td>Toptrees Nursery, Hastings, New Zealand.</td>
</tr>
<tr>
<td>Webb</td>
<td>Webb's Nursery, New Zealand.</td>
</tr>
<tr>
<td>Welch</td>
<td>Stuart Welch, Marton, New Zealand.</td>
</tr>
<tr>
<td>White</td>
<td>P &amp; J White, Hawkes Bay, New Zealand.</td>
</tr>
<tr>
<td>White</td>
<td>Stan White, Te Mahanga, New Zealand.</td>
</tr>
<tr>
<td>Wilson</td>
<td>Wilson's Nursery, Christchurch, New Zealand.</td>
</tr>
</tbody>
</table>
Families and Genera in the current collection at Eastwoodhill

Total: 118 families, 410 genera.

**GYMNOSPERMAE: 8 families, 36 genera**

**Ginkgoales**
Ginkgoaceae: Ginkgo

**Coniferales**
Araucariaceae: Agathis, Araucaria
Cephalotaxaceae: Cephalotaxus
Cupressaceae: Chamaecyparis, X Cupressocyparis, Cupressus, Juniperus, Libocedrus, Thuja, Thujeopsis, Widdringtonia
Pinaceae: Abies, Cedrus, Keteleeria, Larix, Picea, Pinus, Pseudolarix, Pseudotsuga, Tsuga
Podocarpaceae: Dacrycarpus, Dacrydium, Phyllocladus, Podocarpus, Prumnopitys.
Taxaceae: Taxus, Torreya
Taxodiaceae: Cryptomeria, Cunninghamia, Glyptostrobus, Metasequoia, Sciadopitys, Sequoia, Sequoiadendron, Taiwania, Taxodium

**ANGIOSPERMAE: 110 families, 374 genera**

**Monocotyledonae**
Agavaceae: 5 families, 11 genera
Amaryllidaceae: Cordyline, Furcraea, Phormium
Amaraceae: Beschomeria, Bomarea, Doryanthes
Aracaceae(Palmae): Phoenix, Trachycarpus
Liliaceae: Smilax
Poaceae(Graminaceae): Arundo, Phyllostachys

**Dicotyledonae**
Acanthaceae: Beleporone, Sroblanthes, Thunbergia
Aceraceae: Acer
Anacardiaceae: Cotinus, Pistachia, Rhus, Schinus, Spondias
Anonaceae: Asimina
Apiceae: Heteromorpha
Apocynaceae: Nerium, Strophanthes, Trachelospermum
Aquifoliaceae: Ilex
Araliaceae: Aralia, Fatsia, Pseudopanax
Aristolochiaceae: Aristolochia
Asclepiadaceae: Wattakaka
Asteraceae: Brachyglottis, Dahlia, Eupatorium, Helichrysum, Olea, Senecio
Berberidaceae: Berberis, Mahonia, Nandina
Appendix 1: Catalogue of the current collection

Betulaceae: Alnus, Betula, Carpinus, Corylus, Ostrya
Bignoniaceae: Campsis, Catalpa, Doxantha, Eecremocarpus, Jacaranda, Pandorea, Phaedranthus, Podranea, Teocmanthe
Buxaceae: Buxus, Sarcococca
Caesalpinaceae: Cassia, Ceratonia, Cercis, Gleditsia, Gymnocladus, Peltophorum
Calycanthaceae: Calycanthus, Chimonanthus
Caprifoliaceae: Abelia, Dervita, Dipelta, Kolkwitzia, Lonicera, Sambucus, Viburnum, Weigelea
Casuarinaceae: Casuarina
Celastraceae: Catha, Celastrus, Euonymus, Maytenus, Tripterygium
Cercidiphyllaceae: Cercidiphyllum
Cistaceae: Cistus
Clethraceae: Clethra
Coriariaceae: Coriaria
Cornaceae: Aucuba, Cornus, Griselinia
Corynocarpaceae: Corynocarpus
Cunoniaceae: Callicoma, Ceratopetalum, Cunonia
Cyrillaceae: Cyrilla
Davidiaceae: Davidia
Ebenaceae: Diospyros
Ehretiaceae: Ehretia
Elaeagnaceae: Elaeagnus
Elaeocarpaceae: Aristotelia, Elaeocarpus
Eupacridaceae: Cyathodes
Ericaceae: Arbutus, Enkianthus, Erica, Gaultheria, Kalmia, Ledum, Leucothoe, Lyonia, Oxydendrum, Fieris, Rhododendron, Vaccinium
Escalloniaceae: Carpodetus, Escallonia
Eucommiaceae: Eucommia
Eucryphiaceae: Eucryphia
Euphorbiaceae: Glochidion, Mallotus, Sapium
Fabaceae: see Caesalpinaceae, Mimosaceae, and Papilionaceae.
Fagaceae: Castanea, Castanopsis, Fagus, Lithocarpus, Nothofagus, Quercus
Flacourtiaceae: Aberia, Azara, Berberidopsis, Idesia, Poliothyrsus
Garryaceae: Garrya
Hamamelidaceae: Corylopsis, Disanthus, Distylum, Fothergilla, Hamamelis, Liquidambar, Loropetalum, Parrotia, Parrotiopsis, Stachyurus, Sycopsis
Hippocastanaceae: Aesculus
Hypericaceae: Hypericum
Icacinaeae: Pennantia
Illiciaceae: Illicium
Juglandaceae: Carya, Juglans, Platycarya, Pterocarya
Lamiaceae: Coleus, Lavandula, Prostanthera, Rosmarinus, Salvia, Teucrium
Lardizabalaceae: Akebia, Deicaena, Holboelia, Lardizabala, Stauntonia
Lauraceae: Cinnamomum, Laurus, Neolitsia, Persea, Sassafras, Umbellularia
Leguminosae: see Fabaceae
Loganiaceae: Buddleia, Desfontaines, Gelsemium
Lythraceae: Lagerstroemia
Magnoliaceae: Liriodendron, Magnolia, Manglietia, Michelia, Schisandra, Talauma
Malvaceae: Abutilon, Hibiscus, Hoheria, Lagunaria
Melastomataceae: Tibouchina
Melianthaceae: Melia, Toona
Myelanthaceae: Greyia
Mimosaceae: Acacia, Albizia, Calliandra, Leucaena, Pithecellobium
Monimiaceae: Hedycarya
Moraceae: Broussonetia, Cudrania, Ficus, Morus, Paratrophis
Myoporaceae: Myoporum
Myricaceae: Myrica
Myrsinaceae: Myrsine
Myrtaceae: Angophora, Baeckia, Calliston, Eucalyptus, Feijoa, Leptospermum, Melaleuca, Metrosideros, Myrtus, Syzygium, Tristania, Ugni.
Nyssaceae: Nyssa
Ochnaceae: Ochna
Oleaceae: Abeliphylum, Chionanthus, Fontanesia, Forsythia, Fraxinus, Jasminum, Ligustrum, Nestegis, Olea, Osmanthus, X Osmarea, Parasyringa, Syringa
Onagraceae: Fuchsia
Passifloraceae: Passiflora
Pittosporaceae: Hymenosporum, Pittosporum, Sollya
Platanaceae: Platanus
Plumbaginaceae: Ceratostigma
Proteaceae: Banksia, Embothrium, Grevillea, Knightia, Lomatia, Macadamia, Protea
Punicaceae: Punica
Ranunculaceae: Clematic, Paeonia
Rhamnaceae: Alphitonia, Ceanothus, Hovenia, Paliurus, Pomaderria, Rhamnus
Rosaceae: Amelanchier, Aronia, Chaenomeles, Cotoneaster, X Crateagomespilus, Crategus, X Crataegomespilus, Dichotomanthes, Eriobotrya, Exochorda, Kerria, Lyonothamnus, Malus, Mespilus, Neillia, Osmaronia, Photinia, Physocarpus, Potentilla, Prinsepia, Prunus, Pseudocydonia, Pyracantha, Pyrus, Quillaja, Rhapiolepis, Rhodotypos, Rosa, X Sorbaria, X Sorbopyrus, Sorbus, Spiraea, Stephanandra, Straevaesia
Rubiaceae: Coprosma, Emmenopterys
Rutaceae: Calodendrum, Choisya, Citrus, Euodia, Phellodendron, Poncirus, Ptelea, Zanthoxylum
Sabiaceae: Meliosma
Salicaceae: Populus, Salix
Sapindaceae: Alectryon, Dodonaea, Koelreuteria
Saxifragaceae: Carpentaria, Decumaria, Deutzia, Dichroa, Hydrangea, Itea, Philadelphus, Quintinia, Ribes, Schizophragma
Scrophulariaceae: Bowkeria, Freylinia, Hebe, Paulownia
In the original catalogue a plan of the arboretum, with overlaid grid, appeared at this point. Readers of this thesis will find a copy of that plan in thesis Appendix 2.
Appendix 1: Catalogue of the current collection

Abelia: Caprifoliaceae (3+0=3)

- *graeberiana* Rehd. China. not found 18

Abeliophyllum: Oleaceae (1+0=1)

- *distichum* Nakai. Korea. L5+GC, H&S 1947 not found H10

Aberia: Flacourtiaceae (1+0=1)

- *caffra* (Hook f) J Hart. (Dovyalis caffra) KEI APPLE. S Africa. Hortex 1986, M4

Abies: Pinaceae (31+3=34)

- *alba* Mill. EUROPEAN SILVER FIR. Europe. not found N9
- *amabilis* Forbes. PACIFIC SILVER FIR. W N America. H&S 1949, L10; not found F5
  - 'Hudsonia' H&S 1950, not found L7 (dead?)
- *bracteata* (D Don) D Don ex Poit. BRISTLECONE FIR. W USA. H&S 1949, L10+McK
- *cephalonica* Loud. GRECIAN FIR. Greece. H&S 1949, L10+McK
  - *coahuilensis* see *A. durangensis* var. *coahuilensis*
- *concolor* Hildbre. WHITE FIR. USA Mexico. H&S 1949, L10+E O6 P6+E 76+GC R5+MM R7+GC
  - *Candicans* H&S 1949, K10+GC
  - *Compacta* ('GlaucA Compacta') H&S 1949, not found L10
  - *GlaucA* H&S 1949, L10
- *delavayi* Franch. China. L8+E
  H&S 1949, K10 (labelled Ageorgiana related faxoniana.)
- *durangensis* var. *coahuilensis* (I M Forst.) Mart. COAHUILA FIR. Mexico. McKeen 1988. T5 (NM),
  fabri see *A. delavayi* var. *delavayi*.
- *firma* S&Z. MOMI FIR. Japan. H&S 1949, L10+McK; Tantrum 1988, K9+GC (NM),
- *fraseri* (Pursh) Poir. FRASER FIR. USA. H&S 1951, not found P10 (found at Blackwater)
- *georgiana* (related *faxoniana*) see *A. delavayi* var. *georgei*.
- *grandis* (Don ex Lamb) Lindl. GIANT FIR. USA. H&S 1948, G4+CS
- *holophylla* Max. MANCHURIAN FIR. Korea. H&S 1949, L10+E
- *homolepis* S&Z. (brachyphylla Maxim.) NIKKO FIR. Japan.
  H&S 1952, K7+GC (wrongly labelled weitchi), 14 (labelled brachyphylla)
- *kawakamii* (Hayata) Ito. FORMOSAN FIR. Taiwan. H&S 1949, not found L10
- *koreana* Wils. KOREAN FIR. Korea. H&S 1949, not found L10
- *lasiocarpa* (Hook.) Nutt. SUBALPINE FIR. W USA. H&S 1949, not found L10
- *magnifica* A. Murr. CALIFORNIAN RED FIR. W USA. NZFS 7, not found O7 or Q7
- *mariesii* Mast. MARIUS FIR. Japan. P5 1980, not found H8
- *nebrodensis* (Lojac). Mattai. SICILIAN FIR. Sicily. H&S 1951, M7+E
- *nobilis* see *A. procera*.
- *nordmanniana* (Steven) Spach. CAUCASIAN FIR. Caucasus. D&D 1934, I7 L8
- *numidica* De Lannoy. ALGERIAN FIR. Algeria. H&S 1949, L10+McK
- *pindrow var. brevifolia* D&J. (gamblei) WEST HIMALAYAN FIR. Himalaya. 1949, not found L10
- *pinsapo* Boss. SPANISH FIR. Spain. B6 D5 F4 K6 L7 R8 S8 Q9
  - *f. glauca* (Carr) Beissn. E9+GC R7
- *procera* Rehd. (A. *nobilis*). NOBLE FIR. W USA. H&S 1949, L10 P6 P7 Q6 R7,
Appendix 1: Catalogue of the current collection

recurvata Mast. MN FIR. China. H&S 1949, not found L10

religiosa (HEK) Schlect. SACRED FIR. Mexico. NZFS ?, O6=GC P6=GC Q7=GC

spectabilis var. brevifolia (Henry)Rehd. HIMALAYAN FIR. Himalaya. H&S 1949, K10=Mck

veitchii Lindl. VEITCH'S FIR. Japan. H&S 1949, L10=Mck

Abutlon: Malvaceae (2+1=3)

x hybridum Hort. not found H11 or O5, many seedlings G10 H10 N4

striatum G Dickson ex Lindl. South America.

‘Thompsonii' Rosestead 1987, H11=MM

vitisifolium Presl. Chile. Berry1989, G11 (NM),

Acacia: Fabaceae - Mimosaceae (15+1=16)

baileyana Muell. COOTAMUNDRA WATTLE. Australia. D8+MM G8+MM P7=MM

P8=MM R5=MM R8+MM

‘Purpurea' PURPLE COOTAMUNDRA WATTLE. 1980, G8=GC

cultriformis A.Cunn. KNIFE LEAF WATTLE. Australia. O8=MM

dealbata Link. SILVER WATTLE. Australia. C13=MM E5=MM J4 J10=MM N8=DDC

decurrens (Wendl)Willd. GREEN WATTLE. Australia. not found F10,

elata CEDAR WATTLE. Australia. many seedlings M4

floribunda (Venten.) Willd. GOSSAMER WATTLE. Australia.

1987 MWD2995, H11 (NM); 1987 MWD3043, H11 (NM);

leprosa Sieb. LEPER WATTLE. Australia. not found G10

longifolia (Andr)Willd. SYDNEY GOLDEN WATTLE. Australia. N9=DDC

melanoxylon R.Br. BLACKWOOD. Australia, Tasmania. H8=GC, N9=DDC, not found N5

pravissima Muell. OVENS WATTLE. Australia. O8=MM P7=MM R6=MM, not found I9

prominens A.Cunn. GOLDENRAIN WATTLE. Australia. Webb 1935?, N5=GC

pycnantha Benth. GOLDEN WATTLE. Australia. DSIR Ak 1975, not found R8

retinoides Schlect. WIRILDA Australia. DSIR Ak 1980, not found

rubida A.Cunn. RED STEMMED WATTLE. Australia. 1987 MWD2985, H11 (NM);

silvestris BODALLA SILVER WATTLE. Australia. 1987 MWD3025, H11 (NM)

Acer: Aceraceae (83+50=133)

am plum Rehd. China. H&S 1949, K11; Appleton 1988, J6=GC, K10=GC (NM)

buergerianum Miq. (trifidum) TRIDENT MAPLE. China. (all =MM) D5 D11 C12 F9 I9 J2

J7 J9 K5 N2 N4 O2 P3 P5 Q3 R2 R5 R10 S3 S5

caesium Wall. China, Himalaya. Appleton1987, H6=GC


campbellii ssp. wilsonii China. EWH1989, C7(NM); H&S 1948-55, E10=MM I3=MM

campestr e L. HEDGE MAPLE. Europe, Asia minor. Appleton 1987, G7 (NM)

‘Schweinitii' H&S 1957, O2+GC

capillipes Max. RED SNAKE BARK MAPLE. Japan. H&S 1955-59, R3

cappadocicum Gleditsch. CAPPADOCIAN MAPLE. Caucasus, Asia minor to Himalaya.

I10=GC, D4=GC, not found E11

‘Aureum' H&S 1948, E10=MM; Appleton 1988, K10=GC (NM);

‘Rubrum' H&S 1948, E10=MM

var. sinicum Rehd. China. H&S(1D'S) 1979, G6

f. tricaudatum (Rehd)Rehd. China. H&S 1964, not found O8
Appendix 1: Catalogue of the current collection

---

carpinifolium  S&Z.  HORNBEAM MAPLE. Japan. H&S 1955, I2+MM
    Cave(ex Kunming)1988, L3+GC (NM);
caudatifolia  S&Z.  (kawakamii  Koidz, morrisonense Hayata) Taiwan.
    Berry(seed 2275m Daxue Shan, Taiwan), H6
    F(S(ex seed Daxue Shan, Taiwan), K11+GC; Gallen1986 S3+GC (NM)
circinatum  Pursh.  VINE MAPLE. W USA. H&S 1949, E1+MM
cissifolium (S&Z)  K.Koch.  Japan. H&S(IDS) 1979, G7(reverted to stock)
davidii  Franch.  DAVID'S MAPLE. China. P3, not found J8
    'George Forrest' ('Horizontalis') H&S 1949, K11(fallen)
diabolicum  K.Koch.  HORNED MAPLE. Japan. H5+BB, (female)
diabolicum  f. purpurascens (Franch & Sav)  Rehd.  Japan. E10+MM (male)
divergens  Pax. (quinquelatum  K.Koch, not Gilib.) Asiatic Turkey.
    H&S 1965, not found P9; Millichamp1990 (n'y)
fargesii  Franch.  China. H&S(IDS) 1979, G7+GC (NM)
ginnala  Max. (tataricum var. ginnala) AMUR MAPLE. China, Korea. Japan.
    Cave 1988, E10+MM, M4+GC, L5+GC (n'y)
glabrum  Torr.  ROCK MAPLE. W USA. H&S 1957, not found G4
grandidentatum see A. saccharum ssp. grandidentatum
griseum  (Franch)Pax. (nikeense var. griseum).  PAPERBARK MAPLE. China.
    H&S 1952, E10+MM I5+MM N7+MM O8+MM
grosseri  Pax.  China. H&S 1948, not found K11 (could this be the one at the bottom of OH)
    var. hersii (Rehd)Rehd.  China. H&S 1949&55, G4+MM, not found K11
heldreichii  Orph.  GREEK MAPLE. Greece, Bulgaria. Hors1986, H6+GC
hersii see A.grosseri var. hersii
x hillieri  Hort.  (campestre x myosot)  H&S(IDS) 1979, F6
hookeri  Miq.  Himalaya: I4-CN, N5-CN
x hybridum  Bosc.  (opalus x pseudoplatanus) Hort. F5 F6(Ci400)?
hyrcanum  Fisch. & Mey.  BALKAN MAPLE. Balkan, Europe.
    H&S(IDS)1979, G6+MM; H&S1949 L12+IDS; H&S1948 L7+IDS;
japonicum  Thunb.  DOWNY JAPANESE MAPLE. Japan. ex Japan, not found H10
    not found O7 (something at Rock Point pond), Appleton 1988, K10+GC (NM)
    'Aconitifolium' ex Japan?, not found H10 R9
    'Aureum' ex Japan?, not found H10
    'Vitifolium' H&S 1955&65, I2+MM, H8+GC (NM), not found O7
kawakamii Koidz see A.caudatifolium
kawakamii hybrid  Goodwin(ex University of Washington)1986, P5+GC
laetum see A.cappadocicum
laxiflorum  Pax.  China Tibet, Appleton 1988, G5
leucoderme  Smal. (saccharum  ssp. leucoderme (Small).Sarg.).
    CHALK MAPLE. USA. H&S(IDS) 1979, F6
lobeli  Ten.  Italy. H&S 1955, H2+MM
macrophyllum  Pursh.  BIGLEAF MAPLE. W USA, J6+GC Q8+MM R10+MM
mayrii  Schwer. (mono var. mayrii).  Japan. H&S(IDS) 1979, F6
Appendix 1: Catalogue of the current collection

maximowiczianum Miq. (nikoense). NIKKO MAPLE. Japan. E10+MM O7+MM P7+MM
miyabei Max. MIYABE’S MAPLE. Japan. H&S 1938, 15
monspessulanum L. MONTPELIER MAPLE. Europe Asia. D&D1939, E10+MM;
Appleton 1988 K10+GC (NM);
morrisonense Hayata. see caudatifolium.
negundo L. BOXELDER, ASH LEAF MAPLE USA. (all +MM) B5 D6 E4 F6 F9 I2 J9 L12 O10
three foli ate green H5 I7 R10
‘Auratum’ L6+MM
‘Aureomarginatum’ J9+MM mostly reverted
‘Variegatum’ O7+MM, not found C5
var. californicum (Torr & Gr.) Sarg. California. H&S 1959, R3
var. mexicanum Westm. Mexico, Guatemala. Berry1987 S5+GC
var. violaceum (Kirch)Jag. USA. H&S 1959, S3
nigrum Michx. see A. saccharum ssp. nigrum
nikoense Maxim. see A. maximowiczianum. Miq.
oliveranum Pax. China. H&S 1955, not found G5;
oliveranum hybrid Goodwin(ex University of Washington)1986, G5
opalus Mill. ITALIAN MAPLE. Switzerland France. H&S 1947, I27 I7,
opalus ssp. obtusatum Croatia, Bosnia, Serbia. E12+MM, H4+MM
orientale see sempervirens
palmatum Thunb. JAPANESE MAPLE. Japan. (all +MM) B6 C6 D8 D9 E4 E6 E8 F9 Q3 G11
H9 H10 I6 I9 I10 J8 J9 L8 N5 O7 O9 P3 P7 P8 P9 Q5 Q8 R9 R10;
 purple types H10 I9 I10 II0 J10
‘Atropurpureum’ H&S 1938, H5+CN, M6+CN
‘Aureum’ Birch Hill Pond, Hillier Dam Lagoon
var. coreanum Nakai. Korea. H&S 1965, not found P9
‘Cripsii’ H&S 1965, H10
‘Dissectum’ ex Japan?, I10+MM
‘Dissectum Atropurpureum’ ex Japan?, I10+MM
‘Hillieri’ R6
‘Isingaki’ I6 (is this ‘Tsuringaki’ ?)
‘Koshimino’ Cave1988 L4+GC; Q8+MM
‘Lutescens’ H&S 1964, not located P9 (dead?)
‘Nigrum’ H5+CN J6+GC R6
‘Osakasuki’ G5+CN I9+MM O7+CN, not located H5 (check circus corner) O3
‘Oshiu Beni’ N5
‘Rubrum’ I5+CN I6+CN
‘Sango Kaku’ (‘Senkaki’) H&S 1952, 12 I5+GC, not located O7
‘Seigan’ Q7, not located H5
‘Septemlobum’ L7 Q3
‘Septemlobum Rubrum’ H5+CN M3+CN
‘Septemlobum Superbum’ M4
‘Septemlobum Purpureum Superbum’ L4+CN
‘Sessilliforum’ see ‘Koshimino’
‘Shishigashira’ H&S 1956, Q5+MM
‘Sumingashi’ H5+CN
**Appendix 1: Catalogue of the current collection**

- **paxii** Franch. China. H&S 1957, P4; Cave 1988 S7=GC (NM);
- **pensylvanicum** L. STRIPED MAPLE, MOOSEWOOD, USA Canada.

  H&S 1949, not found K11 (dead). Cave (ex Berry ex EWH) 1988 I3=GC, P8=GC

  - **Erythrocladum** H&S (IDS) 1979, G7=GC

- **pentaphyllum** Diels. China. Cave (ex Berry ex Hillier) 1988, F5=GC M4=GC

- **platanoides** L. NORWAY MAPLE. Europe. C12 E4 G10 H2 I2 J7 J9 J10 L8 P9

  - **Crimson King** H&S 1937, G2=CN O3=CN P4=CN S3=CN
  - **Cucullatum** H&S 1965, P10=MM
  - **Drummondii** H&S 1966, 19 reverted to stock
  - **Goldsworth Purple** H&S 1955, 12=CN
  - **Lorbergii** H&S 1957, same as Palmatifidum according to K
  - **Palmatifidum** H&S 1956, H3=MM H4=MM
  - **Reitenbachii** H&S 1949, E12=MM, not found E10
  - **Schwedleri** SWEDLER MAPLE. P8 P10

- **pseudoplatanus** L. SYCAMORE. Europe, Asia. D4 D8 D9 D13 H6 G7

  - **Brilliantissimum** H&S 1938, I4=CN L6=MM L9=MM O9=MM, not found M6
  - **Esk Sunset** J6
  - **Esk Sunset II** Q10
  - **Leopoldii** VARIEGATED SYCAMORE, Q4=MM, not found I9
  - **Worleei** H&S 1948, I4=MM, E12=MM (removed)

- **f. erythrocarpum** (Carr) Pax. RED FRUITED SYCAMORE. Bavaria.

  H&S 1965&66, F4=MM P10=MM, not found F9

- **f. purpureum** PURPLE SYCAMORE. C4=MM D4=MM D5=MM L8=MM O9=MM

- **pseudosieboldianum** Komar. Korea, Manchuria. H&S 1965, Q7=MM

- **pseudosieboldianum var. takesimense** (Nakai) de Jong. Horsham 1986, H6(NM)

- **rubrum** L. RED MAPLE. E USA. H&S 1937, F10=MM I5=MM K7=MM L3(Brill?)

  - **Brilliant** D&D?, E10=GC F10=CN I5=MM L5=MM L6=CN L8=GC
  - **October Glory** Collier 1988 K10=GC (NM)

- **rufinerve** S&Z. RED VEIN MAPLE. Japan. H&S 1938, I5 F9=GC


- **saccharinum** L. (dasycarpm Ehrh.) SILVER MAPLE. USA.

  D&D 1934, F6=MM I9=MM J7=MM K3=MM

- **f. laciniatum** CUT LEAF SILVER MAPLE. H&S 1952?, F9=GC I4=MM

  - **Pulverulentum** H&S 1948, E10=GC

  - **Pyramidale** ('Fastigiatum') G4=GC

- **saccharum** Marsh. SUGAR MAPLE. USA.

  H&S 1938, E4=BB I5 G11

  - **Arnold Form** (ex seed Arnold Arboretum), E11

  - **spp grandidentatum** (Torr & Gray) Desm. USA. H&S 1948 died;

    McKean 1988, C10=GC (NM); McKean (ex MWD) 1985, (NM)

  - **spp. nigrum** (Michx f.) Desm. BLACK MAPLE. USA.

    H&S 1937, H9=GC, H&S (IDS) 1979, G7

- **spermervirens** L. (creticum, orientale) CRETAN MAPLE. Meditt. H&S 1949,

  - **tree at L12 is A. hyrcanum**

- **serrulatum** Hayata. Japan. H&S (IDS) 1979, F6

- **sieboldianum** Miq. Japan. H&S 1966, I3

- **sessiliflorum** see **palmatum** 'Sessiliflorum'

- **spicatum** Lam. MOUNTAIN MAPLE, USA Canada. H&S (IDS) 1979, G7
Appendix 1: Catalogue of the current collection

**Aesculus**: Hipocastanaceae (15+5=20)

- **Aesculus arguta** Buckl. TEXAS BUCKEYE. Texas. H&S(IDS) 1979, F6
- **Aesculus californica** Nutt. CALIFORNIA HORSECHESTNUT. California. PS(ex seed 470m California), K2 dead.
- **Aesculus x carnea** Hayne. (hipocastanum x pavia) PINK HORSE CHESTNUT, Hort. I4+MM I7+MM K3+MM P5+MM R5+MM Q7+MM 'Briotii' H6+MM, not found M6
- **Aesculus chinensis** Bunge. CHINESE HORSE CHESTNUT. China. H&S(IDS) 1979, nursery
- **Aesculus discolor var. mollis** (Raf.)Sarg. (astrina) USA. H&S 1948, H3
- **Aesculus flava** Soland. (octandra. Marsh.) YELLOW BUCKEYE. USA. H&S 1947&55, H4
- **Aesculus flava hyd** (could this be A x hybrid.; (pavia.flava)?) O9
- **Aesculus glabra** Wild. OHIO BUCKEYE. USA. H&S 1956, H4 D12
- **Aesculus hippocastanum** L. HORSE CHESTNUT. Greece, Bulgaria. (all +MM) B5 B6
  - B7 C6 D4 D5 E9 F3 F9 G3 G9 H2 I2 J9
  - 'Digitata' ('Pumilum') H&S 1949, L12+MM
  - 'Praecox' H2+MM
  - 'Pyramidalis' H&S 1949, D12
- **Aesculus indica** (Camb)Hook. INDIAN HORSE CHESTNUT India. (all +MM) G5 H2
  - H3 I2 K9 L3 L7 O2 O7 O9 P2 P10 Q3 R3 S7 S8
- **Aesculus x mutabilis** (Spach)Schnelle. (pavia x sylvatica). Hort. I4+MM
  - 'Induta' H&S 1948, D10+MM
- **Aesculus x neglecta** Lindl. (flava x sylvatica) PAINTED BUCKEYE. USA. H&S(IDS) 1979, G7
- **Aesculus parviflora** Walt. USA. H&S 1938, G5+MM H11+MM O7+MM O8+MM (plus theatre)
- **Aesculus pavia** L. RED BUCKEYE. USA. H&S 1956, I3
- **Aesculus x plantierensis** André. (hipocastanum x carnea). Hort. H&S 1947&49, D10 D12; Cave1986 Q6+GC;
- **Aesculus splendens** Sarg. USA. H&S 1949&55, D10 H3

**Agathis**: Araucariaceae (1+0=1)

- **Agathis australis** Salisb. KAURI. New Zealand. FRJ R.(100 ex Auckland) 1979, M2 M3(bush)

**Ailanthus**: Simaroubiaceae (1+0=1)

- **Ailanthus altissima** (Mill)Swingle. TREE OF HEAVEN. China. D4+MM, H11 (NM)

**Akebia**: Lardizabalaee (1+0=1)

- **Akebia quinata** (Houtt)Dcne. China, Japan, Korea. Nichols 1988, L5+GC

**Albizia**: Fabaceae - Mimosaceae (1+0=1)

- **Albizia julibrissin** Durazz. PINK SIRIS. Iran to Japan. H9+MM J9+MM O10+MM
Appendix 1: Catalogue of the current collection

Alectryon: Sapindaceae (1+0=1)
- excelsus Gaertn. TITOKI. New Zealand. G11-MM

Alnus: Betulaceae (21+5=26)
- excelsus Gaertn. TITOKI. New Zealand. G11-MM
- acuminata arguta (Name not confirmed). MEXICAN ALDER, F3 O9, not found R10
  Berry1987 F3 S5 T5; Berry1988 F5;
- acuminata glabrata (Name not confirmed). Berry1988 T3
  arguta see acuminata arguta.
- cordata (Loisel)Desf. ITALIAN ALDER. Italy, Corsica.
  H&S 1955, D, not found R3; Puha1988 O0 O1 P(all NM);
- cremastogyne Burk. China. FR11988, G5(NM); FR11989 S8(NM)
  firma S&Z. Japan. Puha1988 F4+GC,
- glutinosa (L.)Gaertn. COMMON ALDER. Europe, Nth Africa. Cave1988 OG O1 (both NM)
  'Aurea' H&S 196X Q7; Cave(ex EWH)1988, H4+GC (NM);
  'Laciniata' H&S 1956, not found H4
- hirsuta (Spach)Ruapr. (tintoria) Asia. H&S 1948&59, search Q3
- incana (L.)Moench. GREY ALDER. Europe, Caucasus, R3
  'Aurea' J2; Appleton1988 M6+GC (NM);
  'Laciniata' H&S 1956&57, I3 J2(dead), not found I9
  'Pendula' WEEPING GREY ALDER, H&S 1957, P2
- inokumae Murae.Kuska. FRI Ch(ex seed Mt Iwate, Japan) 1977, P2
- japonica (Thunb) Steurb. Japan, Korea, Taiwan. H&S 1948 B12+GC; Berry(ex Hokaido)1988
  G5+GC,
- jorull.ensis HBK. Mexico, Argentina. Appleton1988, F4; not found C12
- lanata Duthie. China. H&S 1957, not found I3
- nepalensis Don. NEPAL ALDER. Himalaya. Appleton1987, F4
  Jellyman(45000 Talamarang Nepal)1988, F5
- nitida (Spach)Encl. India, Himalaya, Puha 1988,F4; Mortimer1988, F6; Heritage 1988 O1 (NM);
- orientalis Dcne. ORIENTAL ALDER. Asia, Cyprus. H&S1959, not found Q3
- rhombifolia Nutt. WHITE ALDER. USA. Heritage1987, F5+GC
- rubra Bong. RED ALDER. USA. H&S 1952, R10
- sinuata (Reg)Rydb. SITKA ALDER. W N America. Overbye 1985, D7+GC; H&S 1965, F4(Ci290)
  x spathii Call. (subcordata x japonica) Hort. H&S 1948, C11+GC; F4 R3+GC R4+GC
- tenuifolia Nutt. THINLEAF ALDER. W N America. FRI Ch 1977 (seed), F47;
  IDS 1988, F5+GC (Jellyman A.tenuifolia x glutinosa ex Hungary)

Alphitonia: Rhamnaceae (1+0=1)
- excelsa Reiss ex Endl. RED ASH Australia. S White 1986, M6+GC

Amelanchier: Rosaceae (4+1=5)
- excelsa Michx.F.)Fern. (canadensis sens. Weig; not canadensis L.) E N America C6
- asiatica (S&Z)Endl. Japan, China, Korea, H&S 1947, D10 I3
- hybrid (grandiflora canadensis x lamarckii Rubescens) (NNC) I3
- laevis Weig. ALLEGHANY SERVICEBERRY. USA. not found C10
- lamarckii Schroed. E N America
  'Rubescens' (A x grandiflora 'Rubescens') H&S, L4
Appendix 1: Catalogue of the current collection

Amorpha: Fabaceae - Papilionaceae (1+0=1)
fruticosa L. INDIGO BUSH. EN America. Collier1988 L5 (NM);

Ampelopsis: Vitaceae (4+1=5)
aconitifolia Bunge. (Vitis aconitifolia) China. Goodwin(ex UofW), N4 (NM);
brevipedunculata (Max)Trautv. (Vitis heterophylla, V. brevipedunculata) Japan, China. nursery
‘Elegans’ (Vitis heterophylla ‘Elegans’) Nichols 1988, L5+GC
var. maximowiczii (Regel)Rehd. China, Japan, Korea. Goodwin1986 H11 (NM)

Angophora: Myrtaceae (1+0=1)
costata Gaertn(Britt). GUM MYRTLE. Australia. Mortimore1986, K6

Aralia: Araliaceae (2+0=2)
chinensis L. China. 16 (this plant is not typical)
spinosa L. HERCULES CLUB. USA. D5 H5 15. Mortimore(ex Kuruning)1988, 16+GC

Araucaria: Araucariaceae (3+0=3)
araucana (Mol)C Koch. (A.imbricata) MONKEY PUZZLE. Chile. D7
bidwillii Hook. BUNYA BUNYA PINE. Australia. R10

Araucaria: Araucariaceae (3+0=3)

Arbutus: Ericaceae (3+0=3)
x andrachnoides Link. (A x hybrida) Greece. Gallen1985, H11+GC(NM), L6+GC, Q5+GC
canadiensis Duh. Canary Island. Read(ex D&D)1988, M3 (NM);
unedo L. STRAWBERRY TREE. Ireland, Asia minor. D&D 1934, J7 L5 L12

Aristolochia: Aristolochiaceae (1+0=1)
semperfvires L. DUTCHMANS PIPE. Meditt. H&S 1949, 18

Aristolochia: Aristolochiaceae (1+0=1)

Arionia: Rosaceae (2+0=2)
arbutifolia (L.)Elliot. RED CHOKEBERRY. USA. H10

Arundinaria: Poaceae (1+0=1)
donax L. GIANT REED. Meditt. F10+GC, removed 11

Asimina: Annonaceae (1+0=1)
triloba (L.)Dun. PAWPAW. USA. H&S 1951, H8

Aucuba: Cornaceae (1+2=3)
japonica Thunb. JAPANESE LAUREL. Japan. H9 three types
‘Crotonoides’ H11
‘Gold Dust’ not found H10, Crotonoides in H11

Austrocedrus: Cupressaceae (1+0=1)
chilensis (D Don)Florin & Boutelje. (Libocedrus c.) CHILEAN CEDAR. Chile. 01.

Azara: Flacourtiaeae (5+0=5)
chilensis (D Don)Florin & Boutelje. (Libocedrus c.) CHILEAN CEDAR. Chile. 01.

H&S 1947, 18 (NM); EWH seedlings 1987, 18 S7.
Appendix 1: Catalogue of the current collection

serrata Ruiz & Pav. Chile. Goodwin 1986, 17

Baekia: Myrtaceae (1+0=1)

virgata Andr. TWIGGY HEATH MYRTLE. Australia. EWH seedling F8+GC; 19

Banksia: Proteaceae (4+0=4)

N3 P10

collina R Br. HILL BANKSIA. Australia. not found J9 O10

ericifolia L f. HEATH LEAF BANKSIA. Australia. Webb 1934, R6, not found O10

integriifolia L f. COAST BANKSIA. Australia. D & D and Webb 1934, P5+MM P9+MM R6+MM

collina R Br. HILL BANKSIA. Australia. not found J9 O10

Baeckia: Myrtaceae (1+0=1)

virgata Andr. TWIGGY HEATH MYRTLE. Australia. EWH seedling F8+GC; 19

Banksia: Proteaceae (4+0=4)

N3 P10

collina R Br. HILL BANKSIA. Australia. not found J9 O10

ericifolia L f. HEATH LEAF BANKSIA. Australia. Webb 1934, R6, not found O10

integriifolia L f. COAST BANKSIA. Australia. D & D and Webb 1934, P5+MM P9+MM R6+MM

serrata L f. SAW BANKSIA. Australia. Webb 1935?, P5 Q5

Beleoporone: Acanthaceae (1+0=1)

guttata Brandeg. SHRIMP PLANT. Mexico. H11+MM

Berberidopsis: Flacourtiaeae (1+0=1)

corallina Hook f. Chile. White 1988, J7+GC dead. Nichols 1989, I5 (NM);

Berberis: Berberidaceae (18+1 =19)

C10 G9 H5 H8 K12 K13 L13 Q9

actinacantha Martelli. Chile. K6+MM


x carminea Hort.

'Buccaneer' not located K13


darwinii Hook. DARWIN BARBERY. Chile. K6+MM, O7+GC (NM)

glauccorapa Stapf. Himalaya. C12+GC E9+MM G10+GC

hypokerina Airey-Shaw. Burma. K12

jamesiana Forrest & Smith. China. K12+MM M6+MM

lempergiana Ahrendt. China. K12+MM

linearifolia Phil. Chile. K12?

x lologensis Sandwith. (darwinii x linearifolia). Hort. K6+MM

morrisonensis Hayata. Taiwan. not located K13

orthobotrys Schneid. Kashmir. not located H8

panlanensis Ahrendt. China. K12+MM

sargentiana Schneid. China. K12+MM

siano-china (NNC) K12-CN

thompsoniana (Name not confirmed). Scrivener 1988 (Nepal) M4+GC

vernae Schneid. China. 19

yunnanensis Franch. China. L13

Beschorneria: Amaryllidaceae (1+0=1)

yuccoides K Koch. Mexico. L5

Betula: Betulaceae (33+3=36)

B6 B7 F4 F5 G4 I3 L5 L7 O7 O8 P8 R8 R10 R10 Q4

albo-sinensis var. septentrionalis Schneid. China. H & S 1965, O8;

DSIR 1978 & 79, not found F4 G5; Cave 1989 F5;

coerulea-grandis Blanchard. BLUE LEAF BIRCH. USA, Canada.

H & S 1954 & 64, J2, not found J7 O7

costata Trautv. Manchuria, Korea. H & S before 1966, G4 (hyd); H & S 1966 P9 (NM); Appleton 1988,

Nursery
Appendix 1: Catalogue of the current collection

ermanii Cham. ERMANS BIRCH. Asia, Japan, Korea. Appleton 1988, G4(NM)
  var. japonica (Shiraz) Koidz. Japan. H&S 1948&56, not found G4 P8 (Bassinhead ?)
x fetsowii C.A. Asia. H&S 1955 J6; DSIR Ax 1978, not found G4 F4
grossa S&Z. JAPANESE CHERRY BIRCH. Japan. H&S 1967, not found R9
jacquemontii Spach. WHITE BARKED HIMALAYAN BIRCH. Himalaya. DSIR Ax 1978, H4
jacquemontii hyd? Ex seed Villa Taranto Italy 1967, E11+BB
x koehnei Schneid. (papyrijera x verrucosa). Hort.? DSIR Ax 1978, F5; H&S 1966, not found S9
lenta L. SWEET BIRCH. E N America. H&S 1964, not found Q8; Berry(ex Pennsylvania)1988, seedlings in nursery
lutea Michx. (B.alleghaniensis Britt.) YELLOW BIRCH. EN America H&S 1948, P5; F5
maximowiciana Regel. MONARCH BIRCH. Japan. FRI Ch(ex seed Rubesibe, Japan) 1977, G5
medwediewii Regel. TRANSCAUCAUSUS BIRCH. Transcaucaus. DSIR Ax 1979, G5
middendorfii Trautv. & Mey. Siberia. H&S 1966, not found P9
nigra L. RIVER BIRCH. E USA Appleton1985, C7+MM; Harrison 1977, P8+MM O8+MM
  'Heritage' Cave 1987. G5+GC
neoalaskana Sarg. see B.papyrifera var. humilis.
occidentalis Hook. WATER BIRCH. USA. Appleton 1988. D7+GC
  var. inopena (Name not confirmed). Berry(50m N California)1987, D7
papyrifera Marsh. PAPER BIRCH. N America. H&S 1949&54, I3 E10, not found H4(WL?)
  var. commutata (Reg.)Fern. NW USA. DSIR 1978, F5, H&S 1956 not found P5
  var. humilis (Reg.)Fern& Raup. (B.neoalaskana. Sarg)
    USA to Alaska. DSIR 1979, G4 labelled neoalaskana.
  var. kenaica (Evans)Henry. KENAI BIRCH. Alaska. H&S 1948, G4 F5, not found E10 or O7
pendula Roth. SILVER BIRCH. Europe. D&D 1934, D9 D10 E8 F3 F6 H6 I2 I3 I8(largest) 111
    J4 K3 N3 P9 Q3 Q7 Q8 R6 S8
  'Dalecarlica' SWEDISH BIRCH, R7, not found I8
  'Tristis' WEEPING SILVER BIRCH, DSIR Ax 1977&78, G5 P8 Q7, not found F4
platyphylla Sukatev. ASIATIC WHITE BIRCH. Manchuria, Korea.
  var. japonica (Miq)Hara. NE Asia. H&S 1949, L12
  var. rockii (Rehd.)Rehd. (rockii) China, Tibet. H&S 1967, not found R7
  var. szechuanica (Schneid)Rehd. SZECHUAN BIRCH. China. H&S 1948, O9
populifolia Marsh. GRAY BIRCH. E N America. FRI Ch 1977, not found H8; Appleton1987 I5; G5;
pubescens Ehrh. Europe to Siberia. J7 M4 P7; Appleton 1988 P0+GC;
raddeana Trautv. Caucasus. Armstrong F4+GC
schmidii Reg. Japan, Korea, Manchuria. Cave1987, G5
turkestana Litvin. TURKESTAN BIRCH. Turkestan. H&S 1967, not found O7
utilis D Don. HIMALAYAN BIRCH. Himalaya, Kashmir. DSIR Ax 1979, G5
verrucosa Ehrh. see B. pendula

Bomarea: Amaryllidaceae (2+0=2)
caldasiana Herb. N & S America. not found M5

Bowkeria: Scrophulariaceae (1+0=1)
gerardiana Harv. S Africa. D&D 1938, K9

Brachychiton: Sterculiaceae (2+0=2)
acerifolium F.v.Muell. (Sterculia acerifolia) FLAME TREE. Australia. M4
Appendix 1: Catalogue of the current collection

*populneum* (Cav)R Br. (*B.diversifolium*, *Sterculia diversifolium*)
KURRAJONG. Australia. H9=DJC H11=DJC

**Brachyglossis**: Asteraceae (1+0=1)
- *repanda* JR & G Forst. RANGIORA New Zealand.

**Broussonetia**: Moraceae (1+0=1)
- *papyfera* (L.)L'Hér. PAPER MULBERRY. China Japan. H&S 1964, L10 S8

**Brugmansia**: Solanaceae (1+0=1)
- *Bull 1988 M4*

**Buddleia**: Loganiaceae (16+4=20)
- *D9 E9 G5 I5 L6*
  - *alternifolia* Max. FOUNTAIN BURDELLIA. China. E7 H9 R10
  - *auriculata* Benth. S Africa. E10+GC
  - *caryopteridifolia* W W Sm. China. H&S 1949, not found L8
  - *colvilei* Hook. f. Himalaya. Ormond 1988, M4+GC
  - *crispa* Benth ex Wall. India. H&S 1964, H9(gone); J10(seedling from H9) (NM);
    Cave 1988, M6+GC; not found S6;
  - *davidii* Franch. (variabilis) China. S5 19
    'Alba' Collier 1988, K10+GC (NM);
    'Black Knight' Bull 1988, L5
    'Empire Blue' H&S 1935 O9, the S5 one?, not found F3
  - *dysophylla* (Benth)Raddk. S Africa G10+BS, I1=BS
  - *fallowiana* Balf f. & W W Sm. China Collier 1988, K10+GC (NM);
  - *farreri* Balf f. & WW Sm. China. Stevens 1935, H7;
  - *globosa* Hope. ORANGE BALL TREE. Chile, Peru. B6 C7
  - 'Lochinch' Hort. Collier 1988, K10+GC (NM);
    cuttings from above, K10+GC (NM); R6+GC (NM);
  - *nivea* Duthie. China. M6+BS
  - *saligna* South Africa. I10+BS
  - *salvifolia* (L.)Lam. SOUTH AFRICAN SAGEWOOD. S Africa. B6+GC, not found H9

**Buxus**: Buxaceae (1+1=2)
- *sempervirens* L. COMMON BOX. Europe. P5
  - 'Argentea' VARIEGATED BOX. L4

**Calliandra**: Fabaceae - Mimosaceae (2+0=2)
- *portoricensis* (Willd)Benth. WHITE TASSEL FLOWER. Mexico, W Indies. H11+MM
  tweedii Benth. RED TASSEL FLOWER. Brazil. Anderson 19337 died; Avalon1987, H11+MM

**Callicarpa**: Verbenaceae (3+0=3)
- *bodinieri var. giraldii* (Rehd)Rehd. BEAUTY BERRY. China Appleton1986, M4 (NM)
  dichotoma (purpurea) Korea, China. Martins1989 M4(NM)
  japonica Thunb. BEAUTY BERRY. Japan. Hudson1985, M4 (NM)

**Callicoma**: Cunoniaceae (1+0=1)
- *serratifolia* Andre. Australia. 19347, M5+BB

**Callistemon**: Myrtaceae (8+1=9)
- *C10 I9 R6 Q10(BH2)*
  - *citrinus* (Curt)Skeels. (*C.lanceolatus*) CRIMSON BOTTLEBRUSH. Australia. R10
Appendix 1: Catalogue of the current collection

coccineus F Muell. Australia. not found H10 (under large A. buergerianum?)
linearis (Sm) DC. Australia. R10
pheoniceus Lindl. Australia. Q10, not found H10
‘Red Cluster’ (NNC) G8
rigidus R Br. Australia. G8
salignus (Sm) DC. Australia. G8
speciosus (Sims) DC. Australia. not found H9
violacea (Name not confirmed). G8
Calocedrus: Cupressaceae (3+0=3)
decurrens (Torr) Florin. (Libocedrus d.) INCENSE CEDAR. SW USA. D5+McKG4, H7+GC
formosana (Florin) Florin. (Libocedrus f.) Taiwan. 1955?, G4 G9
macroclips Kurz. (Libocedrus m.) China. H&S 1951, not found H7
Calodenrum: Rutaceae (1+0=1)
capense (L.f) Thunb. CAPE CHESTNUT. S Africa. D&D 1938, M8
Calycanthus: Calycanthaceae (2+0=2)
floridus L. CALIFORNIA ALLSPICE. USA. H&S 1945; Appleton 1987, Q5+GC;
occidentalis Hook & Arn. USA. L6+GC,
Camellia: Theaceae (17+198=215)
‘Barbara Clark’ (saluenensis x reticulata). O8
‘Brian Doak’ (seedling of ‘Tali Queen’). O8
chrysantha China. Lennard 1988, H11+GC
‘Cornish Snow’ (saluenensis x cuspidata) H&S 1948?, I8+MM
drupifera see oleifera
‘Frances L’ (saluenensis ‘Apple Blossom’ x ‘Buddha’). Hort. Cave 1988, L4+GC
granthamiana Hong Kong. Koromiko nursery 1981, H8
x heterophylla ‘Barbara Hillier’ (NNC) H&S 1958, P9 P10
higo types
‘Hi-no-hakama’ (higo-type) J6 J7+MM M5
‘Hi-no-maru’ (higo-type) J10 M6
hongkongensis Hong Kong. Koromiko nursery 1981, H8
‘Inamorata’ (saluenensis x reticulata) Hort. 18
‘Inspiration’ (saluenensis x reticulata) Hort. H&S 1960 Q5, not found H10
japonica
‘A D Elosin’ (Name not confirmed). H4
‘Alba Plena’ not found H10
‘Alba Simplex’ not found R8
‘Alexander Hunter’ H4, not found O7
‘A M Hovey’ (Name not confirmed). H11 19
‘Anemoniflora’ R7, not found H11
‘Angela Cocchi Rouge’ (Name not confirmed). R7
‘Anna M Page’ (Name not confirmed). R7
‘Apaueformis’ H10
‘Arajishi’ E10 I11
‘Aspasia’ F10 H4 I10 L4, not found L13
Appendix 1: Catalogue of the current collection

'Auguste Delphosse' (Name not confirmed; 'Auguste Delfosse'?). not found R8
'Begonia' (Name not confirmed). R5
'Bessie MacArthur' (Name not confirmed). not found H10
'Blanche' (Name not confirmed). not found K7
'Blanda' cerise red J7
'Blood of China' P10
'Bonomiana' not found H11
'Campanulata' (Name not confirmed). not found R6
'Carnation Pink' (Name not confirmed). D&D 1934, J9
'Chandleri' II0, not found H11
'Chisyu Kiku Rosey Crimson' (Name not confirmed). H4
'Cho Cho San' II0, not found H11
'C H Hovey' L8 M3
'C M Hovey' I10 I11 M6
'C M Wilson' not found H10
'Colleen Temple' x 'Daitarin' II0
'Contessa Fozzoni' (Name not confirmed; 'Contessa Tozzoni'?). H10
'Crimson Waratah' (Name not confirmed). R7
'Daikagura' D8, not found Q8
'Daitarin' (tango type) P5, not found H10
'Dark Red' (Name not confirmed). not found H10 M4
'Debutante' I8
'Deep Pink Salmon' (Name not confirmed). M4
'Dolly Hussey' (Name not confirmed). O6
'Dorothy Jessup' (Name not confirmed). not found Q8
'Double Rose Pink' (Name not confirmed). Webb 1935, M4
'Dr Tinsley' N5 Q7, not found H10
'Duchess of York' ('Lady Loch') Webb 1934, I11, not found H4
'Edith Linton' D8, not found Q8
'Edward Billing' ('Lady Loch') D&D 1934, J8 M3
'Elegans' I8
'Emporer of Russia Variegated' ('Czarina', 'Great Eastern':NZ) H4
'Engladine No 1' (Name not confirmed). not found Q8
'Firefalls' (Name not confirmed). Q7
'Flame' ('Moshio') P9+MM
'Frances Haver' (Name not confirmed: 'Frances Hanger'?). N7
'Frau Mina Seidel' ('Usu Otome', 'Pink Perfection') J10
'Governor Mouton' not found H10
'Grandiflora' I9+MM J8+MM L6+MM M4+MM
'Great Eastern': true (Australian) II0+CN
'Great Eastern':NZ L4, not found M3 H11
'Great Western' (Name not confirmed). J7
'Hanafuki' not found H10 P8
'Ha-natashawan-Bawa' (Name not confirmed). Q10
'Harriet Beecher Sheather' R7
Appendix 1: Catalogue of the current collection

‘Hassaku’ ('Beni Hassaku') 18 H10+MM R5
‘Helenor’ 18 L9+MM, not found Q8
‘Henry Favre’ D&D 1934, not found M4
‘Hikama’ (Name not confirmed). not found N6
‘Hikaru genji’ 19+MM
‘Hi-otome’ (Name not confirmed). R7
‘Hishtatsakuma’ (Name not confirmed). not found R8
‘Imператор’ R7, not found Q8
‘Isabella’ (Name not confirmed). Webb 1935, H9, not found Q8
‘Jean Lynne’ R7
‘Jenny Lind’ R7
‘John Ilges’ (Name not confirmed). not found H10
‘Joseph Pfingstl’ 19
‘Jouvan’ 111, not correct
‘Jupiter’ H&S 1951 not found R6
‘Kingyo Tsubaki’ ('Apuaeformis') see above
‘Kramers Supreme’ Q7
‘K Sawada’ shifted to P5
‘Kumasaka’ R7
‘Lady Beresford’ (Name not confirmed). not found R8
‘Lady Charlotte’ (Name not confirmed). P9
‘Lady Clare’ ('Akashigata') M3 H9, not found Q8
‘Lady Parker’ (Name not confirmed; ‘Lady Parker Peony’?). M4, not found H11
‘Lady St Clair’ (Name not confirmed). 19 R7
‘La Graciola’ H11 19
‘Large fruited form’ (Name not confirmed). Berry 1988, M3-BB
‘Latifolia’ 18 R7
‘Levertons’ (Name not confirmed). not found Q8
‘Leviathan’ not found H10
‘Look Away’ H10+MM
‘Madame Hahn’ shifted to P5
‘Madame Pepin’ H9
‘Magnoliiflora’ H&S 1951 110
‘Magnoliiflora Alba’ ('Miyako dori') R5
‘Mamoro Wabusuki’ (Name not confirmed). 110
‘Maroona’ (Name not confirmed). D8, not found R8
‘Mary Charlotte’ P10
‘Masterpiece’ (Name not confirmed). Q7
‘Mathiotiana’ F10 I9 H11 J7 M3 M4 Q8, not found P10
‘Mena Ladnier’ P10+MM
‘Metallica’ (Name not confirmed). R7
‘Mikanike’ (Name not confirmed). L5
‘Miss Most’ (Name not confirmed). not found R8
‘Moonlight’ (Name not confirmed). H10 110 K5(or is it Nishiki)
‘Mrs Greer’ (Name not confirmed). 110(counterlabelled ‘Carnation Pink’)
Appendix 1: Catalogue of the current collection

‘Mrs Henry Boyce’ (‘Paolina Maggi Rosea’) 19-MM
‘Mrs Tinsley’ (Name not confirmed). not found H10
‘Nagasaki’ (‘Lady Audrey Buller’) H&S 19517, R5
‘Nigra’ (Name not confirmed). H&S 19517, Q1
‘Nishiki’ (Name not confirmed). M4
‘Nonogami’ (Name not confirmed). not found M4
‘Nonpareil’ (Name not confirmed). M3 H11?
‘Ochraleuca’ (Name not confirmed). not found H10
‘Oni Garona’ (Name not confirmed). K8
‘Paolina Maggi’ not found Q8
‘Paxtonii’ (Name not confirmed). not found Q8
‘Peach Blossom’ (‘Magnoliiflora’; UK) 18
‘Preston Rose’ (‘Duchess de Rohan’) H9
‘Prince Albert’ (‘Albertii’) M4+MM
‘Prince Frederick William’ R7
‘Prolific’ (Name not confirmed). R7
‘Pukekura White’ (Name not confirmed). Q10
‘Purpurea’ (‘Fuyajo’) J6+MM
‘Rachel’ (Name not confirmed). J8
‘Red Gem’ (Name not confirmed). H11+GC
‘Red Waratah’ (‘Mariana’) H9 H11
‘Rose Pink Waratah’ (Name not confirmed). H9
‘Rossii’ (Name not confirmed). R7
‘R.L. Wheeler’ J10
‘Sarah Frost’ (Name not confirmed). H8
‘Shiro Wabusuki’ (Name not confirmed). J6 J7
‘Shepherds Red’ (‘Speciosissima’) M4
‘Shiragiku’ (‘Purity’) H10
‘Shiro-giku’ (Name not confirmed). not found Q8
‘Shiro Taubuki’ (Name not confirmed). R7
‘Simeon’ (Name not confirmed). Q7?
‘Single Red’ (Name not confirmed). M5? H5
‘Sode kakushi’ (‘Gauntlettii’, ‘Grandiflora Alba’) M5
‘Souvenir de Bahuaud Litou’ J10
‘Speciosissima Rosea’ (Name not confirmed). H4+MM
‘Spencers Pink’ E10-MM I10-MM
‘Storeyi’ not found H8
‘Summersby’ (Name not confirmed). not found H8
‘Sunset Glory’ (Name not confirmed). Q7
‘Tabbs’ not found Q8
‘Tarona’ (Name not confirmed). H11 M6
‘The Czar’ M4+MM
‘Thelma Dale’ Q7
‘Thompsoni Rosea’ (Name not confirmed). not found R8
‘Tokyo’ (Name not confirmed). not found H10
Appendix 1: Catalogue of the current collection

'Tommorow' Q7
'Ubane' ('Toki-no-Hagasane') not found P8
'Vicomte de Nieuport' (Name not confirmed). R7
'Villes de Nantes' Q7
'Virgins Blush' (Name not confirmed). I9
'Wabusuki' (Name not confirmed). H8 H9 O8, E10 or is it 'Spencers Pink'
'White Hibiscus' (Name not confirmed). I10
'White Swan' (Name not confirmed). P10
'Winter Cheer' (Name not confirmed). R7
'Woodsii' (Name not confirmed). not found Q8
'Wrightii' (Name not confirmed). D&D, Webb 1935, I11, not found H9
'Yodo No Asahi' R7
'Yoibijin' I9 M5
'Yokohama' ('Sode kakushi') E5 P10
'Yuki Botan' ('Pride of Descanso') P9
'Yukumi Iurema' (Name not confirmed). K8, notfound P10

kissi India, China. Jellyman 1988, M4+GC
lutchuensis Japan. Koromiko nursery 1981, H8
olaifera (drupifera) India, Burma, S.China. Koromiko nursery 1981, H8, J8, K7, P10
'Phyl Doak' (reticulata x saluenensis) O8 Q7, not found H10
reticulata China. H&S 1949, K8 H8, not found P10
wild form P9
types H9 I9 J8 L4 M4
'Buddha' I8
'Captain Rawes' H11, not found H10
'Forrest' ? (Name not confirmed). I10
'Mary Williams' (Name not confirmed). H&S 1960, check H8
'Tall Queen' H&S 1960?, I8
rocueflora (Name not confirmed). Koromiko nursery 1981, H8
rosaeiflora Ceylon. not found H8
saluenensis Yunnan. H9
saluenensis var. latifolia (Name not confirmed). H&S 1951, not found P10
sasanqua Japan.

'Autumn Beauty' (Name not confirmed). M4
'Azuma Nishiki' ('Eastern Brocade') not found H11
'Beni Zuri' (Name not confirmed). H9
'Bonigiri' (Name not confirmed). H9
'Charles Micheal' I10
'Exquisite' J10 R7
'Hijuki Nishiki' (Name not confirmed). I11
'Hinotsukama' (Name not confirmed). H11 M5, not found H9 K7
'Hiryu' ('Kanjiro') L5 K3 M4
'Mine-no-yuki' not found H11 M4
'Monogono' (Name not confirmed). L6 M4
'Onigarona' (Name not confirmed). K7
Appendix 1: Catalogue of the current collection

‘Pink Snow’ K8
‘Plantation Pink’ I9, not found H10 H11
‘Red’ (Name not confirmed). H9
‘Swell Pink’ (Name not confirmed). L6
‘Variegata’ H9

sinensis India, China. H11 L6+GC
tenuifolia (tenuiflora) Taiwan. Koromiko nursery 1981, H8
transnokoensis Taiwan. H11+GC
tsal Yunnan, Burma, Vietnam. Koromiko nursery 1981, not found H8; Lennard 1988, H11+GC
x vernalis ‘Dawn’ (Name not confirmed). I10
x williamsii (japonica x saluenensis)

‘Bartley’ H9
‘Donation’ I10, not found H10 R5
‘J C Williams’ H&S 1951, H8 H9 I10
‘St Eve’ H&S 1954, I10

Misc D6 (CP505), D7(CP431), D7(CP428), D8(CP459), D9 single pink CP428, E10two, F10 three by cottage, H4 four, H5, H8 Ga 826, H11 six, I4two, I7, I8 three, I9 Ga820, Ga 870, Ga835, I10 Ga753 Ga764, Ga763 Ga759 Ga805 Ga801, J8two, J10one, K5 several, L6five, L8 one, M3two, M4 four, M5two, P5 three, P10 two, Q5five, R6two, Q10 one, R5 six

Campsis: Bignoniaceae (1+1=2)

grandiflora (Thunb)Schumann. TRUMPET CREEPER. China H11
x tagliabuana (Vis)Rehd. Hort.

‘Madame Galen’ Nichols 1988, L5+GC

Carpenteria: Saxifragaceae (1+0=1)
californica Torr. California. I10+GC

Carpinus: Betulaceae (8+2=10)
betulus L. COMMON HORNBEAM. Europe. H&S 1949, D10+MMK11+MM K12+MM L12+MM; Appleton 1988, M5+GC (NM);

‘Asplenifolia’ stock C10
‘Fastigiata’ PYRAMIDAL HORNBEAM. I3+MM Q2+MM R3+MM
caroliniana Wall. AMERICAN HORNBEAM. E N America. H&S 1948, S5+MM, not found C10
cordata Bl. Japan. H&S 1959, Q4, not found K13
costata Bl. E Asia. PS(ex seed Mt Kyebang, Korea) (NM);
henryana (Winkl)Winkl. China. H&S 1939, S3+MM
japonica Bl. JAPANESE HORNBEAM. Japan. H&S 1949&59, S3+MM, not found K12

Carpodetus: Escalloniaceae (1+0=1)
serratus JR & G Forst. PUTAPUTAWETA. NZ. M6

Carya: Juglandaceae (7+0=7)
aquatica (Michx f)Nutt. WATER HICKORY. SE USA. DSIR Ak 1981, D7
cordiformis (Wang.)K Koch. BITTERNUT HICKORY. N N America. H&S 1956, I3
glabra (Mill)Sweet. PIGNUT. E USA. Hamilton1983, E4 F6
illinoensis (Wang.)K Koch. (pecan, oliviformis). PECAN. USA. H&S 1959, K6, S2 (NM);
laciniosa (Michx f)Loud. BIG SHELBARK. USA. Hamilton1988, K2+GC
ovata (Mill)K Koch. SHAGBARK HICKORY. USA. H&S 1959, E11
Appendix 1: Catalogue of the current collection

tomentosa Nutt. MOCKERNUT. USA. H&S 1959, Q5 (NM)

**Cassia: Fabaceae - Caesalpinaceae (1+0=1)**

tomentosa L.f. GOLDEN SHOWER. Asia. H&S 1947, R5 R10+D1C

**Castanea: Fagaceae (2+0=2)**

crenata S&Z. JAPANESE CHESTNUT. Japan. Berry(seed 1980), F6+GC

sativa Mill. SWEET CHESTNUT. Asia minor, Europe, N Africa.
H&S 1948, C11 D11 K12, not found D4

**Castanopsis: Fagaceae (1+0=1)**

tribuloides (Smith) A D C. China. Jellyman(AJ120) 1987 L3(NM);

**Castanospermum: Fabaceae - Papilionaceae (1+0=1)**

australe A Cunn & Fras. MORETON BAY CHESTNUT. Australia. N8

**Casuarina: Casuarinaceae (1+0=1)**
P6

**Catalpa: Bignoniaceae (5+2=7)**

bignonioides Walt. INDIAN BEAN. USA. D4+GC

‘Aurea’ H7+GC

bungei C A Mey. China. Gallen ex Hudson 1988, D10=GC (NM);

x erubescens Carr. (bignonioides x ovata). Hort.

‘Purpurea’ Cave 1987, C10


ovata G Don. China. C10; Mortimer 1988, T7+GC (NM);

**Catha: Celastraceae (1+0=1)**
edulis (Vahl) Forrsk ex Endl. ABYSSIAN TEA. Africa. Denes 1988, M4+GC

**Ceanothus: Rhamnaceae (3+1=4)**
P5 R6 S5

cyanus Eastw. W USA. not found I8

x delililius Spach. (americanus x coerulescens). Hort.

‘Gloire de Versailles’ I8, not found L6

impressus Trel. W USA. K9 S5

rigidus Nutt. W USA. Stevens 1935?, not found R6

**Cedrela: Meliaceae**

**see Toona**

**Cedrus: Pinaceae (5+5=10)**

D8 G8 J10 K5

atlantica Manetti. ATLAS CEDAR. NW Africa. C77 K4+GC L4

‘Aurea’ GOLDEN ATLAS CEDAR. H&S 1952, F3=GC H7

f. glauca Beissn. BLUE ATLAS CEDAR. B6 C5 C7 C8 D6 D7 E5 E8 E10 F5 G3 G4

H9 I6 I7 I8 I9 J7 K5 L7 L9 M8 N4 N6 N7 N8 O9 P10 P6 R2 R10 S7

T4 (NM);

‘Glauc Pendula’ Q10

brevifolia (Hook f.) Henry. CYPRESS CEDAR. Cypress. Cave 1988, C8+GC

deodara (D Don) G Don. DEODAR CEDAR. Himalaya. C4 C6 C11 E5 F9 G9

I11 K7 P8 R5 R7 R8 S6 S7 S8

‘Aurea’ GOLDEN DEODAR. B5=GC O2+MM R5M, not found J10

‘Robusta’ Cave 1988, D8+GC(NM); H&S 1952, L8;
Appendix 1: Catalogue of the current collection

**libani** A. Rich. CEDAR OF LEBANON. Lebanon. D7+GC

‘Sargentii’ WEEPING CEDAR OF LEBANON. H&S 1956, H9

**Celastrus: Celastraceae (3+0=3)**

H8

*loeseneri* Rehd & Wils. China. H&S 1951, not found O9

*orobiculatus* Thunb. ORIENTAL BITTERSWEET. China. H&S 1949, M5 19 O9

*rosthorianus* Loes. China. not found M5

**Celtis: Ulmaceae (7+0=7)**

Q7

*australis* L. NETTLE TREE. Europe, Africa, Asia. H&S 1947&49, F12+MM R7, not found K7 K11


*caucasica* Willd. W Europe, W Asia. D&D 1939, not found P5

*glabrata* Planch. Caucaus, Asia minor. H&S 1957, H2+MM

*laevigata* Willd. (mississippiensis) USA. H&S 1949, E12+MM, P5+GC

*occidentalis* L. HACKBERRY. N America. H&S 1949, F11+MM, not found R7

*sinensis* Pers. CHINESE HACKBERRY. China, Japan, Korea. Berry (seed UK), P5+GC, R6+GC

**Cephalotaxus: Cephalotaxaceae (4+0=4)**

*fortunei* Hook. CHINESE PLUM YEW. China. J9, M5+CN

*harringtonia* K Koch. COWS TAIL PINE. E Asia

*harringtonia var. drupacea* (S&Z)Koidz. JAPANESE PLUM YEW. Asia. H&S 1951, I4

*harringtonia var. drupacea fastigiata* (Name not confirmed). M7

**Ceratonia: Fabaceae - Caesalpinaceae (1+0=1)**

*siliqua* L. CAROB. Medit. M9 Q9

**Ceratopetalum: Cunoniaceae (2+0=2)**

*apetalum* D Don. COACHWOOD. Australia. 1938?, M3

*gummiferum* Sm. CHRISTMAS BUSH. Australia. 1938?, R5, not found H10

**Ceratostigma: Plumbaginaceae (1+0=1)**

*willmottianum* Stapf. China. H9+MM

**Cercidiphyllum: Cercidiphyllaceae (2+0=2)**

*japonicum* S&Z. KATSURA TREE. Japan. 19357, H5+MM H6+MM H10 17

I9+MM M4; Cave 1988 Q4+GC (NM);

*japonicum var. sinense* Rehd & Wils. not found (tree at M4 is japonicum)

**Cercis: Fabaceae - Papilionaceae (5+2=7)**

*canadensis* L. EASTERN REDBUD. USA. R5+MM P5+MM.

‘Forest Pansy’ P5

*chinensis* Bge. CHINESE REDBUD. China. D&D 1934, B5+MM K5+MM; Heritage 1986 177

*occidentalis* Tott. CALIFORNIA REDBUD. USA. PS (ex seed UK), F8+GC

*racemosa* Oliv. China. H&S 1948, G5+MM K6+GC

*siliquastrum* L. JUDAS TREE. Europe. C6+MM H6+CN H9+MM I7+MM J9+MM

‘Alba’ Ormond 1988, K10+GC (NM); Roberts (ex Farndon) 1987, L6 dead

**Cestrum: Solanaceae (2+0=2)**

*aurantiacum* Lindl. Guatemala. H8+MM

*elegans* (Brong.) Schlöss. (purpureum) Mexico. not found H10

**Chaenomeles: Rosaceae (2+1=3)**

H5 white, 18 110 N5 white, N7 three N8 white

*cathayensis* Schneid. (Cydonia cathayensis) China. I7 L6
Appendix 1: Catalogue of the current collection

*speciosa* (Sweet)Nakai. (*Cydonia speciosa*) JAPONICA. Japan. not found H8 O8

‘Falconet Charlot’ not found O8

**Chamaecyparis:** Cupressaceae (7+32=39)

*formosensis* Matsum. FORMOSAN CYPRESS. Taiwan. not found N8. (a form of law?)(BB)

*funebris* (Endl)Franco. China B6 D7 D8 E5 G10 J6


*forms* D5(CP590, CP ) M6 yellow

‘Albospica’ not found I11

‘Darleyensis’ not found H9

‘Duncanii’ M6

‘Filifera’ E5(‘Filiformis Elegans’ +CN) J7 L4

‘Filifera Aurea’ M6

‘Fletcheri’ N6

‘Glauc’a’ I7

‘Lutea’ H9

‘Lycopodioides’ D5-CN

‘Minima’ not found M7

‘Naberi’ Orchard Hill

‘Nidiformis’ not found I11

‘Pottenii’ K7

‘Variegata’ E6

*obtusa* (S&Z)Endl. HINOKI CYPRESS. Japan, Taiwan. M7

‘Aurea’ GOLDEN HINOKI CYPRESS. not found M7

‘Aurea Youngii’ M6 M7

‘Compressa’ not found B6

‘Cripsii’ not found B6

‘Nana’ D& D 1935, M6 M7 L6

‘Nana Albo Variegata’ M7

‘Nana Aurea’ M6

‘Nana Variegata’ M6

‘Pygmaea’ not found M7

‘Variegata’ ?? H11

‘Youngii’ M6

*occidentalis* (NNC) E6

*pisifera* (S&Z)Endl. SAWARA CYPRESS. Japan. C5 M6 N6

‘Filifera’ E5

‘Filifera Aurea’ I8 N7 (these two not the same)

‘Plumosa’ C6 M3(felled) R10+MM

‘Plumosa Aurea’ I8

‘Plumosa Aurea Compacta’ D&D 1935, M6

‘Squarrosa’ Q7 R10, not found L6

*thyoides* (L.)BSP. WHITE CEDAR. USA. C5

‘Ericoides’ (Carr)Sudw. USA. M6
Chimonanthus: Calycanthaceae (2+2=4)

*praecox* (L) Link. *(C. fragrans)* WINTERSWEET. China. H4 labelled fragrans (Hillier Dam); 16 not rolled, pale (near Shallos); 18 not noted (white rail border); N7 not rolled (start 3 paths)

*praecox form* H10-MM bright yellow, more scent, shorter petal (Willmot bed); H11 (Garry’s tank)

*praecox ‘Parviflorus’* 17 rolled, pale (troll bridge), O9 rolled (end brown oak), 19 pale, slightly rolled (Gordonia bed)

*praecox ‘Grandiflorus’* F10 dark centre, slightly rolled (above cottage)

*yunnanensis* W W Sm. China. Purdie (Hudson) 1988, K7+GC

Chimonanthus: Oleaceae (2+0=2)

*retusus* Lindl. & Pax. Korea, Japan. E10, dead Q5

*virginicus* L. E USA. not found 18

Choisya: Rutaceae (1+0=1)

*ternata* HBK. MEXICAN ORANGE BLOSSOM. Mexico. E9-MM

Cinnamomum: Lauraceae (1+0=1)

*camphorum* (L) Presl. CAMPHOR TREE. E Asia, Africa. L12+GC O9+GC

Cissus: Vitaceae (1+0=1)

*striata* Ruiz & Pav. Chile, Brazil. I8+JN,

Cistus: Cistaceae (2+2=4)

19 110 L5(NM) N2(NM)

*ladanifer* L. N Africa. not found M7 S9

*monspleisens* L. SW Europe. MONTPELIER ROCK ROSE. not located H10

*x purpureus ‘Brilliancy’* Hort. O9-MM

‘Silver Pink’ Hort. *(laureifolia x cretica)* O9+MM O10-MM

Citrus: Rutaceae (1+2=3)

H9 H11 L5

*grandis* L. *(C.maxima. (Burn)Merril)* SHADDOCK. China, Asia

‘Wheeney’ not located H8 (removed)

*limon* (L)Burm. LEMON. Asia.

‘Ponderosa’ I10

*sinensis* (L)Pers. ORANGE. China. I10

Cladrastis: Fabaceae - Papilionaceae (2+0=2)


*sinensis* Hemsdl. China. H3+GC

Clematis: Ranunculaceae (13+13=26)

H11 110purple,

*armandii* Franch. China. 1948, G5 I8 and naturalising

‘Apple Blossom’ I9+GC

‘Snowdrift’ H&S 1949, not found I8

*balearica* L.Rich. Corica. not found H7

*campaniflora* Brot. Portugal. not found H10

*cirrhosa* L. Spain, Israel. H7+GC H8+GC

‘Fair Rosamund’ Hort. H11

*florida* Thunb. Japan.

‘Sieboldii’ *(C.sieboldii)* not found I8

*grewolfiwia* DC. Himalaya. I7+GC P5+GC

‘Gipsy Queen’ Hort. not found H10

‘Madame Le Coutre’ *(‘Marie Boisselot’)* Hort. not found H11
montana  Buch-Ham.  China, Himalaya. 17
   ‘Alba’  H8
   ‘Rubens’  H5 H8
   ‘Tetarose’  Nichols 1988, L5+GC
napaulensis  DC.  (forrestii)  China, India.  H&S 1948,  J9+GC
paniculata  Gmel.  (indivisa)  New Zealand.  L11
parviflora fortunei (Name not confirmed).  H10
‘Seribo’  (NNC) H11(NM)
serratifolia  Rehd.  Korea.  H11
‘Sir Wolesley’  Hort.  not found H11
texensis  Buckl.  Texas.  not found H11
uncinata  Champ.  China.  H&S 1947, not found 18
‘Ville de Lyon’  Hort.  not found H10
‘W E Gladstone’  Hort.  not found H11

Clerodendron: Verbenaceae (2+0=2)
   trichotomum  Thunb.  Japan.  19-MM
trichotomum var. fargesii  China.  Appleton 1988 K10+GC (NM);

Clethra: Clethraceae (3+0=3)
   abnifolia  L.  N America.  Pukeiti 1985, O7 (NM);
   barbinervis  S&Z.  Japan.  H&S 1959/1955, J2+CN, not found H8
   fargesii  Franch.  China.  H&S 1957, Q4

Clianthus: Fabaceae - Papilionaceae (1+0=1)
   puniceus  Banks & Sol.  KAKA BEAK.  New Zealand.  Dow ex Tologa Bay wild source, M4

Colquhounia: Lamiaceae (3+0=3)
   coccinea  Wall.  Himalaya.  Hudson 1988, M4+GC
   var. mollis (Schlect)Prain.  China.  H&S 1948, not found H11
   var. vestita  (Wall)Prain.  Hudson 1988, M4+GC

Coprosma: Rubiaceae  (5+3=8)
   acerosa  naturalised Q1 (NM)
   repens  A Rich.  TAUPATA.  New Zealand.  K12
   ‘Rebecca’  Bayley1987, H11
   ‘Variegata’  not found H10
   rhamnoides  A Cunn.  New Zealand.  K6 (NM) and naturalising
   rigida  Cheesman.  New Zealand.  D7 (NM) and naturalising
   robusta  Raoul.  KARAMU.  New Zealand.  FRI R 1979, M2 and naturalising
   ‘Gordons Gold’  Collier 1988, M4+GC (NM);

Cordyline: Agavaceae (2+2=4)
   australis  (Forst f)Hook f.  CABBAGE TREE.  New Zealand.  B H Just1920, D8 D9 E9
   F9 G10 L4 L5;  FRI R 1979, K1 L1 N1(all NM)
   ‘Albertii’  D&D1987,17+GC
   ‘Purpurea’  Kew, D11 H10 I10
   terminalis  Kunth.  Polynesia.  not found H10

Coriaria: Coriariaceae (1+0=1)
   arborea  Lindsay.  TUTU.  New Zealand.  L11
Appendix 1: Catalogue of the current collection

**Cornus: Cornaceae (16+1=17)**

- *Comus*: Cornaceae (16+1=17)
  - C12 (white) F9 F10 K9 L11 P3 P4 Q3 Q4 Q5, S6(NM)
  - *alba* L. Siberia to Korea. Mortimor 1988, L6+GC (NM); not found H10;
  - *capitata* Wall. STRAWBERRY TREE. Himalaya. J2 J3 H5 K3 L4 L5 L6 M4
  - *controversa* Hemsl. TABLE DOGWOOD. Japan. Cave1987, 15+GC M7+GC;
    dead 18; Appleton 1988, S7+GC (NM);
  - *florida* L. FLOWERING DOGWOOD. N America. H7 I3 I7+CN J7+CN K6
    1. *f. rubra* (West) Schnelle PINK FLOWERING DOGWOOD. H6 I5 I7 L5 P3 P5 Q9,
  - *kousa*. Hance. JAPANESE DOGWOOD. Japan. I7+MM, not found H6
  - *var. chinensis* Osborn. CHINESE DOGWOOD. China. H&S 1952, P5+MM
  - *macrophylla* Wall. Japan, China, Himalaya. Berry (ex Cholipo), M7, Jellyman (AJ40), L4 (NM); L5 (NM);
  - *mas* L. CORNELIAN CHERRY. Europe, Caucasus. P9 (ex seed UK) 1981, D5+MM M7+GC; not found H8;
  - *nutallii* Audubon. PACIFIC DOGWOOD. N America. H&S 1949, G5+CN H5 H10 L5 Q8 R5
  - *officinalis* S&Z. Japan. Dene1987, M7
  - *sanguinea* L. DOGBERRY. Europe. not found C6
  - *sessilis* Tott. BLACKFRUIT DOGWOOD. California. PS (ex seed N California), 1981 M7
  - *stolonifera* Michx. RED OSIER DOGWOOD. E N America. not found H6

- *Flaviramea* Collier1988, L6 (NM); Cave1988, L6(NM);

**Corylopsis: Hamamelidaceae (5+0=5)**

- M6
  - *pauciflora* S&Z. Japan. Cave 1987, L5+GC
  - *sinensis var. willmottiae* Hemsl. China. H10 Q4
  - *spicata* S&Z. Japan. R6+GC

**Corylus: Betulaceae (4+3=7)**

- *avellana* L. COMMON HAZEL. Europe. S4+GC,
  - *‘Aurea’* Bull 1987, I5+GC
  - *‘Contorta’* CORKSCREW HAZEL, H&S 1955, Q5
  - *chinensis* Franch. CHINESE HAZEL. China. H&S 1949, reverted to stock O4
  - *colurna* L. TURKISH HAZEL. Europe. H&S 1959, R3+GC, Mike Steven1986 R4+GC
  - *maxima* Mill. FILBERT. Europe, Asia minor.
  - *‘Atropurpurea’* E6+MM S5+MM
  - *sieboldiana* Bl. Japan. Gallen, F5+GC

**Corynocarpus: Corynocarpaceae (1+0=1)**

- *laevigatus* JR & G Forst. KARAKA NZ. HB Williams1987 L3(NM);

**Cotinus: Anacardiaceae (2+1=3)**

- C6 D7 J7
  - *coggygria* Scop. SMOKE BUSH. China, Himalaya. D&D 1934,
  - *‘Folius Purpurea’* PURPLE SMOKE BUSH, D&D 1934, C6 D8 E6 H10 L8

**Cotoneaster: Rosaceae (13+1=14)**

- E5 F4 F5 J11(NM), J12, K5(NM), K6(NM), K12
  - *affinis* Lindl. Himalaya. F5+MM F10+BB K6+BB K12+MM
  - *amoenus* Wils. China. K5+BS (NM);
Appendix 1: Catalogue of the current collection

bullatus 'Floribundas' (Stapf), Rehd & Wils. China. D10+GC
conspicuus Margaud. Tibet. J11+BS (NM);
franchetii Bois. China. J8+BS (NM); J6+BS (NM); L5+BS (NM);
frigidus Wall. Himalaya. B7+BS (NM), P5+BS (NM); not found H5 N6
glaucophyllus f. serotinus (Hutch.) Stapf. China. H6+BS; J8+BS (NM);
horizontalis Decne.
lacteus W W Sm. China. H5+BS, not located E5,
microphyllus Lindl. Himalaya, China. R4+BS
pannosus Franch. China. J6+GC
simonsii Baker. Himalaya, India. J5+BS J1+BS, not found J8
x watereri Excell. (frigidus x henryanus). H5+BS

+ Crataegomespilus: Rosaceae (1+1=2)
dardarii Simon-Louis. BRONVAUX MEDLAR. Hort. H&S 1948&50, D12 R2
‘Asnieresii’ H&S 1948&50, D10 S5

Crataegus: Rosaceae (28+7=35)
azarolus L. AZAROLE. Europe, N Africa, W Asia. H&S 1957, not found G3
chlorosarca Max. Manchuria. H&S 1957, not found G3
coccinoides Ashe. KANSAS HAWTHORN. USA. H&S 1948, E11
collina Chapm. SANDHILL HAWTHORN. USA. H&S 1958, H3
crus-galli L. COCKSPUR HAWTHORN. USA. not found E4 E11 G3
‘PyraCanthifolia’ H&S 1948, E11
‘Splendens’ H&S 1948, not found E11
douglasii Lindl. BLACK HAWTHORN. USA. H&S 1938, not found I4
x grigonensis Mouillef. Hort. H&S 1948, E12; Cave1988, V5 (NM);
holmesiana Ashe. E N America. H&S 1948, not found E11
jackii Sarg. JACK HAWTHORN. Canada. H&S 1948, E11
jonesiae Sarg. JONES HAWTHORN. N America. H&S 1948, E11
laciniata (orientalis) ORIENTAL THORN. Europe, Asia. H&S 1938, G5
laevigata see oxycantha.
macracantha see succulenta var. macracantha
mexicana DC. (C.pubescens f. stipulacea) Mexico. Q5+GC. Cave1988, S6 (NM),
missouriensis Ashe. USA. H&S 1949, D10 K12
mollis (Torr & Gray) Scheele. DOWNY HAWTHORN. USA. H&S 1947&51, E12
monogyna Jacq. COMMON HAWTHORN. Europe, Africa. not found O8
‘Biflora’ (‘Praecox’) GLASTONBURY THORN. H&S 1947, E11+MM
orientalis Pall. Europe, Asia. see Claciniata
oxycantha L. (laevigata. DC.) Europe, Africa.
‘Pauls Scarlet’ (‘Coccinea Plena’) D&D 1934?, H&S 1948, C4+MM I3+MM L13 Q1+MM, not found L6
‘Francois Rigaud’ (‘Fructo Lutea’) YELLOW FRUIT HAWTHORN, H&S 1949, K12
‘Punicea’ SINGLE RED MAY, H&S 1948&55, I3+MM K12+MM
phaenopyrum (L.f.) Med. (cordata) WASHINGTON THORN. USA. H&S 1938, K3 (NM); not found K2,
Appendix 1: Catalogue of the current collection

**pinnatifida** Bge. N.E Asia, not found G3

**var. major** N.E Br. China. H&S 1948, not found H3

**polyclada** (Name not confirmed). H&S 1956, not found G3

**x prunifolia** (Poir)Pers. Hort. H&S 1938, not found I8 K9 K12 L6 L7 M7

‘Splendens’ H7

**pubescens f. stipulacea** sec mexicana.

**punctata** Jacq. DOTTED HAWTHORN. E.N America. H&S 1949, K12, not found E11

**smithii** 16 this plant may be C.x smithiana. According to K and Hortus, C.smithii does not exist, it is Cuniflora.

**songarica** Reg. (Catalica. Lange.) Turkestan. not found O9

**submollis** Sarg. QUEBEC HAWTHORN. N America. H&S 1951, D11

**succulenta var. macracantha** (Lodd) Eggl. FLESHY HAWTHORN. USA. H&S 1948, not found E11

**uniflora** Muenchh. ONE FLOWER HAWTHORN. E USA. H&S 1948, not found C10

**wilsonii** Sarg. China. H&S 1948, E11

**X Crataemespilus: Rosaceae (1+0=1)**

**grandiflora** G Camus. Hort. H&S 1948 &51 &59, D10 E12 dead Q5

**Crinodendron (Tricuspideria): Tiliaceae (2+0=2)**

**hookerianum** Gay. Chile. PS 1981, not found H8

**patagua** Mol. Chile. Goodwin 1986, J9 (NM);

**Cryptomeria: Taxodiaceae (2+10=12)**

**japonica** D Don. JAPANESE CEDAR. Japan. Goudie 1934, C6 C12 C13 D6 D12 F5 I5 I6 J4 J6 J7 K4 K5 K8 L5 M3 M4 M7

form M7

‘Bandai-Sugi’ M6+JD (NM);

‘Compacta’ D&D 1934, J7 M7

‘Elegans’ D&D 1934?, D5 D6 I6 L6 O6

‘Elegans Aurea’ not found M7

‘Fortunei’ S7+GC

‘Globosa’ Bull1987, M6 (NM);

f. lobii (Carr)Beissn. D&D 1934?, J7, not found I8

‘Monstrosa’ L6+GC

‘Plumosa’ B6+GC C6+GC N8+MM O8+MM

‘Viminalis’ not found M7

‘Yueka’ M6 M7

**Cudrania: Moraceae (1+0=1)**

**tricuspidata** (Carr.)Burdeu. China. Berry (ex Cholipo ex Mt Chi Korea) 1988, M4+GC

**Cunninghamia: Taxodiaceae (2+1=3)**

C5

**konishii** Hayata. Taiwan. H&S 1949, E12+McK

**lanceolata** (Lamb)Hook. CHINA FIR. China. B6 C5 D6 D8 E6 I6 L4

‘Glaucia’ E12+GC I7+GC

**Cunonia: Cunoniaceae (1+0=1)**

**capensis** L. BUTTERKNIFE BUSH. S Africa. Denes 1987, I10

**X Cupressocyparis: Cupressaceae (0+1=1)**

**leylandii** ‘Variegata’ Hort. M6+MM

**Cupressus: Cupressaceae (13+5=18)**

D5 E8 J7 O9

**arizonica var. arizonica** Greene. ARIZONA CYPRESS. USA. I7 I8
Appendix 1: Catalogue of the current collection

**benthamii** (Endl.) Carr. BENTHAM’S CYPRESS. Mexico. C5

‘Aurea’ GOLDEN BENTHAM’S CYPRESS, removed F9


**chengiana** (NNC) Ormond 1988, S6+GC (NM)

**corneyana** Knight ex Carr. China. Hudson 1988, M3 (NM);

**duclouxiana** Hickel. China. K10=BS, Ormond 1988, S6+GC (NM);

**funebris** Endl. WEEPING CYPRESS. China. Webb 1935, B6 D7 D8 E5 G10 I6, not found J7

**glabra** Sudw. (arizonica var. glabra. (Sudw)Little.) SMOOTH ARIZONA CYPRESS. USA. G9 H9; McKeen 1989, C7(NM);


**guadalupensis var. forbesii** S Watts. GUADALUPE CYPRESS. Mexico, Guadalupe. Ormond 1988, F6+GC

**lusitanica** Mill. MEXICAN CYPRESS. Mexico to Hoduras.

‘Cluaca’ H&S 1949, not found I8

**macrocarpa** Hartw.ex Gordon. MONTEREY CYPRESS. California.

‘Donard Gold’ GOLDEN MACROCARPA. H&S 1950, H9

‘Lutea’ D&D 1934, E5 F5 H7 I8 O9 G10 P9 S5,

**sempervirens var. horizontalis** (Mill)Voss. ITALIAN CYPRESS. Europe

D&D 1934, B5 F6 H4 I5 J4 J6 L5 L6 M7

**torulosa** D Don. BHUTAN CYPRESS. Himalaya. NZFS? 1962?, O6 R 7

**Cyathodes:** Epacridaceae (1+0=1)

**fasiculata** (Forst f.) Allan. MINGIMINGI. NZ. not found J6

**Cyphomandra:** Solanaceae (2+0=2)

**betacea** (Cav).Sendth. TREE TOMATO. Peru. naturalised

**fragrans** (NNC) P Murphy(ex Food Resources Ltd)1987, H11

**Cyrilla:** Cyrillaceae (1+0=1)

**racemiflora** L. USA, W Indies. I8

**Cytisus:** Fabaceae - Papilicnaceae (2+0=2)

**multiflorus** (Ait)Sweet. WHITE SPANISH BROOM. Spain, N Africa. H&S 1950, not found H9

**procumbens** (Willd)Spreng. PROSTRATE BROOM. Europe. H10

**Dacrycarpus:** Podocarpaceae (1+0=1)

**dacyroides** (Rich)de Lauben. KAHIKATEA. NZ. FRI R 1979, I7, L3(bush)

**Dacrydium:** Podocarpaceae (3+0=3)

F5

**biforme** (Hook f.)Pilger. PINK PINE. NZ. FRI R 1979, M2(bush)

**colesenoi** Hook. SILVER PINE. NZ. D&D 1934, K7

**cupressinum** Lamb. RIMU. D&D 1934, E5 K7 Q10 M2(bush)

**Dahlia:** Astereaceae (2+0=2)

**tenuicaulis** Sorenson. Berry(ex Mexico)1987, H11


**Dais:** Thymeleaceae (1+0=1)

**cotinifolia** L. S Africa. McKay1988 J9+GC(NM), M4+GC;

**Daphne:** Thymeleaceae (7+2=9)

**bholua** (Damon form) Buch-Ham. Nepal, Bhutan, China. Cave, H11+GC

**bholua** Nepal, Bhutan, Assam. Jellyman1988 M4(NM)

**collina** Smith. Italy, Asia minor. Cave 1988, H10+GC (NM),
Appendix 1: Catalogue of the current collection

laureola  L.  Europe, N Africa.  H10+MM  I8+MM  I10+MM
mezereum  L.  Europe, Asian minor. McKean 1988, L6+GC (NM);
‘Alba’  McKean 1988, L5+GC (NM);
x neo politana Lodé. (collina x cneorum). Europe. H&S 1946, I10+GC
odorá  Thunb.  China, Japan.  I8+M M  I10+M M,
‘Aureomarginata’  not found H8

Davidia: Davidiaceae (1+0=1)
involucrata  Baill.  DOVE TREE.  China.  I8+M M  P9

Decaisnea: Lardizabiliaceae (1+0=1)

fargesii  Franch.  China.  nursery

Decumaria: Saxifragaceae (1+0=1)
sinensis  Oliv.  China.  H&S 1948, I8

Desfontainia: Loganiaceae (1+0=1)
spinosa  Ruiz & Pav.  Chile. Mike Steven 1986, P4+GC dead

Deutzia: Saxifragaceae (2+3=5)
E5  L8
gracilis  S&Z.  Japan.  not found H10
x hybrida  Hort.
‘Magician’  Q5+GC
‘Montrose’  H10+MM Q5+MM, not found H10 07
scabra  Thunb.  Japan, China.  E9+MM
‘Flora Plena’  C10+MM D10+MM E8+MM E9+MM F9+MM

Dichotomanthes: Rosaceae (1+0=1)
tristaniicarpa  Kurz. China. H&S 1948, K12+BS

Dichroa: Saxifragaceae (1+0=1)

Diervilia: Caprifoliaceae (1+0=1)
lonicera  Mill.  E.N America. Pukeiti 1986, F10 (NM); L5+GC; M4

Diospyros: Ebenaceae (5+0=5)
armata  Hemsl. China. H&S 1948, reverted to stock at O2
ferrea var. geminata  Australia. MAF Ruakura 1988, L4+GC
kaki  L.  COMMON PERSIMMON. China, Japan.  not found 14
lotus  L.  DATE PLUM. China. FS (ex seed Japan) 1969, H9 S4
virginiana  L.  AMERICAN PERSIMMON. E N America. H&S 1938, G5+GC, O2+GC

Dipelta: Caprifoliaceae (1+0=1)

Disanthus: Hamamelidaceae (1+0=1)
cercidifolius  Max.  Japan. H&S 1956, dead; Pukeiti 1986, R6+GC

Distyllum: Hamamelidaceae (1+0=1)
racemosum  S&Z.  Japan. H&S 1949, K11; E Martin 1988, I7+GC (NM); M6+GC

Dodonaea: Sapindaceae (0+1=1)
viscosa  (L)Jacq. AKEAKE New Zealand.
‘Purpurea’  H10+MM

Doryanthes: Amaryllidaceae (1+0=1)
palmeri  W.Hill. Australia. Freeman 1988, M4 (NM)

Dovyalis: Flacourtiaceae
caffra  see Aberia caffra
Appendix 1: Catalogue of the current collection

**Doxantha: Bignoniaceae (1+0=1)**

*unguis-cati* (L)Rehd. CATS CLAW CREEPER. Argentina. Nichols 1987, IR, and pavillion

**Dregea: Asclepiadaceae**

see *Wattakaka*

**Duranta: Verbenaceae (1+0=1)**

*repens* (plumieri) USA to Brazil. 1986, I9-MM

**Duvalia: Staphyleaceae**

see *Staphylea*

**Eccremocarpus: Bignoniaceae (0+2=2)**

*scaber* Ruiz & Pav. Chile.

‘Aureus’ Nichols 1988, L5+GC

‘Carmininus’ Nichols 1988, L5+GC

**Edgeworthia: Thymeleaceae (1+0=1)**

*papyrifera* Zucc. YELLOW DAPHNE. Japan, China. H10+MM

**Ehretia: Ehretiaceae (2+0=2)**


*macrophylla* Wall. H&S 1957, H3+IDS

**Elaeagnus: Elaeagnaceae (4+2=6)**

*x ebbingei* Boom. (macrophylla x pungens). Hort. Q5


*multiflora* Thunb. Japan. H6

*pungens* Thunb. Japan. H5

‘Dicksonii’ D8 J9, not found I11

‘Maculata’ K12 H11 M6

**Elaeocarpus: Elaeocarpaceae (2+0=2)**

*dentatus* (JR&G Forst.) Vahl. New Zealand. FR 1979, L2 (bush)

*reticulatus* Smith. Australia. Henderson 1988, L4+GC

**Embothrium: Proteaceae (1+1=2)**

*coccineum* JR & G Forst. CHILEAN FIRE BUSH. Chile.

‘Longiflorum’ & ‘Norquino’ H&S 1949 & 55, M6, not found Q5

**Emmenopterys: Rubiaceae (1+0=1)**


**Enkianthus: Ericaceae (2+0=2)**

*campanulatus* (Miq) Nichols. Japan. P5+GC


**Erica: Ericaceae (3+0=3)**

Two at Circus Corner, one at Black gates.

**Eriobotrya: Rosaceae (1+0=1)**


**Erythrina: Fabaceae - Papilionaceae (1+0=1)**

*crista-galli* L. COMMON CORAL TREE. Brazil. M5 dead.

**Escallonia: Saxifragaceae (2+3=5)**

D6 E5 F3 J9

‘Apple Blossom’ *(virgata x rubra var. macrantha)*. Hort. not found P3

*bifida* Link & Otto. Brazil. H&S 19567, E5-MM G10-MM G11-MM P3-MM P4-MM

‘Donard Seedling’ *(virgata x rubra)*. Hort. H&S 1956, H3

*laevis* (Vell) Sleum. *(organensis* Gardener.) Brazil. 1949, D10
Appendix 1: Catalogue of the current collection

Note: Latin names are italicized.

Eucalyptus: Myrtaceae (11+1=12)

- **botryoides** Sm. **BUNGALAY**. Australia. K9 N5 D1C
- **delegatensis** R T Baker. **ALPINE ASH**. Australia, Tasmania. Goudie 1934, J3 J6
- **ficifolia** F v Mueller. **SCARLET FLOWEDED GUM**. Australia. Goudie 1934, K6 (NM)
- **leucoxylon ‘Rosa’** PINK FLOWERED YELLOW GUM. Goudie 1934, K6 (NM)
- **mitchelliana** JARRAH. Australia. Bull 1988, F7+GC
- **robusta** Sm. **SWAMP MAHOGANY**. Australia. Bull 1988, G8+GC
- **sideroxylon** A Cunn ex Woolls. **RED IRONBARK**. Australia. L11
- **tetraptera** Turcz. **SQUARE FRUITED MALLEE**. Australia. F8+GC
- **viminalis** Labill. **MANNA GUM**. Australia. Goudie 1934, F7 F8 G7 G8, not found I11

Eucommia: Eucommiaceae (1+0=1)


Eucryphia: Eucryphiaceae (5+0=5)

- **cordifolia** Cav. Chile. Thermal 1988, K10 GC (NM);
- **x hillieri** Ivens. (lucida x moorei). H&S 1966, N7+GC
- **x intermedia** Bausch. (glutinosa x lucida). Hort. H&S 1966, dead N7
- **moorei** F v Mueller. **PLUM WOOD**. Australia. H&S 1948, K10; Dene 1986 K10 (NM)
- **x nymanensis** Bausch. (cordifolia x glutinosa). Hort. Welsh 1988, K10 GC (NM);

Euodia: Rutaceae (2+0=2)

- **danielli** (Benn) Hems. China, Korea. Dene 1987 F9; Appleton 1988 M6 (NM);

Euonymus: Celastraceae (16+3=19)

- **atropurpureus** Jacq. (latifolius, Marsh.) **BURNING BUSH**. USA H&S 1951, not found G4
- **europaeus** L. **COMMON SPINDLE TREE**. Europe, W Asia. D&D 1934, not found L6,
- **europaeus types** C4(CP491 & CP494) C7(CP517) D5(weeping) D8(CP415 CP490)
- **latifoliis** (L) Mill. (europaeus var. latifolius L.) Europe to Asia minor. H&S 1958, not located Q4
- **‘Aureopictus’** not found H11
- **‘Robustus’** not located Q4

Latifolius (L) Mill. (europaeus var. latifolius L.) Europe to Asia minor. H&S 1958, not located Q4

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Note: Latin names are italicized.
Appendix 1: Catalogue of the current collection

**Eupatorium**: Asteraceae (2+0=2)

*purpureum* DC Dense. Mexico. H&S 1949, not found H11

**Euscaphus**: Staphyleaceae (1+0=1)

*japonica* (Thumb.)Kanitz. Japan. Berry ex Korea 1988, M4+GC

**Exochorda**: Rosaceae (1+0=1)

*racemosa* (Lindl)Rehd. (grandiflora) PEARL BUSH. China. E9-MM J6-MM

**Fagus**: Fagaceae (7+10=17)

*engleriana* Seemen. CHINESE BEECH. China H&S 1952, P3

*grandifolia* Ehrh. (americana, farruginea). AMERICAN BEECH. USA. H&S 1949, K11 P1(NM), not found H8

*lucida* Rehd & Wils. China. H&S 1948, K12; Cave(ex EWH)1988, E9

*orientalis* Lipsky. Asia minor, Caucasus. ORIENTAL BEECH, H&S 1948, C11

*sylvatica* L. COMMON BEECH. Central Europe. D&D 1934 D6 E6 F5 F9 G8

G11 I6 J6 J7 J10 K3 K7 L3 L5 L8 M3 M5 O7 O8

purple types E9 H6 H10 I11 J9

‘Albomarginata’ H&S 1951, P3; Cave(ex EWH)1988, K2+GC;

‘Asplenifolia’ FERN LEAF BEECH, K3, nursery,

‘Dawyck’ DAWYCK BEECH, H&S 1947, J9; Cave(ex EWH)1988, E10;

‘Pendula’ WEEPING BEECH, C9 I10

*f. purpurea* (Ait)Schneid. COPPER BEECH. 17, K2(NM) theatre.

‘Purpurea Pendula’ Cave 1988, G10+GC dead.

‘Purpurea Tricolor’ TRICOLOUR BEECH, E10 I6 I7

‘Riversii’ (‘Pupurea Major’) RIVER’S PURPLE BEECH, E7 F10

‘Rohannii’ PURPLE FERN LEAF BEECH, H&S 1949, K12; Cave(ex EWH)1988 D9

‘Rotundifolia’ ROUND LEAF BEECH, H&S 1951, O3

*f. tortuosa* (Pepin)Hagi. CONTORTED BEECH, H&S 1951, P4

‘Zlatia’ Cave1988, E4+GC

**Fatsia**: Araliaceae (1+0=1)

*japonica* (Thunb)Dcne & Planch. JAPANESE ARALIA. Japan. H11+GC (NM)

**Feijoa**: Myrtaceae (2+0=2)

N4

*magnifica* (NNC) L5

*sellowiana* (Berg)Berg. S America. Webb 1837, O9, not found I10

**Ficus**: Moraceae (1+0=1)

*carica* L. COMMON FIG. Asia minor. K3+MM

**Firmiana**: Sterculiaceae (1+0=1)

*simplex* (L)W F Wight. PARASOL TREE. China. Fs(ex seed UK), not found H8

**Fontanesia**: Oleaceae (2+0=2)

*fortunei* Carr. (japonica) China. I8
Appendix 1: Catalogue of the current collection

**phillyreoides** Labill. W Asia. not found 18

**Forsythia: Oleaceae (2+5=7)**

C7 F10 F11 N5 N8 O8

‘**Beatrix Farrand**’ (‘Arnold Giant’ x ‘Spectabilis’), Q10+CN; R6

x **intermedia** Zab. Hort( Germany).

‘**Arnold Giant’** R10+CN; not found 07

‘**Lynwood**’ Q10+CN; not located R6

‘**Spectabilis’** G5+CN, N4; not found 19 06

‘**Spring Glory’** R6

**suspena** (Thunb) Vahl. Japan, not found 07

**suspena var. sieboldii** Zab. Hort(Japan). D&D1934, J7+GC

**Fothergilla: Hamamelidaceae (1+0=1)**

**major** Lodg. DWARF ALDER. USA. L6

**Fraxinus: Oleaceae (27+4=31)**


**americana** L. WHITE ASH. USA. Appleton 1988, C9+GC (NM);


**angustifolia var. lentiscifolia** (Desf) Henry. NARROW LEAF ASH. Europe, Africa, H&S 1951, E11

**bungeana** DC. China. PS(ex seed Korea), C10

**bracteata** see **griffithii**

**chinensis** Roxb. China. CHINESE ASH, H&S 1951, F11

var. **acuminata** Lingelsh. H&S 1951, F11


**dimorpha** see xanthoxyloides dimorpha.

**dipetala** Hook & Arn. TWO PETAL ASH. USA. H&S 1948&51, E11+CN; not located F5

**excelsior** L. COMMON ASH. Europe, N.Asia. B11 C10 C11 D12 E6 F6 G10

f. **angustifolia** NARROW LEAF COMMON ASH, not located H6, tree labelled angustifolia at H7

f. **diversifolia** (‘Monophylla’) H&S 1951, E11 F11

‘**Golden Glow**’ (NNC) Bull 1987, K2+GC


not found E11; Hamilton city council 198X, C9(NM)

**holotricha** Koehne. Balkan. H&S 1948, E11+CN

**latifolia** Benth. (oregona) OREGON ASH. USA. H&S 1948, not found R7 S9

**mandshurica** Rupr. MANDSHURIAN ASH. China, Japan. PS(ex seed Mt Kyebang, Korea)


**nigra** Marsh. BLACK ASH. USA. PS 1973, not located E11

**ornus** L. MANNA ASH. S Europe, Asia minor. H8 R9, not found D9

**oxycarpa** Wild. (angustifolia sp. oxycarpa. (Wild)) Franco & Racho Alfonso),

**excelsior sp. oxycarpa** (Will.) Wesm., oxypylla Bieb.) DESERT ASH. S Europe, N Africa, Asia minor. D13,

‘**Raywoodi**’ CLARET ASH, D&D 1934, B11 D5 D6 I3 I5 J4 J5 J7 L11 Q6

**paxiana** Lingelsh. China, Himalaya. H&S 1950, dead Q5?

**pensylvanica** Marsh. RED ASH. USA.

**viridis types** GREEN ASH G9 I2 I2 D13

‘**Aucubifolia**’ H&S 1948, E11
Appendix 1: Catalogue of the current collection

‘Variegata’ WHITE VARIEGATED RED ASH, H&S 1950?, E11

platypoda Oliv. China, not found F4

sieboldiana (longicuspis)?? According to Krussman sieboldiana = mariesii, and longicuspis =
pubinervis, the first in each case not being related. Does this entry then refer to the longicuspis = pubinervis
pair. H&S 1948, not located R7

spaethiana Lingelsh. Japan. H&S 1951, E11, not found H8

udhei (Wen)Lingelsh. SHAMEL ASH. USA. E12 (not according to CN)

velutina Torr. VELVET ASH. USA. H&S 1948, C11

xanthoxyloides (G Don)DC. AFGHAN ASH. Afghanistan. H&S 1948, B11

var. dimorpha (Coss & Durieu)Wenz. N Africa. H&S 1948, B11, not found E11

Freylinia: Scrophulariaceae (1+0=1)

lanceolata (L f.)D Don. (cestroides) S Africa. H&S 1948, I11

Fuchsia: Onagraceae (1+0=1)

H11

Furcraea: Agavaceae (1+0=1)

bedinghausii K Koch. Mexico. L5

Garrya: Garryaceae (2+0=2)

elliptica Lindl. USA K6


Gaultheria: Ericaceae (1+0=1)

sinensis Anthony. Burma, China. not found H11

Gelsemium: Loganiaceae (0+1=1)

sempervirens Ait. YELLOW JASMINE. USA.

‘Flore Plena’ Nichols 1988, L5-GC

Genista: Fabaceae - Papilionaceae (2+0=2)

H10

aetnensis DC. MT ETNA BROOM. Sicily. Toptrees 1988, L4 (NM)

cinerea (Vill)DC. Spain. H&S 1949, not found H8 L9

Ginkgo: Ginkgoaceae (1+1=2)

biloba L. MAIDENHAIR TREE. China. D8 K L13 O6 O7 O8 P6

‘Fastigiata’ N6

Gleditsia: Fabaceae - Caesalpinaceae (8+5=13)

K12two

aquatica China. H&S 1955, H3+BS (WL sinensis)
caspica Desf. Iran, Transcaucusus, Appleton 1987, 14
delavayi Franch. China. H&S 1955, H3+BS


japonica koraiensis (NNC) T5-CN

sinensis Lam. China. H&S 1955, C11=CN; H3+BS (WL macrantha);

triacanthos L. COMMON HONEYLOCUST. USA. C7 F5 F10 K5, not found J9

‘Elegantissima’ H&S 1938, N6

f. inermis Wild. THORNLESS HONEYLOCUST. 1949, D5 H2 L13=GC(OH588)

‘Moraine’ not located K12

‘Ruby Lace’ J12

‘Shademaster’ not located K12

‘Sunburst’ K12

Glochidion: Euphorbiaceae (1+0=1)

L10 J9
Appendix 1: Catalogue of the current collection

(sinicum) Hook & Arn. China. H&S 1949, not found K12

Glyptostrobus: Taxodiaceae (1+0=1)

(lineatus) (Poir.)Drue. (pennisiis). CHINESE SWAMP CYPRESS. China. H&S 1955, K6 Q3+GC

Goodia: Fabaceae - Papilionaceae (1+0=1)

(latifolia) Salisb. GOLDEN TREE. Australia. I9+MM H11+MM

Gordonia: Theaceae (2+0=2)

(axillaris) (Roxb.) D Dietr. (anomala). China. 110 M3

(lasiatus) Ellis. LOBLALLY BAY USA. L4 dead

Grevillea: Proteaceae (4+3=7)

(asplenifolia) R Br. ASPLENIUM GREVILLEA. Australia. 1981, G8

‘Canberra Gem’ Hort. 1981, G8

glabrata (Lindl.) Meissn. Australia. 1981, G8

juniperina R Br. Australia. G8

‘Red Cloud’ Hort. 1981, not found G9

robusta A Cunn. SILKY OAK. Australia. M3 N4 N8 O8 P10 Q9 R7 R9 S7, not found G11

rosmarinifolia A Cunn. ROSEMARY GREVILLEA. Australia.

‘Jenkinsii’ 1981, G8

Greyia: Melianthaceae (1+0=1)

(radkoferi) Syzy. S Africa. H10+DG

Griselinia: Cornaceae (1+0=1)

(littoralis) Raoul. KAPUKA. NZ. FRI R 1979, not found M2

Gymnocladus: Fabaceae - Caesalpinaceae (1+0=1)

dioica (L.)Koch. (canadensis) KENTUCKY COFFEE TREE. N America H&S 1955, N7

Halesia: Styraceae (2+0=2)

(carolina) L. SILVER BELL TREE. N America. G5 (NM)

monticola (Rehd.)Sarg. MOUNTAIN SHOWBELL. USA. H&S 1938, L4 M4

Hamamelis: Hamamelidaceae (2+2=4)

x intermedia Rehd. Hort.

‘Hiltingbury’ H&S 1957, Q5

japonica S&Z. JAPANESE WITCH HAZEL. Japan.

‘Arborea’ JAPANESE WITCH HAZEL. Hort. 19377, G5 J8

mollis Oliv. China. D&D 19347, L6 T7

vernalis Sarg. OZARK WITCH HAZEL. USA. H&S 1949, L12

Hardenbergia: Fabaceae - Papilionaceae (1+0=1)

violacea Australia. I9+MM

Hebe: Scrophulariaceae (3+0=3)

(cupressoides) (Hook f.)Ckn & Allan. New Zealand. D&D 19347, not found H9

speciosa (A.Cunn)Ckn & Allan. New Zealand. not found H10

stricta (Benth.)L B Moore. KOROMIKO. New Zealand. not found E7 L12

Hedycarya: Monimiaceae (1+0=1)

arborea PIGEONWOOD. New Zealand.

Hedysarum: Fabaceae - Papilionaceae (1+0=1)

multijugum Max. FRENCH HONEYSUCKLE. Mongolia. H7

Helichrysum: Asteraceae (2+1=3)

glomeratum (NNC) not found H7
Appendix 1: Catalogue of the current collection

*petiolatum* (L.) DC. LICORICE PLANT S. Africa. 19+MM

*Aureum* 19+MM

Hemiptelea: Ulmaceae
davidii see Zelkova

Heteromorpha: Apiaceae (1+0=1)

*arborescens* (Spreng) Cham & Schlect. S Africa. Appleton (ex Kirstenboch) 1988, M4+GC (NM);

Hibiscus: Malvaceae (2+0=2)

*mutabilis* L. China. H11+MM 19+MM

*syriacus* L. ROSE OF SHARON. China, India. H11

Hoheria: Malvaceae (1+2=3)

*populnea* A Cunn. LACEBARK. NZ. F7 K8 M6

‘Alba Variegata’ (cream outer) R6+MM

‘Variegata’ (gold inner) Q10+MM

Holboellia: Lardicabalaceae (1+0=1)

*latifolia* China. H8+GC

Hovenia: Rhamnaceae (1+0=1)

*dulcis* Thunb. RAISIN TREE. China, Himalaya. PS (ex seed Japan) 1968, 19+BB

Hydrangea: Saxifragaceae (6+3=9)

*L* 6

*aspera* D Don. Himalaya, China.

ssp. *aspera* (*H. villosa*) China, Taiwan. Freeman, O7 (NM);


*heteromalla* D Don. (xanthoneura) India, Himalaya, China. Jellyman (Nepal) 1988, M4+GC


‘Blue Wave’ H&S 1949, I8

f. *hortensia* M3

*paniculata* Sieb. China, Japan.

‘Grandiflora’ PEEGEE HYDRANGEA, R6

*petiolaris* S&S. CLIMBING HYDRANGEA. Japan, Korea. D & D 1934, L6

*quercifolia* Bartr. OAK LEAF HYDRANGEA. USA. L6 F9

*serrata* (Thunb) Ser. (acuminata) Japan, Korea.

‘Bluebird’ H&S 1962, not found O7

*villosa* see *H. aspera* ssp. *aspera*

Hymenosporum: Pittosporaceae (1+0=1)

*flavum* F v Muell. NATIVE FRANGIPANI. Australia. M4 N5

Hypericum: Hypericaceae (3+1=4)

*I* 8 K5

*sp* (KR743) Nepal. (NM)


*leschenaulti* Choisy. (triflorum) Java, Sumatra. H&S 1949, I8

*x moserianum* Luquet ex Andre. Hort.

‘Tricolor’ not found H10

Idesia: Flacourtiaeae (1+0=1)

*polycarpa* Max. China. 1937?, F6+GC J4+MM

Ilex: Aquifoliaceae (16+7=23)

I11 & F9 (OH625 & 622) L10 (OH630) O9
x altaclarensis (Loud)Dallim. HIGHCLERE HOLLY. Hort.

‘Camellifolia’ H&S 19527, I8

‘Hendersonii’ H&S 1951, G9

‘Wilsonii’ H&S 1949, not found L10

aquifolium L. COMMON HOLLY. Europe. K9 111, variegated B6 Q8,

‘Argenteomarginata’ BROAD LEAF SILVER HOLLY, J7 Q8

‘Aureomarginata’ L7

‘Ferox Argentea’ SILVER HOLLY, J7 K9 Q7

‘Golden Queen’ (‘Aureoregina’) H&S 1949, not found L10

casina L. non Walt. Dahoon. (rosmarinifolia) USA. H&S 1949, I7+GC L9
crenata Thunb. Japan. H&S 1965, I8
dipyrena Wall. HIMALAYAN HOLLY. Himalaya. H&S 1949, not located L10

fargesii Franch. China, Burma. H&S 1949 & 55, L9 P4, not found O1 Q5

fargesii f. sclerophylla (a form of fargesii ssp. melanotricha) China, N.Burma, Tibet. H&S 1949, not located L10


integrala Thunb. Japan. Berry(ex Korea)1988, I6+BB

kingiana Cockerell. (insignis Hook f.) Himalaya. H&S 1948, L10

latifolia Thunb. TARA-YO. Japan. H&S 1949, L10


pedunculosa Mill. Japan. H&S 1965, I8


rosamarinifolia sec casine
tertiicillata (L)Gray. WINTERBERRY E.N.America. I7+GC L6+GC

Illicium: Illiciaceae (1+0=1)
anisatum L. Japan. H5+BS

Indigofera: Fabaceae - Papilionaceae (3+0=3)


gerardiana Wall ex Baker. (heterantha Wall ex Brandis). Himalaya. L6+GC

Itea: Saxifragaceae (2+0=2)


yunnanensis Franch. China. K69, P10 dead

Jacaranda: Bignoniaceae (1+0=1)

ovalifolia R Br. (mimosifolia) Argentina. R6+GC

Jasminium: Oleaceae (6+1=7)

azoricum L. MADEIRA JASMINE. Azores. H&S 1949, not found H8

beesianum Forrest & Diels. China. K5+GC

humile var. revolutum (Sims)Stokes. (revolutum) Himalaya, Kashmir. G4+GC

mesnyi Hance. PRIMROSE JASMINE. China. G9+MM G11+MM

polyanthum Franch. China. H&S 1947, 111+MM

x stephanense Hort. China. Harrison1934, I4+GC

‘Fairfield Sundrop’ Nichols 1988, L5+GC
Appendix 1: Catalogue of the current collection

Juglans: Juglandaceae (7+2=9)

ailantifolia Carr. (sieboldiana Max. not Goepp). JAPANESE WALNUT. Japan. L11=GC?, Q4
california Wats. CALIFORNIA WALNUT. California. H&S 1965, Q7
cinerea L. BUTTERNUT. E N America. PS(ex seed)1981, L11, gone H8
hindii (Jepson)E Smith. HINDS WALNUT. California. FRJ R 1979, F3
microcarpa Berl. (rupestris)Englem.) TEXAN WALNUT. USA. H&S 1965, Q8 Q4
nigra L. BLACK WALNUT. E N America. H&S 1951&65, F9, P57, not found L8 R9
regia L. COMMON WALNUT. Europe, Asia. E4 F4 F5 G2 G3 I4 I5 K10, not found L8 K14
   ‘Laciniata’ CUT LEAF WALNUT, C10 G6 I5 I9
   ‘Wilsons Wonder’ Beech wood

Juniperus: Cupressaceae (23+9=32)

africanus L7+ E (this plant received by W D Cook as africanus)
   ‘Glaucu’ M6+MT (received by W D Cook as africanus)
chinensis L. China, Japan. E5+GC; Tantrum 1988, O5+GC (NM);
cultivars I5=GC, L7 K12
   ‘Pyramidalis’ not found B12 H5 I5 L6 I7 M13 Q5
communis L. COMMON JUNIPER Europe, Asia, China, America. K6+GC; not found Q5
   ‘Oblonga Pendula’ WEEPING JUNIPER, H&S 1949, C11+CN
   f. suecica (Mill)Ait. (‘Fastigiata’) SWEDISH JUNIPER.Scandinavia.
      I5=GC T7=GC Q5=GC; not found H8
deppeana Steud. ALLIGATOR JUNIPER. USA. McKean 1988, O5=GC (NM);
drupacea Labill. SYRIAN JUNIPER. Greece, Asia minor. H&S 1948, B12-MM
excelsa Bieb. GRECIAN JUNIPER. Caucasus, Asia minor. H&S 1949, C11
flaccida Schlech. MEXICAN JUNIPER. Mexico. H&S 1948, B12-CN
formosana Hayata. PRICKLY CYRESS. China. H&S 1948, B12-CN
x media van Melle. M6
   ‘Blaauw’ L12
   ‘Pfitzera’ Pfitzer JUNIPER, E8 L8=GC
monosperma (Engl.)Sarg. USA. Tantrum 1988, N3=GC (NM);
oblenga ‘Pendula’ = J.communis ‘Oblonga Pendula’
occentialis Hook. Western USA. C7=GC
osteosperma (Torr)Little. USA. Tantrum 1988, O5=GC
oxycedrus L. PRICKLY JUNIPER. Medit/Iran. H&S 1948, C11
phoenicea var. turbinata (Guss)Parl. PHOENICIAN JUNIPER. Medit. H&S 1948, B12
procura Hochst ex Endl. AFRICAN JUNIPER. Africa. C12 dead; Etherington1989, O5
recurva var. boxii (Jackx)Melv. COFFIN JUNIPER. China, Burma. H&S 1950, L7+MM H7+MM
rigida S&Z. Korea, Manchuria. D&D 1937&45, I5=GC, E7=GC
sabina L. COMMON SAVIN. Europe, Asia minor. E6=GC
   var. tamariscifolia Ait. TAMARISK LEAF JUNIPER. H&S 1949, B12-CN
   ‘Knap Hill’ I7=CN
squarrosa (Name not confirmed). B11
squamata D Don. Afghanistan to Taiwan
   var. fargesii Rehd & Wils. China, Tibet. H&S 1949, C11
   ‘Meyeri’ MEYER JUNIPER. H&S 1949, L12, not found L7
Appendix 1: Catalogue of the current collection

virginiana L. EASTERN RED CEDAR. N America. K6+GC
‘Glauc’ H&S 1949, B11

Karbina: Ericaceae (2+0=2)

G5 K6

angustifolia f. candida L. WHITE FLOWERED SHEEP LAUREL. N America. not found G5

latifolia L. CALICO BUSH. N America. Stevens 1935, not found G5

Kennedia: Fabaceae - Papilionaceae (3+0=3)
carnea Australia. Nichols 110+IN

nigricans Lindl. Australia. Nichols 1988, H11+GC

rubricunda Australia. 110+GC, N4(NM),

Kerria: Rosaceae (1+1=2)
japonica (L)DC. China. Mortimer 1987, 15 (NM)

‘Plena Flora’ H6+MM; Murphy 1987 (NM),

Ketlederia: Pinaceae (1+0=1)
davidiana (Bert.)Beissm. China. H&S 1948, G3

Knightia: Proteaceae (1+0=1)

excelsa R Br. REWA REWA. NZ. FRI R 1979, M2(bush)

Koelreuteria: Sapindaceae (4+0=4)

integrifolia Franch. China. H8, O10, not found G4

paniculata LAR. GOLDEN RAIN TREE. China, Korea. D5 F9 G9

var. apiculata (Rehd. & Wils.)Rehd. China. R3

Kolkwitzia: Caprifoliaceae (1+0=1)

Laburnum: Fabaceae - Papilionaceae (2+2=4)

D8 I3(stillwater) 15(parrots walk gate)

alpinum (Mill)Bercht. & Presl. SCOTCH LABURNUM. Europe. not found 14

anagyroides Med. (vulgare) COMMON LABURNUM. Europe. R5, not found P5 H8

‘Autumnale’ (‘Latest and Longest’) H&S 1949, H7 K11

vulgare Bercht. & Presl. (anagyroides. Med.) 15(willow bridge) ??

x watereri ‘Vossii’ J4, not found R6

Lagerstroemia: Lythraceae (1+1=2)

K13

indica L. CREPE MYRTLE. China. H10

‘Eavesii’ (mathewisii x indica). H9

Lagunaria: Malvaceae (1+0=1)

patersonii Don. NORFOLK ISLM’D HIBISCUS. Australia. M3+MM

Lantana: Verbenaceae (0+1=1)
camara L. MARMALADE BUSH. Tropical asia.

‘Chelsea Gem’ N5+GC

Lardizabal: Lardizabalanaceae (1+0=1)

bibernata Ruiz & Pav. Chile. H&S 1948, K12+GC

Larix: Pinaceae (3+0=3)

G11 M9
decidua Mill. (europaea) COMMON LARCH. Europe. G10

x eurolepis Henry. DUNKELD LARCH. Hort. 1948, not found M9

kaempferi (Lamb)Carr. (leptolepis) JAPANESE LARCH. Japan. 1948, not found M9
Laurus: Lauraceae (4+0=4)

azorica (Sieb) J. Franco. (canariensis) CANARY LAUREL. Canaries. H&S 1955, R5
azorica hyd Chceh Bot Gdn1984, P5+GC
nobilis L. BAY LAUREL. Asia minor. H&S 1955, G9 N6
nobilis f. angustifolia (Nees)Markgraf. WILLOW LEAF BAY, H&S 1954, F4

Lavandula: Lamiaceae (2+0=2)

dentata L. TOOTHED LAVENDER. Spain. I9+MM
stoechas L. Meditt. H11+MM

Ledum: Ericaceae (1+0=1)
glandulosum Nutt. WN America. H&S M4(NM)

Leptospermum: Myrtaceae (2+0=2)

eaeivatum F Muell. COASTAL TEA TREE. Australia. E9+GC
lanigerum (Ait)Sm. WOOLLY TEA TREE. Tasmania. DSIR Ak 1980, G8+GC

Lespedeza: Fabaceae - Papilionaceae (1+0=1)


Leucaena: Fabaceae - Mimosaceae (1+0=1)
glaucu (L). Benth. WHITE POPINAC. USA. M4

Leucothoe: Ericaceae (1+1=2)

fontanesiana (Steud)Sleumer. USA. D&D 1938, J8
‘Rainbow’? H11 J9

Libocedrus: Cupressaceae (1+0=1)

also see Austrocedrus and Calocedrus

chilensis (D Don)Endl. (Austrocedrus c.) CHILEAN INCENSE CEDAR. Chile. O2
decurrens Torr. see Calocedrus decurrens (Torr)Florin.

plumosa (D Don) Sarg. KAWAKA NZ. FR1 R 1979, N2(bush)

Ligustrum: Oleaceae (5+4=9)

compactum Brandis. China. L6+MM, not found L13
confusum Dcne. Himalaya, India. H&S 1949, L13+MM
japonicum ‘Macrophyllum’ Berry(ex Korea)1988, Q5+GC dead
japonicum ‘Rotundifolium’ Mike Steven 1986, H11+GC
lucidum Ait.f. GLOSSY TREE PRIVET. China. H&S 1949, L13+MM
‘Tricolor’ VARIEGATED TREE PRIVET, D8

ovalifolium Hask. HEDGE PRIVET. Japan. 19497, K12+MM, not found L13
‘Aureum’ GOLDEN PRIVET. L4+MM

sinense Lour. CHINESE PRIVET. China. H&S 1949, L13+MM

Liquidamber: Hamamelidaceae (4+1=5)

formosana Hance. China. E5 L7 P10 R5

var. monticola Rehd & Wils. China. F4 P3 R5, not found P4
orientalis Mill. Asia minor. Cave(Hudson/Hillier)1988, E5+GC

styraciflua L. SWEETGUM. USA D&D 1934, B6 C4 D4 D12 D12 E5 E9 F5 G11 H2 I11 K8

L3 L6 L10 M4 N1 N8 O1 O2 O3 O4 P1 P3 P4 Q1

‘Festeri’ D&D, not found R5

Liriodendron: Magnoliaceae (2+2=4)

chinense (Hemsl)Sarg. CHINESE TULIP TREE. China. H&S 1957, died P10;
seedling ex China1988, (NM)
Appendix 1: Catalogue of the current collection

_tulipifera_ L. TULIP TREE. USA. E5 G3 L7

‘Aureomarginatum’ VARIEGATED TULIP TREE, K6 L6 N6, not found G3

‘Fastigiatum’ PYRAMIDAL TULIP TREE, H&S 1955, G3

**Lithocarpus**: Fagaceae (2+0=2)

-edulis (Mak)Nakai. Japan. K4
glaber (Thunb)Nakai. Japan, China. H&S 1938, K4

**Lomatia**: Proteaceae (4+0=4)
dentata Chile. 111+PC
-ilicifolia R Br. HOLLY LOMATIA. Australia. Hudson 1988, Q5+GC
-myricoides (Gaertn)Dorrien. Australia. H&S 1955, R5
-tinctoria (Labill)R Br. Tasmania. 110+GC

**Lonicera**: Caprifoliaceae (14+1=15)
bush types D4 D5 H3 H10 110 J8,
climbing types D5(CF508) E9(CF559) G10 H8 J7 L4 M4,
-fragrantissima Lindl & Paxt. China. H9 H10 H11 N9 O9, not found G8
-henryi Hemsl. China. not found M4
-hildebrandiana Collet & Hemsl. GIANT HONEYSUCKLE. Himalaya H11
-japonica Thunb. JAPANESE HONEYSUCKLE. Japan, Korea, China. not found J7 J8 J9
-korolkowii Stapf. Turkestan. D&D 19417, not found M4
-maackii (Rupr)Max. China, Japan. F10 I10, not found 18
-quinquelocularis Hardw. Himalaya. C11+GC
-sempervirens L. TRUMPET HONEYSUCKLE. N America. D&D1942, K5(heart?)

‘Sulphurea’ Nichols 1988, L5+GC

sp McKean N.America. (Vancouver)1988, J7 (NM)
splendida Boiss. Spain. D&D 1942?, not found M4
tatarica L. Russia, Turkestan. Hudson 1988, L5+GC (NM)

**Loropetalum**: Hamamelidaceae (1+0=1)

-chinense (R Br)Oliv. China. N5-MM

**Lyonia**: Ericaceae (1+0=1)


**Lyonothamnus**: Rosaceae (1+0=1)

-floribundus var. asplenifolius A Gray. CATALINA IRONWOOD. California. H&S 1951, R6

**Macadamia**: Proteaceae (1+0=1)

tetraphylla L A S Johnson. MACADAMIA NUT. Australia. N5?

**Magnolia**: Magnoliaceae (31+29=60)

-B5 19 110 J8 M3 N3 P9
-acuminata (L)L. CUCUMBER TREE. USA.

‘Golden Glow’ Cave 1988, K5+GC

campbellii Hook f. & Thoms PINK TULIP TREE. Himalaya. M4 Q5 Q8
-f. alba Hort. H&S 1955, P5

‘Charles Raffill’ (campbellii ssp. campbellii x campbellii ssp. mollicomata). H&S 1965, P4, not found Q5 Q6

-coco (Lour)DC. Java. H11+GC


cylindrica Wils. China. H&S1957, Q5; Cave 1988, L5+GC
Appendix 1: Catalogue of the current collection


**delavayi** Franch. China. H&S 1938, L5 N2 P5 Q5

**denudata** Desr. (conspicua, heptapeta) China. Cave 1988, L5+GC (NM);

‘Purple Eye’ LILY TREE, YULAN, not found I9

‘Douglas Cook’ Hort. (all +MM) O2 O3 O7 P5 P7 P10 Q5

‘Early Rose’ Hort. M4

**fraseri** Walt. (auriculata) FRASER MAGNOLIA. USA, H&S 1957, not found R6

**grandiflora** L. SOUTHERN MAGNOLIA. USA. B5 B6 C7 E5 F6 F9 H7 I7 J9 H8 J9 K6 L4 O2 O7

‘Angustifolia’ Q5+MM P10+MM

‘Exmooth’ H&S 1938, G5+CN

‘Ferruginea’ H&S 1938, H5+CN J8+MM

‘Goliath’ H&S 1952, N7+MM

‘Heaven Scent’ Hort. (Gresham hyd). Barret1987, L5

**hypoleuca** S&Z. (obovata) WHITELEAF MAGNOLIA. Japan. H&S 1949, not found J7


‘Kewensis’ Hort. (kobus x salicifolia) H&S 1965, H8 (WL biondii)

**kobus** DC. Japan. D&D 1934?, C7 HS IS I7 L8(best form) J7 J8 J9 K7 K12 L8 M4 R5 R10 O10, not found K3

**var. borealis** Sarg. Japan. H&S 1938&52, K11, not found O6

**liliiflora** Desr. (purpurea, pentapeta) China. B6+MM L6+MM J8 M5

**x loebneri** Kâche. Hort. (kobus x stellata) H&S 1952, K8+CN R9 P3 Q4, not found H10

**macrophylla** Michx. BIG LEAF MAGNOLIA USA. H&S 1952, J8+MM N7+MM O8+MM, not found Q5

**nitida** W WSm. China, Tibet. H11+GC died.

**officinalis** Rehd. & Wils. China. H&S 19647,

**var. biloba** Rehd. & Wils. China. H&S 1965, H8; 08; Cave 1988, K10+GC (NM);

‘Peppermint Stick’ (Gresham hyd; liliiflora x veitchi). Hort. Barret1987, R5

‘Pinkie’ (Kosar hyd: liliiflora Reflorescens x stellata Rosea). Hort. Koromiko nursery 1981, not found J11

**x proctoriana** Rehd. (kobus x salicifolia). Hort. H&S 1957, 59,65, P10 R5, not found J7(posstroll bridge)

‘Royal Crown’ (Gresham hyd; liliiflora x veitchi). Hort. Barret1987, L4

**salicifolia** (S&Z)Max. WILLOW LEAF MAGNOLIA. Japan. H&S 1938, J9


‘Serene’ Hort. Barret1987, L4

**sieboldii** K Koch. (parviflora) Japan, Korea. Cave 1988, L3+GC (NM); P5+GC (NM);

**x soulangiana** Soul-Bod. (denudata x liliiflora) SAUCER MAGNOLIA. Hort. E5 E9 H5 H11 I8 I9 I10 K7

‘Alba’ H&S 1952 Barret1987 R6, not found H8

‘Alexandrina’ H&S 1952, E5 E9 H5+CN H11 J6+CN 110+CN J7; not found H8

‘Brozonzii’ H&S 1957, K11+MM P10+MM Q10+MM

‘Lennei’ D&D 1935, H&S 1952, O7+MM, not found K8 K11 H8 H10

‘Lennei Alba’ H&S 1952, not found H8

‘Rustica Rubra’ D&D 1934, H&S 1952, C7+CN 16 I7 L7 K7 K11; not found H8

‘Speciosa’ H&S 1951, M4

‘Triumphans’ Q10

‘Verbanica’ H&S 1956, J9, dead R6 Q4

dark base J7 J9 K8 L4
Appendix 1: Catalogue of the current collection

sprengeri var. diva  Stapf. GODDESS MAGNOLIA. China. H&S 1949&51, K7 K11+GC (not same as K7), not found H8

stellata  (S&Z)Max. STAR MAGNOLIA. Japan. E8 I10 L6, not found H10

‘King Rose’ 1980, not found K8

‘Rosea’ L4+MM

x thompsoniana  (Loud)Voss. (sprengiana x tripetala). Hort. H&S 1951&52, not found 18; L6; Cave 1988, L6+GC (NM);

tripetala  (L.)L. UMBRELLA MAGNOLIA. USA. H&S 1951, M5+GC; Cave 1986, L5+GC

x veitchii  Bean. (tripetala x denudata). Hort. Types 18+MM M5+MM N5+MM

‘Isca’ Veitch 1954, L5+CN L9 K10

‘Peter Veitch’ H&S 1938&52, Veitch 1954, 19, not found 05

virginiana  (glauca) SWEETBAY. USA. H&S 1952 dead L6, Koromiko 1981 J11 (NM)

var. australis  Koromiko nursery, not found J11

wilsonii  (Finet & Gagnep)Rehd. China. Cave 1988, L4+GC (NM); P5+GC (NM);

Mahonia: Berberidaceae (5+0=5)

M4 N5

acanthifolia  Wall ex G Don. Nepal. H&S 1951, K8; Cave (ex Kunming), I5 (NM)

aquifolium  (Pursh)Nutt. OREGON GRAPE. W N America. not found I10

bealei  (Fort)Cart. China. D5

lomatiorifolia  Tak. China, Burma. H&S 1947, not found O5

mariesii  (NNC) Cave (ex Kunming)1989, I5 (NM)

Mallotus: Euphorbiaceae (1+0=1)

japonicus  (Thunb)Muell-Arg. Japan, China, Korea. PS (ex seed Japan), S6

Malus: Rosaceae (31+31=62)

C8(CP400) C11(PP84 PP85 PP64 PP66) C12(PP111 PP299 PP244 PP243) E8 E9(PP236) H3(C1440) I3(C1421) I5(CaPP90) I7(CaPP199) L8 K6(CaPP51) K10(OH618) K11(OH517 OH519 OH523 OH533) MX(very late) N5pendulous O8(DP18) P8(DP15,18) P10(BW1,2,3A,4,5) Q6 S3(GD3 GD4) S4(GD1 GD2); N6 N8 O8 R6 R7 R7(DP111)

purple types C7 D6 D8 E4 E5 E7(3tree) E8 I3 I6 I9 J8toothed leaves N6 O9 P3 P9 Q6 Q7(DP14);

‘Aldenham Purple’ (from nieckewatzkyana). Hort. 1948, C11+MM

angustifolia  (Ait)Michx. SOUTHERN CRAB. USA. C12+MM H9+MM L3+MM, not found J8,
apetala x pumila  P2 not found

x arnoldiana  (Rehd)Sarg. (floribunda x baccata). J8+MM

‘Atropurpurea’ (Jay Darling.Hort. according to Krussmann). H7+CN

‘Atrosanguinea’ see floribunda var. atrosanguinea

baccata  (L)Borkh. SIBERIAN CRAB. China. H7+CN; C11(PP65); not found H6

‘Gracilis’ K6, S3+CN; not found Q4

‘Macrocarpa’ L8+MM(Berry)

var. mandschurica  (Max)Schneid. MANCHURIAN CRAB. China. H&S 1948, not found B11

‘Microcarpa’ (Name not confirmed). C12+MM

baccata x pumila  O3 P3
coronaria  (L)Mill. USA.

‘Charlottae’ F3+MM; mostly dead M6

‘Crimson Glory’ (Name not confirmed). M6

‘Crimson Rod’ (Name not confirmed). M4

‘Dartmouth’ (pumila group) Hort. not found L6

‘David Nairn’ (Name not confirmed). not found P10 S5
domestica  (pumila) Europe, Caucasus, Turkestan. C13 E9 E12 F3 F10 J7 P6, not found O9
Appendix 1: Catalogue of the current collection

'Echtermeyer' (x purpurea 'Pendula') ('Excellenz Thiel' x niedzwetzkyana). Hort. H&S 1948, C11+MM D9+MM

'Eleyi' (niedzwetzkyana x spectabilis). Hort. not found 09; see also Jay Darling

florentina (Zucc)Schneid. Italy. D11+MM H8+GC; Cave (ex EWH) 1988 L4+GC;

floribunda Van Houtte. JAPANESE CRAB. Japan. Webb 1935, D6+MM D7+MM D9+MM F10+MM J7+MM O7+MM O9+MM P8+MM

'Gibbs Golden Drop' (Name not confirmed). H&S 1949, K11

glaucescens Rehhd. SWEET CRAB APPLE. USA. H&S 1948, not found B11 K12

halliana Koehne. Japan. China. D5+MM E7+MM K6+MM, not found K2 J8

x hartvigii Koehne. (baccata x halliana). Hort. H&S 1948, not found B11

'Hillieri' (schiedeckeri group) Hort. H&S 1947, C12

'Hop a' (baccata x niedzwetzkyana; adstringens (baccata x pumila), according to K) Hort. O3, not found 01

hupehensis (Pam)Rehhd. (theifera). TEA CRAB. China. C11+MM E9+MM E12+MM

G5+MM H6+MM J6+MM I8+MT L6+MM G4+MM M6+MM

hupehensis f. rosea PINK FLOWERED TEA CRAB. H&S 1951, not found J8

ioensis (Wood)Britt. BECHTEL CRAB. USA

'Plena' Webb 1935, L8+MM N6+MM O8+MM

'Jay Darling' (baccata x niedzwetzkyana). Hort. E11+MM E12+MM

'John Downie' Hort. K6

kaido Dipp. (M x madgeburgensis Hartvig.) (pumila x spectabilis). Hort. E10+MM E11+MM J8+MM

kaido Parde. (M x micromalus Makino.) (baccata x spectabilis). Hort. 1949, not found K4 K10

kansuensis (Batal)Schneid. China. not found B12

'Lady Northcliffe' (baccata group) Hort. H&S 1948, not found B11

lancifolia Rehhd. SWEET CRAB APPLE. USA. E10+MM L6+MM J7+MM

'lemoinei' (purpurea group). Hort. P8+CN

x madgeburgensis see kaido

'Mammoth' (Name not confirmed). H&S 1949, K11, not found K7

x micromalus see kaido

'Montreal Beauty' (pumila group) Hort. Webb 1935, K6+CN, not found 17

niedzwetzkyana Dieck. (pumila var. niedzwetzkyana). RUSSIAN PURPLE CRAB. Turkistan. not found P4

x platycarpa Rehhd. (coronaria x domestica). BIG FRUIT CRAB. USA. H&S 1947, L6

prunifolia (Willid)Borhk. Asia. H&S 1938, not found K4 L6

'Fastigiata' K11; Pollock1989 Q4(NM)

var. rinkii (Koidz)Rehhd. (M. ringo Carr.) China. L6, not found K12

x purpurea (Barbier)Rehhd. (atrosanguinea x niedzwetzkyana) I7+MT I7+MT; not found P4

'Red Tip' (ionensis x niedzwetzkyana; coronaria 'Elk River' x niedzwetzkyana, according to Bean)

Hort. H&S 1949, K11

x robusta (Carr)Rehhd. (baccata x prunifolia). Hort. HYBRID SIBERIAN CRAB. 19+MT

sikkimensis (Wenzig)Koehne. SIKKIM CRAB. India. not found L3

'Simcoe' (baccata x niedzwetzkyana) Hort. H&S 1948, K11

'Sir Heaton Rhodes' (Name not confirmed). M4

x soulardii (Bailey)Britt. (domestica x ionensis). USA. H&S 1948, not found K12

spectabilis (Ait)Borhk. China. H&S 1949, not found B12

'Flore Plena' (all +MM) C8 C12 D6 D7 E6 F4 I6 I7 I8 I7

'Versiisii' maybe K12

x sublobata (Dipp)Rehhd. (prunifolia x sieboldii). Japan. H&S 1948, C12+MM
Appendix I: Catalogue of the current collection

Manglietia: Magnoliaceae (1+0=1)

hookeri Cubitt & W W Sn. China, Tibet. H&S 1952, not found M4 H8

Maytenus: Celastraceae (1+0=1)

boaria Molina. (chilensis) Chile. Stevens 1935, H&S 1948, F6 P6 Q6

Melaleuca: Myrtaceae (7+0=7)

armillaris Smith. BRACELET HONEYMYRTLE. Australia. DSIR Ak 1980, F8+MM
decussata R Br. TOTEM POLES. Australia. Not found H11
fulgens R Br. Australia. G7+GC
linariifolia Smith. SNOW IN SUMMER. Australia. Not found J9
nodosa Smith. BALL HONEY MYRTLE. Australia. G6
stropheloides Sm. PRICKLY PAPER BARK. Australia. DSIR Ak 1975, K7
thymifolia Smith. FEATHER HONEY MYRTLE. Australia. DSIR Ak 1975, not found K9

Melia: Meliaceae (1+0=1)

azedarach L. BEAD TREE. Himalaya. Not found Q9; Appleton 1988, K10+GC (NM);

Melicytus: Violaceae (2+0=2)
lanceolatus New Zealand. FRI1979, K2(NM), M1(NM),
ramiflorus MAHOE. New Zealand. M2 (bush)

Meliosma: Sabiaceae (3+0=3)
cuneifolia Franch. China. H&S 1959, R3
tenuis Maxim. Japan. Hudson1988, L4 (NM);

Mespilus: Rosaceae (1+0=1)
germanica L. MEDLAR. Europe to Iran. Not found E6, reverted S2

Metasequoia: Taxodiaceae (1+0=1)
glyptostroboides Hu & Cheng. DAWN REDWOOD. China.
H&S 1949, I8+MM K12+MM; McKean, S7+GC

Metrosideros: Myrtaceae (2+0=2)
exelsa Sol. (tomentosa) POHUTUKAWA. NZ. FRI R 1979, M2 M3(bush); Williams TLC, seedlings S6
umbellata Catv. SOUTHERN RATA. NZ. FRI R 1979, M2(bush)

Michelia: Magnoliaceae (3+1=4)
compressa (Max)Sarg. Japan. H&S 1949, M8 L6+GC
‘Caerhays form’ H&S 1956, L8(reverted to type)
figo (Lour)Spreng. PORT WINE MAGNOLIA. China. C7+MM M3+MM H11 M4+MM

Morus: Moraceae (2+0=2)

alba L. WHITE MULBERRY. China. Not found Q9

Myoporum: Myoporaceae (1+0=1)
lactum Forst f. NGAIO. New Zealand. K9+MM
Appendix 1: Catalogue of the current collection

Myrica: Myricaceae (2+0=2)

*cerifera* L. WAX MYRTLE. USA. 19

*pensylvanica* Loisel. USA. 15+GC

Myrsine: Myrsinaceae (2+0=2)

*africana* L. Himalaya, China, Africa. 18+BS

*australis* (A Rich)Allan. *(Rapanea australis)* RED MATIPO. NZ.

Myrtus: Myrtaceae (5+1=6)

*bullata* Banks & Sol. *(Lophomyrtus bullata)* New Zealand. K7

*communis* L. COMMON MYRTLE. Meditt.

‘Variegata’ VARIEGATED MYRTLE, H&S 1946, not found 18

*lechlerianna* (Miq)Sealy. Chile. H&S 1952, 13+GC

*luma* Molina. *(Luma apiculata)* Chile. H&S 1950, E10+MM F9+MM I8+MM

*obcordata* (Raoul)Hook.f. *(Lophomyrtus obcordata)* ROHUTU. NZ. Webb 1937, 16+BS

*x ralphii* Hook.f. *(Lophomyrtus x ralphii)* New Zealand. *(bullata x obcordata)* Webb 1937, not found K7

*ugni* Molina. *(Ugni molinae)* CRANBERRY. Chile. D&D 1925, Heritage 1986, H11+GC

Nandina: Berberidaceae (1+2=3)

*domestica* Thunb. SACRED BAMBOO. China. 18

‘Pygmaea’ D&D, 19+MM

‘Nana Purpurea’ not found 18

Neillia: Rosaceae (2+0=2)

*thibetica* Franch. *(longiracemosa)* China. H&S 1949, I7+GC I8+GC

*thyrsifolia* D Don. Himalaya. Toptrees 1988, R5+GC

Neolitsea: Lauraceae (2+0=2)

*sericea* (Bl)Koidz. *(glauca)* Japan, Korea, China. P5(ex seed Cheju Island Korea)1981, G6+GC

*f. xanthocarpa* (Nakai)Okuyama. E Asia. P5 as above, not found H8

Nerium: Apocynaceae (1+4=5)

*oleander* Soland. OLEANDER. Meditt. H5 H6 H8 H10 I8 J9 O7 O8 M4 M6

‘Mrs Rhoeing’ H5

‘Pauline Gregory’ not found 18

‘Souvenir de Phoenix Duval’ I8+GC(NM)

‘Variegatum’ not found H10

Nestegis: Oleaceae (2+0=2)

*cunninghamii* (Hook f.)L Johnson. BLACK MAIRE. New Zealand.

D&D 1934, not found K7(is an unnamed Olea here)

*montana* (Hook f.)L Johnson. *(Olea montana)* MOUNTAIN MAIRE. NZ. D&D 1934, K7

Nothofagus: Fagaceae (11+0=11)

*alpina* (Poepp & Endl)Oersted. *(procerus)* RAULLI. Chile. H&S 1948, died 1982 S8

*antarctica* (Forst)Oerst. ANTARCTIC BEECH. Chile. H&S 1965, not found O9, died 1982

*cunninghamii* (Hook f.)Oerst. Tasmania. Jellyman 1988, K10+GC (NM); Fuketita 1988, K10+GC (NM);

*dombeyi* (Mir)Bl. COIGUE BEECH. Chile. H&S 1949&55, died1982 H3 S8,

*fusca* (Hook f.)Oerst. RED BEECH. NZ. D&D 1934, FRI 1979, K2 K2 Q10, died1982 H11,

*menziesii* (Hook f.)Oerst. SILVER BEECH. NZ. D&D 1934; FRI 1979, K2 K7

*moorei* Maiden. Australia. H&S 1955, J9

*obliqua* (Mirbel)Bl. ROBLE BEECH. Chile. H&S 1948, 12 R7, not found S8 N7

*solandri var. cliffortioides* (Hook f.)Poole. MOUNTAIN BEECH. NZ. FRI 1979, K7, not found N2
Appendix 1: Catalogue of the current collection

solandri var. solandri (Hook f.) Poole. BLACK BEECH. NZ. D&D 1934, O8, not found K7; FR I R 1979, M2

truncata (Col) Kn. HARD BEECH. NZ. FR I R 1979, M2 (bush)

Nyssa: Nyssaceae (3+0=3)

aquatica L. USA. Walker, D7+GC; Mortimer 1988, G4+GC (NM);
sinensis Oliv. China. Cave (Berry/Hilliard), S8+GC

sylvatica Marsh. BLACK TULEPO. USA. Stevens 1935?, H&S 1955, D6+MM F4+GC G3+MM O1+GC P7

Ochna: Ochnaceae (1+0=1)

multiflora DC. Africa. D&D 1934, H11+MM M4+GC

Olea: Oleaceae (2+0=2)

europaea L. COMMON OLIVE. Mediterr. H&S 1949, K11(OH657) N4

verrucosa Link. S. Africa. K11(OH537)

also see Nestegis

Olearia: Asteraceae (2+0=2)

K6

crosby-smithiana Petrie. New Zealand. K7

paniculata (J R & G Forst.) Druce. AKEAKE. NZ. not found G10 K8

Osmanthus: Oleaceae (4+1=5)

E5
delavayi Franch. China. 1935-37, H5 H6 II0 L5

fragrans Lour. SWEET OSMANTHUS. Himalaya, Japan, China. H9

heterophyllus (G Don), P. S. Green. (aquifolium) Japan.

‘Variegatus’ D8+MM I10+MM

suavis King. India, Tibet. H&S 1947, E10+BB

yunnanensis (Franch) P S Green. (forrestii Rehd) China. H5+GC, Welch ex EWH 1988, K7+GC

Osmarea: Oleaceae (1+0=1)

burkwoodii Burk w & Skipwith. Hort. H&S 1937, G5+MM L5+MM

Osmaronia: Rosaceae (1+0=1)

cerasiformis (Torr & Gray) Greene. (Nuttallia cerasiformis, Oemleria cerasiformis).

OSO BERRY. N America I7+GC, not found L6

Ostrya: Betulaceae (3+0=3)

carpinifolia Scop. HOP HORNBEEAM. Europe, Asia minor. H&S 1959, S4 R4+GC, not found I2 P2

japonica Sarg. Japan, China. H&S 1949, not found E11

virginiana (Mill) K Koch. IRONWOOD. N America. H&S 1957, I2+GC

Oxydendrum: Ericaceae (1+0=1)

arboreum (L) DC. SOURWOOD. USA. L6

Paeania: Ranunculaceae (3+4=7)

P. lemoeinei Rehd. Hort. not found

‘Chromatella’ sulphur yellow double. not found

‘Lord Selbourne’ not found

‘Mme Louis Henry’ yellow pink salmon. not found

‘Sunrise’ not found

lutea Delavay ex Franch. China. 39

var. ludlowii Stern & Taylor. Tibet. not found

Paliurus: Rhamnaceae (1+0=1)

spina-christi Mill. (australis) S Europe, Orient. H7+GC
Appendix 1: Catalogue of the current collection

Pandorea: Bignoniaceae (0+1=1)
    jasminoides (Lindl) K Schum. Australia.
    ‘Rosea’ Nichols 1988, L5+GC

Parasyringa: Oleaceae (1+0=1)
    sempervirens (Franch) W W Sm. China. H&S 1949, L11

Paratrophis: Moraceae (1+0=1)
    microphylla not found Z14

Parrotia: Hamamelidaceae (1+1=2)
    persica (DC) A Mey. IRONWOOD TREE. Iran. 1937, C12 D5 E7 F5 G6 K2
    Red Autumn form Cave, H6; Lowry H6 I6

Parrotiopsis: Hamamelidaceae (1+0=1)
    jacobemontiana (Decne)Rehd. Himalaya. Appleton 1988, N4+GC (NM):

Parthenocissus: Vitaceae (1+0=1)

Passiflora: Passifloraceae (1+0=1)

Paulownia: Bignoniaceae (3+0=3)
    kawakamii Ito. China. Berry (ex seed 1400m Szuchii Taiwan), J2+GC
    tomentosa (Thunb)Steud. ROYAL PAULOWNIA. China, Japan. not found R9(covered by slip), not found H11

Peltophorus: Fabaceae - Caesalpinaceae (1+0=1)
    africanum (Name not confirmed). died M3

Pennantia: Icacinaceae (1+0=1)
    corymbosa JR & G Forst. KAIKOMAKO. NZ. K7

Persea: Lauraceae (2+0=2)
    borbonia Spreng. RED BAY. USA. H&S 1955, Q5
    thunbergii (S&Z)Kosterm. Asia. BB(ex seed Cheju, Korea), G6 M3

Petteria: Fabaceae - Papilionaceae (1+0=1)
    ramentacea (Sieb.)Presl. Caucasus. H&S 1950, I9,

Phaedranthus: Bignoniaceae (1+0=1)
    buccinatorius (DC)Miers. Mexico. Nichols 1988, L5+GC

Phellodendron: Rutaceae (4+0=4)
    amurense Rupr. AMUR CORK TREE. China. C7+GC I4+GC
    var. lavellei Sprague. Japan. H&S 1957, dead G5
    japonicum Max. (amurense var. japonicum) Japan. H&S 1959, R3

Philadelphus: Saxifragaceae (8+7=15)
    C13 H5 I10 L6 K11
    ‘Albatre’ Hort. (virginalis group according to K, cymosus group according to Bean) H&S 1949, not found H10
    ‘Aurea’ (coronarius ‘Aureus’ ?) (NNC) H&S 1947, L5+GC
    ‘Belle Etoile’ (lemoine group). Hort. not found M3
    californicus Benth. California. Pukeiti 1986, K6 (NM);
    coronarius L. MOCK ORANGE. Italy. E8 G10 G11; not found D9
    ‘Girandinole’ (virginalis group) Hort. H&S 1949, not found K12
**Appendix 1: Catalogue of the current collection**

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<th>Catalogue References</th>
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<td><strong>Phenix:</strong> Aracaceae (1+0=1)</td>
<td>canariensis</td>
<td>Chabaud. CANARY ISLAND DATE PALM. Canaries.</td>
<td>M3</td>
</tr>
<tr>
<td><strong>Phormium:</strong> Agavaceae (1+1=2)</td>
<td>tenax</td>
<td>J R &amp; G Forst. NZ FLAX. NZ.</td>
<td>not found P7,</td>
</tr>
<tr>
<td></td>
<td>‘Variegata’</td>
<td></td>
<td>NEW ZEALAND FLAX. D7 E10 N7</td>
</tr>
<tr>
<td><strong>Photinia:</strong> Rosaceae (8+2=10)</td>
<td>beauverdiana</td>
<td>Schneid. China. H&amp;S 1948&amp;49&amp;55, G4 L6 K12 P10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>var. notabilis</td>
<td>(Schneid)Rehd &amp; Wils. China. H&amp;S 1955, G4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>davidsoniae</td>
<td>Rehd. &amp; Wils. China. Harrison1934 D5; seedlings from the original. D4 F5 G10+MM H2+MM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>x fraseri</td>
<td>Dress. Hort?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Robusta’</td>
<td>K11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>glabra</td>
<td>(Thunb)Max. Japan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Rubens’</td>
<td>Webb 1937, D6 F10 F11 H2 I7, not found E6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>serrulata</td>
<td>Lindl. China. B5 C6two C13 D8+MM E9+MM E6+MM H5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>villosa</td>
<td>(Thunb)DC. Japan, Korea, China. H6 I6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>var. laevis</td>
<td>(Thunb)Dipp. K12</td>
<td></td>
</tr>
<tr>
<td><strong>Phyllocladus:</strong> Podocarpaceae (3+0=3)</td>
<td>alpinus</td>
<td>Hook f. MOUNTAIN TOATOA. NZ. FRI R 1979, N2(bush)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>glaucus</td>
<td>Carr. TOA TOA. NZ. D&amp;D 1934, not found K7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>trichomanoides</td>
<td>Don. TANEKAHA. NZ. FRI R 1979, M3(bush)</td>
<td></td>
</tr>
<tr>
<td><strong>Phyllostachys:</strong> Poaceae (2+0=2)</td>
<td>aurea</td>
<td>Riv. FISHPOLE BAMBOO. China. H9+MM, not found F8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nigra</td>
<td>(Lodd)Munro. BLACK BAMBOO. China, Japan. N8+MM</td>
<td></td>
</tr>
<tr>
<td><strong>Physocarpus:</strong> Rosaceae (0+1=1)</td>
<td>opulifolius ‘Aurea’</td>
<td>(L.)Max. N America. Beaumont1986, H11+GC</td>
<td></td>
</tr>
<tr>
<td><strong>Picea:</strong> Pinaceae (23+3=26)</td>
<td>abies</td>
<td>(L.)Karsten. (excelsa) COMMON SPRUCE. Europe. P6+E; not found D6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Inversa’</td>
<td>WEEPING COMMON SPRUCE, not found P10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Pendula’</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bicolor</td>
<td>(Max)Mayr. (P.alcockiana) ALCOCK SPRUCE. Japan. H&amp;S 1949, L11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>brachytyla</td>
<td>(Franch.)Pritz. China. L11=E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>complanata f.latisquama</td>
<td>L11+E (see brachytyla f. latisquama)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>engelmannii</td>
<td>(Parry)ex Engl. ENGELMANN SPRUCE. USA. not found D7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. glauca</td>
<td>(R Sm.)Beissn. USA. not found L7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>excelsa ‘Pendula’</td>
<td>see P.abies ‘Pendula’</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 1: Catalogue of the current collection

**Pinus: Pinaceae (82+1=83)**

- *lilacina* (Moench) Voss. WHITE SPRUCE. E. N. America. L7+E
  - var. *albertiana* (S. Brown) Sarg. ALBERTA SPRUCE. Canada. 1949, not found L12
  - ‘Conica’ DWARF ALBERTA SPRUCE. M7
- *koyamae* Shir. Japan. L12
- *mexicana* Martineau. Mexico. T5+GC
- *morrisonicola* Hayata. TAIWAN SPRUCE. Taiwan. H&S 1949, L11+E
- *omerika* (Panicc) Purk. SERBIAN SPRUCE. Serbia. E5+GC 18+E, not found O7
  - *sericea* (Name not confirmed) O6
- *orientalis* (L.) Link. ORIENTAL SPRUCE. Caucasus, Asia minor. H&S 1949, G4+MM L12+MM
- *pungens* Engl. BLUE SPRUCE. USA. not found 18
  - f. *glauca* (Reg) Beissn. not found S4 S5
- *rubens* Sarg. (rubra) RED SPRUCE. N. America. O6+GC P6+GC Q7+GC R7+GC
- *sitchensis* (Bong.) Cart. SITKA SPRUCE. N. America. H&S 1949, L11+E S3+GC
- *smithiana* (Wall) Boiss. (morinda) HIMALAYAN SPRUCE. Himalaya. B6+MM D5+MM D6+MM D7+MM D8+MM D6+MM

**Picrasma: Simaroubiaceae (1+0=1)**

- *quassioides* (D Don) Bennet. E. Asia. H&S 1959, Q10+GC

**Pieris: Ericaceae (1+1=2)**

- ‘Forest Flame’ (japonica x formosa ‘Wakehurst’) Hort. H&S 1964, not found H11
  - formosa var. *forrestii* Airey-Shaw. (forrestii) China. H&S 1956, not found; Cave1987, H8+GC 17

**Pinus: Pinaceae (82+1=83)**

- *lilacina* (ex Myers Park) 1987, (NM).
  - *aristata* Engl. BRISTLECONE PINE. USA. Tantrum 1988 dead
  - *armandii* Franch. ARMAND PINE. China. K5; Freeman 1988 (NM); Murphy (ex EWH) nursery;
  - *ayacahauite* Ehrenb. MEXICAN WHITE PINE. Mexico. Tantrum 1988 (NM)
  - var. *veitchii* Sha-W. Mexico. McKean1988 (NM)
- *balfouriana* Grev. & Balf. FOXTAIL PINE. California. Tantrum (nursery)
  - *banksiana* Lamb. JACK PINE. Canada. H&S 1949, L13 dead; Tantrum 1988 (NM); Appleton 1988 (NM);
  - *brutia* Ten. (halepensis var. brutia). Asiatic Turkey. O7+GC
  - *canariensis* Sweet ex K Sprengel. CANARY ISLAND PINE. Canaries. C5 L12+McK
  - *cembra* L. AROLLA PINE. Middle Europe. H&S 1949, not found N13
  - *cembroides* Zucc. PINYON PINE. Mexico to USA. McKean (ex University of Chippingo) 1989, (NM)
  - var. *edulis* (Engelm) Voss. (edulis) COLORADO PINYON. Mexico to USA. Cave 1989 (NM)
    - Appleton (ex Murphy ex Alberta), nursery.
  - *contorta* var. *latifolia* Engl. & S Wats. LODGEPOLE PINE. USA. felled N4, not found Q9
  - *cooperi* Blanco. Mexico. McKean 1988 (NM)
  - var. *ornelasi* (NNC) McKean 1987, (NM)
  - *coulteri* D Don. BIG CONE PINE. Mexico. Tantrum 1988 (NM); Appleton, nay.
- *densata* (tabuliformis var. densata) China. CedarLodge 1987, (NM)
Appendix 1: Catalogue of the current collection

densiflora S&Z. JAPANESE RED PINE. Japan, Korea. H&S 1949, L12
‘Umbraculifera’ Mayr. Japan. L13+CN

douglasiana Martinez. Mexico. McKean 1987, (NM)
durangensis Martinez. DURANGO PINE. Mexico. O9+GC Q9+MM; McKean 1987 (NM).

echinata Mill. SHORT LEAF PINE. USA. Tantrum 1988 (NM)
elliottii Engel. SLASH PINE. SE USA. Trap 1989, (NM).

inglemannii Cott. APACHE PINE. USA, Mexico. McKean 1987, (NM).

flexulis var. reflexa (Name not confirmed). McKean 1987 (NM)
greggii Engel. ex Parl. Mexico. Tantrum 1988 (NM); CedarLodge1986 (NM)
halepensis Mill. ALEPPO PINE. Portugal to Afghanistan. H&S 1949, L12 O4+GC, not found M13


johannis (NNC) McKean 1987,88 (NM)

kesiya Royal ex Gordon. (khasia). Burma, Thailand, Assam. O10; Freeman 1986, (NM);


kr611 Mexico. McKean 1988 (Keith Rushford Mexico collection) (NM)
lambertiana Doug. SUGAR PINE. USA, Mexico. H&S 1949, not found L13; Tantrum 1988 (NM)

lawsonii Roezl. Mexico. Tantrum(ex Mexico)1988 dead

leiophyUa Schlech.&Chamisso. Mexico. McKean 1987 (NM)
lambholtzii Robinson & Fernald. LUMHOLTZ PINE. Mexico. McKean 1988 (NM);

massoniana Lamb. MASSONS PINE. China. McKean 1988 (NM);

maximartinezii (NNC) Cave 1986 (NM).

michoacana Martinez. McKean 1987, (NM)

montezume Lamb. MONTEZUME PINE. Mexico. G9+GC. McKean1987 (NM); CedarL1986 T3 (NM).


monticola Doug. ex D Don. WESTERN WHITE PINE. N America. C11+GC, not found G9


mugo Turra. (P.montana). MUGO PINE. Europe, Balkans. Tantrum 1988 dead

mugo var. pamillio (Haenke)Zenari. Europe. H&S 1952, not found L13

muricata D Don. BISHOP PINE. W N America. Goudie 1934, felled M3; Appleton (blue strain) nursery.

nelsonii Shaw. Mexico. Tantrum 1988 dead

nigra Arnold. AUSTRIAN PINE. Austria.

var. caramonica (Loud)Rehd. (nigra ssp. pallasihana)Lamb Holm

CRIMEAN PINE. Balkan, Crimea. L12

var. corsicana (Loud)Hyl. (nigra ssp. laricio.(Poir)Maire.)

CORSICAN BLACK PINE. Italy, Corsica. L12

var. maritima (Pilaricio) CORSCIAN PINE H9 (pavilion)

ooocarpa Schnied. Mexico, Nicaragua. Tantrum1988 (NM); CedarL1986 (NM);

parviflora S&Z. JAPANESE WHITE PINE. Japan. H&S 1949,
L13=McK, L12, these two not the same; Tantrum(nsy)


Tantrum(ex R Gordon ex Wade)1988 (NM)

patula Schlect. & Cham. JELECOTE PINE. Mexico. Goudie 1934. C5+MM J4+MM K4+MM
K6+MM N5+MM N9+MM

peuce Griseb. MACEDONIAN PINE. Albania, Greece. H&S1932, not found L13; Tantrum 1988 dead;

pinaster Ait. MARITIME PINE. Meditt. Goudie 1934, Q8, 112+GC
Appendix 1: Catalogue of the current collection

**pine** L. STONE PINE. Medit. O10

**ponderosa** Doug ex Laws. WESTERN YELLOW PINE. W N America. H&S 1949, M13+GC (NM); Tantrum 1988 (NM)

**pseudostrobus var. apulcensis** (Lindl)Shaw. Mexico. McKean 1987, (NM)

**pungens** Lamb. HICKORY PINE. E N America. J7+GC, not found B F6

**radiata** D Don. RADIATA PINE. USA. O9+MM, top OH

**resinosa** Ait. AMERICAN RED PINE. E N America. H&S 1988 (NM)

**rigida** Mill. PITCH PINE. N America. H&S 1949, L12+Mck

**roxburghii** Sarg. LONG LEAVED INDIAN PINE. Himalaya. Appleton (nsy).

**sabiniana** Doug. DIGGER PINE. USA. Tantrum 1988 (NM), Trap (nsy).

**serotina** MichX. POND PINE. USA. R8

**sinensis** Mayr. see *P.tabuliformis*

**strobus** L. EASTERN WHITE PINE. E N America. H&S 1949, H7

**sylvestris** L. SCOTS PINE. Europe. H&S 1949, not found M13

**f. argentea** Stev. Caucasus. H&S 1949, L12

**var. mongolica** McKean 1987, (NM).

**tabuliformis** Carr. (sinensis Mayr.) CHINESE PINE. China. H&S 1949, L12+Mck

**taeda** L. LOBLOLLY PINE. USA. CedarLodge 1987, (NM)

**thunbergii** Parl. JAPANESE BLACK PINE. Japan. Tantrum 1988 (NM)

**torreyana** Parry ex Carr. TORREY PINE. S California. Jellyman1988, (NM)

**uncinata** Mill. ex Mirb. (mugo var. rostrata). MOUNTAIN PINE. Switzerland. H&S 1949, L12

**virginiana** Mill. SCRUB PINE USA R.10,(one WL S87); Tantrum 1988 (NM)

**wallichiana** A B Jacks. (griffithii McClelland, not Parl; *excelsa* ex D.Don, not Lamb).

**BHUTAN PINE. Himalaya. C5-MM**

**yunnanensis** Franch. (tabuliformis var. yunnanensis).

**YP** PINE. China. H&S 1949, L13; McKean 1987 (NM).

**Piptanthus**: Fabaceae - Papilionaceae (1+0=1)

**laburnifolius** (D Don)Stapf. (nepalensis) Himalaya. Appleton 1988, M4+GC (NM)

**Pistachia**: Anacardiaceae (2+0=2)

**chinensis** Bge. CHINESE PISTACHIO. China. H&S 1947&49, C11+GC G9 K12 L12+MM O9 P3 P5 S3

**vera** L. PISTACHIO. Asia minor, Syria. H&S 1955, H4

**Pithecellobium**: Fabaceae - Mimosaceae (1+0=1)

**pruningum** Australia. Bull 1988, M4+GC(NM);

**Pittosporum**: Pittosporaceae (8+1=9)

**L3**

**colensoi** Hook f. NZ. FRI R 1979, M2(bush), not found H9

**crassifolium** Banks & Soland. KARO. NZ. not found K7 F10

**dallii** Cheesm. NZ. Millichamp 1988, M3(bush)

**eugenioides** Cunn. TARATA. NZ. K7 not found E5

'Variegatum' D&D 1934?, O8, not found H11 Q6

**phillyraeoides** DC. Australia. Bull 1987, dead G9+GC

**ralphii** Kirk. NZ. D&D 1934?, I7+MM K4+MM K7 K9+MM G10+MM

**tenuifolium** Gaertn. KOHUKU. NZ., FRI R 1979, D4+MM G10+MM H7 K7 M4 04+MM

**viridiflorum** Sims. S Africa. Bull 1988, M4+GC
Appendix 1: Catalogue of the current collection

Platanus: Platanaceae (7+4=11)

D4 D12 (PP296)

\(x\) acerifolia (Ait) Willd. LONDON PLANE. Horton 1918-20, E4 F3+MM I2 J3, located (but NM) E14 F15 G16

‘Cantabrigenis’ (P. cantabrigiensis) H&S 1948, E12

cuneata Willd. see P. orientalis var. cuneata. (Willd) Loud.

orientalis L. ORIENTAL PLANE. Europe to Asia Minor. H&S 1948, E12; not found C12

1372 MWD 1980, nursery

1372 MWD 1980, nursery

1384 MWD 1980, nursery

var. cuneata (Willd) Loud. (P. cuneata) D12

var. insularis (P. cuneata) CYPRIAN PLANE. H&S 1945&48, D12

x mexicana Moric. Mexico. Berry (Puebla Mexico), S4+GC

racemosa Nutt. CALIFORNIA SYCAMORE. USA. H&S 1948, C9 F6 K3 L3, not found D12

wrightii S Watts. USA, Mexico. Hortex 1986, K2+GC

Podocarpus: Podacarpaceae (9+2=11)

K7 (CaP144) M7 P3

andinus Poepp. ex Endl. (Pruunnopitys elegans) Phil. PLUM FRUITED YEW. Chile. H&S 1949, G9

ferrugineus G Benn. ex D Don. Miro. NZ. FRI R 1979, I7, not found N2

hallii Kirk. HALLS TOTARA. NZ. FRI R 1979, N2 (bush)

henkelli Stapf. S Africa. M7+GC

latifolius (Thunb) R Br. EX Mirb. UPRIGHT YELLOW-WOOD. S Africa. H&S 1949, H4

macrophylus (Thunb) D Don. China, Japan. H&S 1949, G3

salignus D Don. (chilinus). Chile. H&S 1948, not found G3 N7

spicatus R Br. ex Mirb. MATAI. NZ. FRI R 1979, not found M2

totara G Benn. ex D Don. TOTARA. NZ. D&D 19347, I7 K7 M2

‘Aurea’ K8+MM

‘Pendula’ WEEPING TOTARA, G4+MM

Podranea: Bignoniaceae (1+0=1)

ricasoliana (Bail) Sprague. S Africa. Nichols 1988, L5+GC

Poliothrys: Flacourtiaceae (1+0=1)


Pomaderis: Rhamnaceae (2+0=2)

K7

apetala Labill. TANUI. NZ. D&D 19347, K5 K7 L8

rugosa Cheesman. NZ. D&D 1934, not found K6 K7

Poncirus: Rutaceae (1+0=1)

trifoliata (L) Raf. BITTER ORANGE. China, Japan. J8+MM

Populus: Salicaceae (10+18=28)

G3 S7 S8 S9

alba L. SILVER POPLAR. Europe, Africa, Asia.

‘Pyramidalis’ (P. ‘Bolleana’) BOLLES POPLAR. Goudie 1934, J11+GC (NM);

alba x glandulosa ‘Korea 1’ Hort. MWD 1980, not located L14

alba x grandidentata Hort. nursery

‘Androscoggin’ (maximowiczii x trichocarpa) Hort. not located S8
Appendix 1: Catalogue of the current collection

x *canadensis* Moench. CAROLINA POPLAR. USA.

‘Serotina’ (*P. serotina*) E8+GC

‘Serotina Aurea’ (P. ‘Serotina Aurea’) not found

*x candicans* Ait. (*balsamifera x deltoides*) BALM OF GILEAD POPLAR. USA. B5, not found J4

*ciliata* Wall. HIMALAYAN BALSAM POPLAR. Himalaya. MWD 1969, N14+GC (NM); P12 (NM),

*deltoides* Marsh. (*P. monolifera*) AMERICAN POPLAR. USA, Europe, Africa.

‘Carolina’ (P. *angulata*) CAROLINA POPLAR S10

‘Frimley’ G3, not located K14

‘Frimley’ hyd Hort. removed F4

‘Frye’ (*laurifolia x nigra*) Hort. not located S7

*lasiocarpa* Oliv. CHINESE NECKLACE POPLAR. China. H&S 1955, G4+GC; McKean1988, R7 (NM);

‘Maine’ (*candicans x berolinensis*) Hort. not located S7

*maximowiczii M1012* Henry. JAPANESE BALSAM POPLAR. China, Japan. MWD 1976, Q2 Q3+GC

*nigra* L. BLACK POPLAR. Africa, Europe.

‘Italica’ LOMBARDY POPLAR, Webb 1917, E4+MM F6+MM I2+MM I3+MM I6+MM J3+MM

‘Rochester’ (*maximowiczii x nigra Planiusensis*) Hort. not located S8

‘Roxbury’ (*nigra x trichocarpa*) Hort. not located S8

‘Rumford’ (*laurifolia x nigra*) Hort. not located S8

*simonii* Carr. CHINESE BALSAM POPLAR. China. F4+GC; S7 (NM); MWD 1988, T7+GC

‘Strathglass’ (*laurifolia x nigra*) Hort. not located S8

*suaveolens* Fisch. SIBERIAN BALSAM POPLAR. China. not found F4

*szechuanica* Schneider. SICHUAN POPLAR. China. H&S 1955, I2+GC S3 Q3 O1 O2

var. tibetica (P. *violascens*) H&S 1947 &55, P4, not found S4 S9

*tremula* L. QUAKING ASPEN. Europe, Africa, Asia. McKean(MWD)1988, P0+GC (NM), P0+GC (NM);

*wilsonii* Schneider. China. dead

*yunnanensis* Dode. YUNNAN POPLAR. China. Goudie 1934, Wilson 1939, K6+GC, M10+GC

*yunnanensis 76-200-44* MWD 1981, not found F11

Potentilla: Rosaceae (0+2=2)

*fruticosa* L. Europe.

‘Parviflora’ H&S 1947, not found H10

‘Vilmoriniana’ H&S 1946, not found H10

Prunus: Rosaceae (1+0=1)

*uniflora* Batal. China. H&S 1959, not found Q7

Prostanthera: Lamiaceae (2+0=2)

*ovalifolia* R Br. Australia. O8+MM Q9+MM Q10+MM

*rotundifolia* R Br. Australia. D&D 1934, Q9+MM

Protea: Proteaceae (0+1=1)

‘Clarks Red’ Hort. I9+MM

Prumnopitys: Podocarpaceae

*elegans* G9 see Podocarpus andinus.

Prunus: Rosaceae (44+62=106)

B5 C4 C7 C11 D7 E10 F4 F9 H5 H6 H8 I4 I5 I8 I9 J8 L7 L9 L11 K12 N5 N1 O1 Q3

‘Alisons Pink’ J7+MT

*apetala* (S&Z) France & Sav. (tschonoskii). Japan. 1948. not found L5

*armeniaca* L. APRICOT. China. P10+MM, not found S6

‘Dawn’ FLOWERING APRICOT, R9 (as Celestial Dawn); not found H9
Appendix 1: Catalogue of the current collection

avium

GEAN, WILD CHERRY. Europe. H5+GC(NM), I4 I8 J4 K11 L9, not found H8

‘Grandiflorum’ H&S 1951. F8

‘Plena’ DOUBLE FLOWERED GEAN, not found L6(removed)

‘Tangshi’ (Name not confirmed). CHINESE CHERRY. I3

‘Awanui’ (Name not confirmed). F5 1981. not found H5

x blireana

Andrea. (cerasifera ‘Atropurpurea’ x mame) B5 C7 D5 D6 D7 D8 F5 G11 K5 K6 P9 P10 R10, not found H9 S9

campanulata

Max. BELL FLOWERED CHERRY. Japan. E7 F8 G9 H4 H5 H10 I4 I8 J6 J7 J7

K2 K4 K6 K12 M4 N4 N5 R6 Q7

formosa form

K11

‘Plena’ DOUBLE BELL FLOWERED CHERRY. H&S 1949, K11

canescens

Bois. GREY LEAF CHERRY. China. H&S 1949, not found K12

cantabriensis

Stapf. (pseudocerasus var. cantabriensis) CAMBRIDGE CHERRY. China. I4 (NM);

cerasifera

Ehrh. CHERRY PLUM. Asia minor. (yellow plum) C5 C6 C8+MM C7+MM D8 E5

F11 I9 J2 R10

‘Atropurpurea’ (‘Pissardii’) bronze Ivs, white flws PURPLE LEAF PLUM

C7 C6 C10 C12 D8 J7 K3 K10 L5 L6

ssp. divaricata small yellow plum, green Ivs, white flws. G8 J8 Q9

‘Lindsayae’ green leaves, pink flowers. I8

‘Thundercloud’ purple Ivs, pink flw C5 C6 D7 D8 K6 P10 R10,

mice purple types D5 D9 G4 E5 E10 I3 K5

cerasoides

D Don. China. K4+GC L4+MM L5+MM M6+MM M5+MM M6+MM and naturalising

cerasoides var. rubea


K6+MM K11 O8; Cave ex Hudson 1988, F6+GC

concinnna

Koehne. China. G9

conradinae

Koehne. China.

‘Semi Plena’ H&S 1947, F8

copollin

Zucc. (salicifolia Kunth). P4+GC

davidiana

(Carr)Franch. DAVID’S PEACH. China.

‘Alba’ WHITE FLOWERED DAVID’S PEACH, H&S 1948, C12

‘Rubra’ PINK FLOWERED DAVID’S PEACH, H&S 1948, C12

decora

(Name not confirmed). H&S 1948, K11

domestica

L. COMMON PLUM. Europe. I7

dulcis

D A Webb. ALMOND. N Africa. K12

‘Burbank Seedling’ N4+CN

‘Early Jordan’ removed H10

‘IX L’ K11+CN L12+CN N5+CN

‘Monovale’ K11+CN

‘Papershell’ N4+MT

glandulosa

Thunb. BUSH CHERRY. China. I7+GC

‘Rosea Plena’ DOUBLE FLOWERED BUSH CHERRY, I9+MM

glaucescens

(Name not confirmed). C11+MT

x hillieri

Hillier. (incisa x sargentii). Hort. H&S 1947, K11

ilicifolia

Walp. California. HOLLY LEAF CHERRY H&S 1948, K10

x incam

‘Okame’ Hort. (incisa x campanulata). F8+MM G9 M5+MM

incisa

Thunb. FULL CHERRY. Japan. L6

x ivensii

(yedoensis ‘Ivensii’) H&S 1949, K11
Appendix 1: Catalogue of the current collection

**x juddii** E Anderson. (*sargentii x yedoensis*). K11

**x kanzakura** 'Rubescens' F10+MM J4+CN J6+CN J4+CN; not true according to Sykes, these trees are a campanulata form.

**laurocerasus** L. CHERRY LAUREL. Europe, Asia minor. C19+MM D10+MM G10+MM J10+MM K10+MM

**lusitanica** L. PORTUGAL LAUREL. Spain, Portugal. E9+MM H8+GC H10+GC

**lyoni** Sarg. CATALINA CHERRY. California. H&S 1948, K10

**maackii** Rupr. MANCHURIAN CHERRY. Manchuria. J5+GC

**mahaleb** L. ST LUCIE CHERRY. Asia minor. H4+GC

‘Pendula’ WEEPING ST LUCIE CHERRY H&S 1948, C11+MM

**malifolia** (Name not confirmed; *padus* ‘Malifolia’?). H&S 1949. not found K13 (stock)

**maximowiczii** Rupr. Japan, Korea, China. H&S 1948, C12+GC

**mume** S&Z. JAPANESE APRICOT. Japan. O9 R10

‘Celestial Dawn’ H5 R10+CN

‘Peggy Clark’ R10+MT

‘Rosea Flore Plena’ P10+MM R10+CN

‘The Geisha’ 15

**nipponica** Matsum. ALPINE CHERRY. Japan. J8+MM J4+MM K6 Q7+MM

**padus** L. BIRD CHERRY. Europe, Asia, Japan. H5 P4+GC

‘Albertii’ H&S 1948, dead K12


**persica** (L.)Batsch. PEACH. China. D9+MM E7 E10 F8 F9 H6 I6 L4 O8 (double shocking pink) O9

‘Folius Purpureus’ PURPLE LEAF PEACH F8+MM G8+MM J9+MM

‘Helen Borchers’ O9+MM R10+MM

‘Pendula’ H7 H10 18

‘Pollardii’ E7+MM F7+MM G8

‘Russells Red’ not found O9

**salicifolia** Kunth. (*copollin Zucc.*) Mexico. L5+GC (NM);

**sargentii** Rehd. SARGENT CHERRY. Japan. J6

**sargentii** ?? see *P x hillieri*. H&S 1948, K11

**x schmidtii** Rehd. (*avium x canescens*) Hort. H&S 1949, not found K12

**seikan?** ?? this label appears in Cook’s notes on the tree ‘Alisons Pink’.

**serotina** Ehrh. BLACK CHERRY. USA. 1975, G6+GC, not found N7, Tantrum 1988 (NM);

**serrula** Franch. China. Millichamp 1981, K11, not found G5

**serrulata** Lindl. China. cvs C5 D5 D9 E6 E7 F9 F10 G9 H7 H10 I6 I8 J9 S4 S3 R2 Q4 R10

‘Asano’ (*serrulata f. geraldiniae*) H&S 1948, L12

‘Ashi botan’ (Name not confirmed). Q9

‘Benden’ (*serrulata f. rubida*) H&S 1948, K12

‘Botrykawa’ (Name not confirmed). not found H6, appears to be ‘Fugenzo’

‘Fugenzo’ (*J.H.Veitch’). D5 D7+MM D8+MM E5 E6 E8+MM F5+MM G9 H5 Q1

‘Hisakura’ (*serrulata f. splendens*) 16 K11 K12

‘Hokusai’ H&S 1949, not found K12


‘Kanzan’ (*serrulata f. purpureascens*). H&S 1949, K11 R9, not found L7 L6

‘Kiku zakura’ (*serrulata f. chrysanthemoides*). not found F9

‘Kofugen’ (*Fugenzo’, according to Bean). R9

‘Mt Fuji’ see ‘Shirotae’

‘O’Naden’ D8 H6 J8+MM L6+MM
Appendix 1: Catalogue of the current collection

### Pseudocydonia: Rosaceae (1+0=1)

*Pseudocydonia* *sinensis* Schneid. CHINESE QUINCE. China. not found F6. E7 E10 H5 H9 K6; Gallen 1988, S6 +GC (NM)

### Pseudolarix: Pinaceae (1+0=1)

*Pseudolarix* *amabilis* (Nelson)Rehd. GOLDEN LARCH. China. Cav(Kunming), K3 (NM)

### Pseudopanax: Araliaceae (3+0=3)

*Pseudopanax* *arbores* (L f.)W R Philipson. (Nothopanax *arboresum*) FIVE FINGER. New Zealand. M2(bush), not found K7

*Pseudopanax* *tomentos* Thunb. DOWNNY CHERRY. China. Japan. G5 I7+GC

*Pseudopanax* *wrightii* Hort. L8+MM. N6+MM

*Pseudopanax* *yedoensis* Matsum. (speciosa x subhirtella). YOSHINO CHERRY. Japan. D9 E9 F8 F9 J5 J6 K6 K7 M6

*Pseudopanax* *yedoensis x subhirtella 'Ascendens'* Hort. H&S 1949, K12

### Pseudotsuga: Pinaceae (3+0=3)

*Pseudotsuga* *macrocarpa* (Torr)Mayr. BIG CONE DOUGLAS FIR. USA. H&S 1951, not found S8

*Pseudotsuga* *macrolepis* (Name not confirmed). McKean 1988, K10 +GC

*Pseudotsuga* *menziesii* (Mirb)Franco. (taxifolia) DOUGLAS FIR. W N America. C7 E8 G10 G11 I6 J5 J6 J10 K5 K6 K9 L7 L11 O4 P5 P6

### Ptelea: Rutaceae (1+0=1)

*Ptelea* *trifoliata* L. HOP TREE. E N America. H&S 1959, Q5+MM

### Pterocarya: Juglandaceae (3+0=3)

*Pterocarya* *fraxinifolia* (Lam)Spach. (caucasica) CAUCASIAN WINGNUT. Caucasus H&S 1956, H3(and many suckers), L8+GC,

*Pterocarya* *rehderiana* Schneider. (fraxinifolia x stenoptera). Hort. R3+MM

*Pterocarya* *stenoptera* C. DC. CHINESE WINGNUT. China. H&S 1956&59, R3+MM P107
Appendix 1: Catalogue of the current collection

Pterostryax: Styraceae (2+0=2)

- corymbosa S&Z. Japan. H&S 1955, I2+GC
- hispida S&Z. Japan. Appleton 1988, H7+GC dead; Appleton 1988, I2+GC (NM), K10+GC (NM)

Punica: Punicaceae (1+4=5)

- granatum L. POMEGRANATE. Europe, Himalaya. H9
  - ‘Albo Plena’ (‘Multiplex’) DOUBLE WHITE FLOWERED POMEGRANATE. H&S 1948, not found H8
  - ‘Double Red’ (Name not confirmed). L5+GC Hatch 1988 (NM)
  - ‘Nana’ DWARF POMEGRANATE. H&S 1948, H10, not found H8
  - ‘Wonderful’ (Name not confirmed). P5

Pyreanthus: Rosaceae (3+0=3)

- angustifolia (Franch)Schneid. China. O10+GC R6+MM; not found O4
- coccinea Roem. Italy, Asia minor. not found O7
- crenato-serrata (Hance)Rehd. (yunnanensis) China J2+BS

Pyrus: Rosaceae (5+0=5)

- alnifolia (X Sorbuspyrus alnifolia). Hort. D12
- auricularis (X Sorbuspyrus auricularis) Hort. D12
- domestica types E9 F9
- folgeri (Sorbus folgeri) C11
- x lecontei Rehd. Hort. (communis x pyrifolia) H5+ M6+
- pashia Hamilt. China. pashia types D9 J3 L8(round leaf) M8 N1(round leaf) O7 O9(pointed leaf)
  R10(pointed leaf)(round leaf), not found H11. Are two species mixed up here, perhaps pashia and pyrifolia?
  one group a fortnight later than the other.
- phaeocarpa Rehd. China. H&S 1948, not found B11, could be in nursery wood

Quercus: Fagaceae (84+17=101)

- aegilops see Q. macrolepis
- afarens Pomel. CHESTNUT LEAF OAK. Algeria. H&S 1955, P1 P7
- affinis (Name not confirmed). Berry(2750m El Chico, Mexico)1987, S2+GC T6+GC
- agrifolia Nee. CALIFORNIA LIVE OAK. California. seed california 1959 M6 O9+GC;
- alba L. WHITE OAK. N America. H&S 1938, O6 O9+GC O10+GC; PS 1981, not found H8
- aliena Bl. ORIENTAL WHITE OAK. Japan, Korea. PS(ex seed Arnold arb) 1969, R4, not found O3
  - var. acuteserrata Max. Japan, China. PS as above, not found H8
- alpestris see faginea.
- arkansana Sarg. ARKANSAS OAK. USA. PS(ex seed) 1976, Q3
- baetica H de Vil. Europe. (included in faginea?) H&S 1949, K12
- bicolor Willd. SWAMP WHITE OAK. E N America. H&S 1935&47&55, J4+BB Q8
- candidans calophylla (Name not confirmed). S3+GC
- canariensis Willd. (mirbeckii) ALGERIAN OAK. Spain, Africa. H&S 1938&50, D4+MM L12+MM Q8 N6
  - ‘Latifolia’ H&S 1950&55, Q2 Q8
- canariensis x robur Hort. K2+GC
- cerris L. TURKEY OAK. Europe, Asia minor. H&S 1955, D6 E6 O3 O8+IDS
- cerris x suber Hort. E10+BB
- chrysolepis Liebm. CANYON LIVE OAK. W N America. H&S 1948, D10
Appendix 1: Catalogue of the current collection

app. J. CATALOGUE OF THE CURRENT COLLECTION

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coccinea Meunch. SCARLET OAK. E USA. B5 C4 D4 D9 H5 I5 J4 K7 K9 K11 L4 O6;
not found G10 N7

'Splendens' F6 H6-CN I9 K3-CN
crassifolia Humb. & Bon. Mexico. T4+GC
dentata Thunb. DAVIDY OAK. Japan. Berry(Seed Trompenburg) O10+GC
douglasii Hook & Arn. BLUE OAK. W N America. nursery
elipsoidalis E J Hill. NORTHERN PIN OAK. USA. H&S 1965, P9 R7
faginea Lam. (lustinica) Webb., not Lam. PORTUGESE OAK. Spain, Portugal. H&S 1965,
E11 (labelled alpestris)
falcata var. pagodifolia Ell. CHERRY BARK OAK. USA. FRJR 1975, O3 R5 S5 T5+GC
felipensis hyd Berry(Mexico)1987, S5 P1+GC
frainetto Ten. (conferta) HUNGARIAN OAK. Balkan, Italy. H&S 1955, N7 Q6+GC
fulva (Name not confirmed). Berry(Mexico)1987, T5+GC
garryana Doug ex Hook. OREGON WHITE OAK. N America. H&S 1947, D11
glandulifera Bl. (serrata) Thunb. China, Japan. H&S 1955, L7, P3(WL acuta) P8,
not found 18 (Wrongly Labelled Q. grosseserrata)
x heterophylla Michx. (phellis x rubra) USA. not found N6
x hispanica Lam. (cerris x suber). Spain, Portugal, Italy.
Ambrozyana’ H&S 1955, Q8
'Leucombeana' LUcombe OAK. H&S 1938?, 47&58 J4 N6
x humidicolor (Name not confirmed). P5(ex seed USA) 1969, not found S5
ilex L. HOLM OAK. Medit. D7+MM J4 D4+GC
var. ballota (Desf) A. DC. BALLOTA. Spain, N Africa. Berry(seed)1980, dead
var. fordii (ilex “Fastigiata”) Hortex 1987, R5+GC
illicifolia Wang. BEAR OAK. E USA. H&S 1948, M7
imbricaria Michx. SHINGLE OAK. N America. H&S 1938&48, L8 P1
incana Roxb. see Quercus inacina
inferorion Oliv. DYE OAK. Turkey, Greece. not found E107
ithaburensis Dcne. (aegilops var. pyrami, aegilops var. ithaburenisis) W Asia. H&S 1955, G4+BB
kellogii Newb. CALIFORNIA BLACK OAK. USA. H&S 1947, D11+GC, Q1; not found N8
x kewensis Osborn. (cerris x wilsizensi) KEW OAK. Hort. H&S 1948, N8
lamellosa Sm. Himalaya. Jellyman(Nepal)1987, R2+GC
latifolia see canariensis ‘Latifolia’
leucombeana see hispanica ‘Leucombeana’
leucothecophora A Camus. (Quercus. Roxb., not Bartr.) China. H&S1948, D10;
libani Oliv. LEBANON OAK. Syria, Asia minor. H&S 1955, P3
lobata Nee. VALLEY WHITE OAK. California. ex seed california 19597, Q8
lyrata Walt. OVERCUP OAK. USA. PS(seed Oktibbeha Miss. USA) 02 O3 R4
macranthera Fisch & Mey. CAUCASIAN OAK. Caucasus to Persia. H&S 1947?, N6, not located J4
macrocarpa Michx. BURR OAK. Canada, USA. H&S 1948-51, J4+BB; not found O8,
macrocarpa hyd S4
macropleis Kotschy. (aegilops L.) VALONIA OAK. S Balkans, Italy, W Asia. not found O8
marilandica Meunch. BLACKJACK OAK. E USA. H&S 1949, E12+BB
mexicana H&B. Mexico. Berry1987, S4+GC
michauxii Nutt. SWAMP CHESTNUT OAK. N America. FS(seed Oktibbeha, Miss, USA) O3
Appendix 1: Catalogue of the current collection

mongolica Fisch. ex Turcz. MONGOLIAN OAK. Japan, China, Korea. D10+BB; (seed Arnold Arb) O3; not found R4

myrsinifolia Bl. (vibrayneana) Japan, China. R6+BB; Berry(Hiller)1988 (NM);

nigra L. WATER OAK. S USA. H&S 1938-48, K4 P7

nutallii N. America. Hamilton 1988, L3+GC (NM)

palustris Muench. PIN OAK. E USA. B11 D8 D1 E8 E10 G2 H2 L12 M6 N1 N2 N3 N4 N6 O3 O8 P3 P4 Q3 R7 S4

‘Horizontalis’ Q8

petraea (Matt)Liebl. (sessiliflora) SESSILE OAK. Europe, Asia minor.

‘Mespillifolia’ H&S 19387, 557, K3 O6 P8

‘Purpurea’ (‘Rubicunda’) PURPLE LEAF DURMAST OAK H&S 1955, 18

phellos L. WILLOW OAK. S USA. H&S 1947, 07 (wrongly labelled)

phillyreoides Gray. SE USA. H&S 1955, O3; R5+GC

pontica K Koch. ARMENIAN OAK, PONTINE OAK. Caucasus, Armenia H&S 1955, P5+BB; Midle Arboretum,Norway(Mt Kara Dag, 1300m Turkey), R4+GC (NM);

prinus L. CHESTNUT OAK. USA. Q2; Hamilton 1988, dead V5

pubescens Willd. (obusata) DOWNY OAK. Europe, Asia minor.

H&S 1948&55, O7, removed D12; SEED 1974, P4+GC, S4 labelled obtusata,


pyrami Kotschyi. Asian minor, Sicily. H&S 1955, Q8 O8+GC

pyrenaica Willd. PYRANEAN OAK. France. seed 1980, not found H8

reticulata H B K. Mexico, USA. R5+GC

robur L. ENGLISH OAK. Europe. B5 B11 B12 C4 C5 C11 D4 E6 F9 G9 G10 H8 H9 J9

‘Concordia’ H7+GC; Millicamp 1988 (NM)

‘Cristata’ H&S 1955, P7

‘Fastigata’ CYPRESS OAK H&S 1949, N8

‘Fastigata Purpurea’ H&S 1955, P4 G6+GC

‘Fennessii’ (‘Heterophylla’) E11+GC

‘Filiicifolia’ D11+GC N6 P8,

‘Hodgekinsonii’ D12+GC E11+GC E12+GC I5 J4 J5 L9 N8

rubra L. RED OAK. N America. C10+MM C12-MM D4 D7 F11 J9 L5 L5 L7 L10 L11 M5 P8 Q4

rugosa H3K. Mexico. Berry, P1+GC T5+GC

salicina Bl. (stenophylla) Japan. H&S 1948, C10

x schochiana Dieck. (palustris x phellos). SCHOC OAK. USA.H&S 1948, P8

x schochiana Dieck. (palustris x phellos) New Zealand cross. seedling of Hastings tree, F2; Wilsons nsy, R6;

x schuettei (Name not confirmed). not found S5

semecarpifolia Sm. (aquifoliodes) China. H&S 1952, L8

shumardii Buckl. SHUMARD OAK. USA. FR 1975, P3 R4 S4 T5

stellata Wang. POST OAK. USA. H&S 1959, N7

suber L. CORK OAK. Europe, N Africa. Mortimer(Albert Pk)1987, R5

sycophila (aff. Rosei) (Name not confirmed). Mexico. Berry1987 T5+GC

trojana Webb. MACEDONIAN OAK. Greece, Asia minor. H&S 1947, D11+GC

x turneri Willd. (ilex x rubra). TURNER’S OAK. Hort. H&S 1948, P8

‘Pseudoturneri’ H&S 1955, Q8

variabilis Bl. ORIENTAL CORK OAK. China, Japan. H&S 1949, E12

velutina Lam. BLACK OAK. E USA. H&S 1947&51, L13+GC

velutina ‘Rubrifolia’ H2
Appendix 1: Catalogue of the current collection

**Quillaja:** Rosaceae (1+0=1)
- *saponaria* Mol. SOAP BARK TREE Chile. D&D 1938, E5+ I10

**Quintinia:** Saxifragaceae (1+0=1)
- *acutifolia* Kirk. WESTLAND QUINTINIA New Zealand. FRI R 1979, M2(bush)

**Rapanea:** Myrsinaceae
- *australis* see *Myrsine australis*

**Raphiolepis:** Rosaceae (2+0=2)
- *indica* (L.) Lindl. INDIAN HAWTHORN. China. L4

**Rhamnus:** Rhamnaceae (2+0=2)
- *californica* Esch. COFFEE BERRY. USA. H&S 1948, L12+GC;
- *purshiana* DC. CASACARA SAGRADA. N America. D7+BB; L6+GC; P9+GC(NM)

**Rhaphithamnus:** Verbenaceae (1+0=1)
- *spinosus* (Juss) Small. Chile. H&S 1937, not found H2; nursery

**Rhododendron:** Ericaceae (56+188=244)
- *aberconwayi* Yunnan. O7
- *arborescens* N-America. P7
- *arboreum* Kashmir, Nepal, Sikkim. M4; Nursery; not found M7 N5
  - seedling L4 M3 M4 M7 M5
  - *ssp. cinnamomeum* Nepal. M4 not found J8
  - 'Kermesium' (Name not confirmed). J8 O7 M8;
    - var. kingianum Manipur. H4
  - 'Kingianum zeylanicum' (Name not confirmed; arboreum var. kingianum = zeylanicum). O8
    - pale red (Name not confirmed). M3
  - 'Rubrum', (Name not confirmed). not found N5
- *augustinii* (chasmangoides) China. J8, dead O7
- *augustinii var. chasmangoides* Yunnan, Tibet. not found O7
- *aucklandii* 'Rubrum' (griffithianum 'Rubrum') (Name not confirmed). H4
- *barbatum* Himalaya. J7
  - 'Meteor' (Name not confirmed). not found P9
- *campylocarpum* Nepal, Sikkim, Assam, Burma, Tibet. M4
- *davidsonianum,* Szechuan, Yunnan; not found J8 Q7
  - 'Exbury Pink' (Name not confirmed). not found O7
- *dawsonianum* (Name not confirmed). K7
- *decorum* China. H5
- *delavayi* (arboreum ssp. delavayi) Yunnan. not found O7
- *diaprepes* Yunnan. dead P10
- *diaprepes x griersonianum* F6
- *discolor* China. O7, not found N5
  - 'Kirki' (Name not confirmed). not found J8
- *elliotii* India. check G4
- *ficioeigerum* Yunnan. not found O7
- *fortunei* China. O7 Q7, not found J7
  - *fortunei* 'Red Form' (Name not confirmed). not found O7
- *grande* Nepal, Bhutan. not found L4
- *griersonianum* Yunnan. not found H11
Appendix 1: Catalogue of the current collection

*griffithianum* (aucklandii) Nepal, Assam. M3, not found G4

*heliolepis* Yunnan, Burma. not found J8

*ilanetum* (Name not confirmed) not found O7

*intricatum* Szechuan. not found O7

*japonicum* Japan. not found P10

*johnstoneanum* India, Assam, Manipur. O7

*luteum* Europe, Caucasus. not found I8

*macabeanum* India, Manipur, Assam. not found P7

*maddenii* Himalaya. F9 N5 O7

*megetatum* Himalaya, Burma. not found O7

*nuttalii* Assam, Tibet, Burma. P7+GC, not found H10

*occidentale* N.America. not found P10

‘Graciosa’ I9

*polyandrurn* (Name not confirmed). Q7

*ponticum* Spain, Portugal, Asia minor. J9 M7, check L7

*x pulcherrimum* (‘Nobleanum’) (arboreum x caucasicum) L4

*racemosum* Yunnan, Szechuan. O7, not found P9

*sanguineum* ssp. didymum (didymum) Tibet. not found O7

*schlippelbachii* Korea, Russia, China. P9

*smirnovii* Asiatic Turkey. K7

*sperabile* var. weihsiense Weihsi. F8

*sutchuenense* China. K8

*viscosum var. rhodanthum* (Name not confirmed). P10

*wallichii* Nepal, Assam. O7

*zeylanicum* (arboreum var. zeylanicum) Ceylon. O7

‘Iam’ (Name not confirmed). not found G4

Rhododendron hybrids

‘Albatross Townhill’ (discolor x ‘Loderi King George’). not found R9

‘Aladdin’ (auriculatum x griersonianum). P9

‘Alice’ (griffithianum hyd). not found J8

‘Amy’ (griffithianum hyd). not found O8

‘Angelo’ (discolor x griffithianum). Q7

‘Angelo Solent Queen’ (discolor x griffithianum). H4 O8

*arboreum* x *decorum* (Name not confirmed). not found I9

‘Argosy’ (auriculatum x discolor). not found Q7

‘Arthur Bedford’ (ponticum hyd ?) Q7

‘Arthur Gilbert’ (Name not confirmed). not found R9

‘Augfast’ (augustini x fastigiatum). not found O7

‘Avalanche’ (colophyrum x ‘Loderi’). Q7

‘Azrie’ (diaprepes x grierssonianum). F6 O7

‘Bagshot Ruby’ (thomsonii hyd). L5

‘Barclayi Avice’ (Name not confirmed). not found M4

‘Barclayi Helen Fox’ (‘Glory of Penjerrick’ x thomsonii). not found P9

‘Barclayi Robert Fox’ (‘Glory of Penjerrick’ x thomsonii). not found Q7

‘Barnett Glory’ L4

‘Beauty of Littleworth’ (griffithianum hyd). K8 L6
Appendix 1: Catalogue of the current collection

'Beauty of Tremough' (arboreum x griffithianum), not found H7 P9
'Best White' (Name not confirmed), O7
'Blue Peter' H4+MM J7+MM I9+MM
'Boddartianum' (arboreum x campanulatum), G3
'Bow Bells' ('Corona' x williamsianum), not found P9
'Britannia' ('Queen Wilhelmina' x 'Stanley Davis'), K7 O7 P7
'Brocade' ('Vervaeniana' x williamsianum), not found O7
'Bulstrode' Q6
'Bulstrode Park' (griffithianum hyd x 'Sefton'), Q7
'Calstocker' (calophtysum x 'Dr Stocker'), not found O7
'Carita Inchmery' (campylocarpum x 'Naomi'), O7
'Chancellor' O7
'Charles Lawson' (Name not confirmed), M6
'Charles Smith' (Name not confirmed), seedling E5, not found O7
'Chaste' (campylocarpum x 'Queen of the May'), not found R9
'China' (fortunei x wightii), Q7
'Christmas Cheer' (caucasicum hyd), M4 P10
'Chrysomanicum' Q7
'Colonel Rogers' (falconeri x niveum), P10
'Cornish Cross' (griffithianum x thomsonii), not found J8
'Cornubia' (arboreum 'Blood Red' x 'Shilsonii'), H4 M3
'Corry Koster' not found L5
'Countess of Althone' (catawbiense 'Grandiflora' x 'Geoffrey Millais'). E5 H6 O7, dead Q7
'Countess of Derby' ('Cynthia' x 'Pink Pearl'), L5
'Countess of Sefton' (edgeworthii x 'Multiflorum'), not found O7
'Daubuzzi' (griffithianum hyd), O8
'Daydream' (griersonianum x 'Lady Besborough'), not found P9
'Dorothea' (decorum x griffithianum), P10
'Dr A.H.Aikman' (Name not confirmed), not found H11
'Dr A W Endtz' (catawbiense hyd x 'Pink Pearl'), not found O8
'Earl of Althone' ('Queen Wilhelmina' x 'Stanley Davis'), O8
'Eileen' M6
'Elizabeth' (forrestii x griersonianum), P9
'Elsa Crisp' x 'Tally Ho' P9
'Elspeth' (campylocarpum x hardy hyd), M4
'Erica'? (Name not confirmed; could be Erich, or Eri the azalea), M4
'Ernest Gill' (arboreum x fortunei), H7
'Eureka' (arboreum x hookeri), not found H8
'Fastuosum Flore Plena' (catawbiense x ponticum), not found L4 P9
'Firetail' ('Britannia' x eriogynum), O7 P7 Q7
'Fittianum' (racemosum hyd), not found O7
'Florence' not found O7
'Fragrantissimum' (edgeworthii x formosanum), H11+MM H10+MM K8+MM
'Garnet' (Broughtonii x griffithianum), M3 O7, not found P7
'General Sir John du Cane' (discolor x thomsonii), O8
'George Hardy' (griffithianum hyd), not found L4
Appendix 1: Catalogue of the current collection

‘Gillii’ (arboreum ‘Blood Red’ x griffithianum). K8
‘Gills Crimson’ (griffithianum hyd). M3, not found 19 07
‘Glory of Bagshot’ (griffithianum hyd). M4
‘Glory of Penjerrick’ (arboreum x griffithianum). not found Q7
‘Goethe’ (catawbiense hyd). M4
‘Gomer Waterer’ (catawbiense hyd). not found L5
‘Goody Pink’ (Name not confirmed). H4
‘Graham’ (Name not confirmed). O7
‘Grand Marquis’ (Name not confirmed). not found P9
‘griffithianum x ‘Doncaster’ not found 19
‘griffithianum x eliotii’ not found R9
‘Grierdal’ (dalhousiae x griersonianum). I8
‘Gwynool’? (Name not confirmed). O7
‘Harisii Superbom’ (thomsonii hyd). K8
‘Helene Schiffler’ (arboreum hyd). M6
‘Horsham’ (griffithianum hyd x ‘Monteir Thiers’). O8 P9
‘Hugh Koster’ (‘Doncaster’ hyd x ‘George Hardy’). P9, not found H6
‘Ibex’ (griersonianum x pocophorum). O7 P9 19
‘Ilam Canary’ (Name not confirmed). not found N5
‘Ilam Kingianum’ (Name not confirmed). H4
‘Ilam Orange’ (dichroanthum hyd). O7
‘Ilam Tropic Glare’ (Name not confirmed). 110
‘Iverys Scarlet’ (arboreum hyd). B6+MM K7 dead L8
‘Jean’ (decorum x griersonianum). not found O7
‘Jenny’ not found P9
‘Joseph Whitworth’ M6
‘Kaka’ (Name not confirmed). O7
‘Kate White’ (Name not confirmed). O7
‘Kewense’ (fortunei x griffithianum). check B6 B7
‘Kew Pearl’ not found H6
‘Kluis Sensation’ (‘Britania’ x seedling). not found H8
‘Kluis Triumph’ (griffithianum hyd). I8
‘Lady Bessborough’ (campylocarpum var. elatum x discolor). P9 R7
‘Lady Chamberlain’ (cinnabarim var. roylei x ‘Royal Flush’). not found P9
‘Lady Eleanor Cathcart’ (arboreum x maximum). K8 O8
‘Lady Galway’ P7 P9 not the same, P9 correct?
‘Lady Galway’ x maddeni P7
‘Lady Grey Egerton’ (catawbiense hyd). not found H11
‘Lady Longman’ not found O7
‘Lady Primrose’ not found L5
‘Lady Roseberry’ (cinnabarim var. roylei x ‘Royal Flush’). not found O7
‘Large Leaf’ (Name not confirmed). H4
‘Laura Aberconway’ (‘Barclayi’ x griersonianum). not found P9
‘Lavender Girl’ (fortunei x ‘Lady Grey Egerton’). O7
‘Letty Edwards’ (campylocarpum var. elatum x fortunei). Q10
‘Lindleyanum’ (Name not confirmed). not found K7
‘Lodauric’ (auriculatum x ‘Loderi’), not found 18 R9
‘Loderi Game Chick’ O8
‘Loderi Irene Stead’ H4 O8
‘Loderi King George’ (fortunei x griffithianum). H4
‘Loderi King George’ hybrid (Name not confirmed). H4?
‘Loderi Pink Diamond’ (fortunei x griffithianum). O8 L5
‘Loderi Sir Joseph Hooker’ (fortunei x griffithianum). F9
‘Loderi Venus’ (fortunei x griffithianum). O8
‘Loderi’ (fortunei x griffithianum). Several seedlings M3 M4 M6 O8
‘Loders White’ (arboreum var. album x griffithianum). Not found J8
‘Louis Pasteur’ (‘Mrs Tritton’ x ‘Viscount Powerscourt’). M3
‘Lucky Strike’ (‘Countess of Derby’ x grier. sonianum). Not found R9
‘Luscombeanum’ (fortunei x thomsonii). Not found 17, (other note says found 17).
‘Madame de Bruin’ (‘Doncaster’ x ‘Prometheus’). K8
‘Margaret Dunn’ (discolor x ‘Fabia’). Q7
‘Mars’ P6 Q7, not found J8
‘Mary Blane’ O7
‘Matador’ (grier. sonianum x strigilolus). P9
‘Mohamet’ (dich. rahn. x ‘Tally Ho’). check BW, not found 07
‘Mother of Pearl’ (sport of ‘Pink Pearl’). Not found H7
‘Mount Everest’ (Camp. ant. x griffithianum). Not found L4
‘Mrs A. T. de la Mare’ (‘Halopeanum’ x fortunei ‘Mrs Charles Butler’). O8 110
‘Mrs C. B. van Nes’ (‘Florence Smith’ x ‘Princess Juliana’). E5
‘Mrs Charles E. Pearson’ (catawbienese ‘Grandilorum’ x ‘Coombe Royal’). K6
‘Mrs Charles Irwin Evans’ (Name not confirmed). Dead H4 check
‘Mrs G. W. Leak’ (‘Chevalier Felix du Savage’ x ‘Coombe Royal’). Not found J8
‘Mrs Henry Agnew’ (arboreum var. album x grande). Not found H7
‘Mrs J. C. Williams’ Q7
‘Mrs J. G. Millais’ M6
‘Mrs P. D. Williams’ L6
‘Mrs R. S. Holford’ (catawbienese hyd). M6
‘Mrs W. T. Thistleton Dyer’ (fortunei hyd). Not found L4
‘Myrtifolium’ (hirsutum x minus). Not found 07
‘Nanette’ O7
‘Naomi A M’ (‘Aurora’ x fortunei). P10
‘Naomi Nautilis’ (‘Aurora’ x fortunei). P7
‘Nobleanum’ (arboreum x caucasicum). H4 K8
‘Norman Shaw’ (‘B. de Bruin’ x discolor). Not found R9
‘Parisienne’ (Name not confirmed; an azalea?) Q10
‘Penjerrick’ (Camp. pol. x elatum x griffithianum). Not found G4
‘Pilgrim’ (fortunei x ‘Gills Triumph’). O7
‘Pink Pearl’ (‘Broughtonii’ x ‘George Hardy’). O7 O8 M4, not found 18
‘Prince Camille de Rohan’ (caucasicum hyd). M6
‘Princess Alice’ (ciliatum x edgeworthii). Not found O7
‘Professor Hugo de Vries’ (‘Doncaster’ x ‘Pink Pearl’). M6
‘Purple Splendor’ (‘Hexe’ x poukhanense). Not found G4
Appendix 1: Catalogue of the current collection

‘Queen Wilhelmina’ (griffithianum hyd). P9
‘Red Admiral’ (arboream x thomsonii). O7
‘Red Glow’ (‘Halopeanum’ x thomsonii). P6 Q7
‘Richard Gill’ (fortunei x thomsonii). L5
‘Robert Croux’ M6
‘Robert W Wallace’ (griffithianum hyd). not found N7
‘Romany Chai’ (griersonianum x ‘Misers Maroon’). J9
‘Romany Chai’ (griersonianum x ‘Misers Maroon’). H4, check sundail I9
‘Rosabel’ (griersonianum x ‘Pink Shell’). H4, not found O7
‘Rosamund Millais’ (‘Doncaster’ x ‘George Hardy’). K7
‘Royal Flush’ (cinnaeabarinum x maddenil). Q10, not found P8 Q7
‘Rubina’ (didymum x ‘Tally Ho’). Q7
‘Saffoph’ not found N5
‘Scarlet King’ (griersonianum x ‘Ilam Alarm’). O7
‘Seta’ (moupinense x spinuliferum). P7
‘Shilsonii’ (barbatum x thomsonii). not found L3
‘Shilsonii x arboream’ (Name not confirmed), not found L4 N5
‘Sir Frederick Moore’ (discolor x ‘St Keverne’). not found Q7
‘Sir John Ramsden’ (‘Corona’ x thomsonii), not found P9
‘Sir Robert Peel’ E9+MM F9+MM G11+MM I7+MM
‘Spotlight Sappho’ (Name not confirmed). G3
‘Steads Hardy Red’ (Name not confirmed). O7
‘Sunrise’ (griersonianum x griffithianum). P9
‘Sweet Simplicity’ M6
‘Unique’ (campylocarpum hyd). L5
‘Unknown Warrior’ (‘Queen Wilhelmina’ x ‘Stanley Davis’). H4 K7 O7
‘Vanessa Pastel’ (griersonianum x ‘Soulbut’). check, not found H10
‘van Nes Sensation’ (‘Sir Charles Butler’ x ‘White Pearl’). M3
‘Victorianum’ (dalhousiae x nutallii). P7, not found P10
‘White Pearl’ (griffithianum hyd). not found H6 F9
‘Winsome’ (griersonianum x ‘Humming Bird’). P10

Miscellaneous: Rhododendron
B7(CP488A), B6(CP488), C6(CP498), D5, E5(CP441), E9(CP487), F6, F9(CP466 467), G3(CI304), G11two, H4several, H5several, H7several, J3three, J8, J9several, K7(CaP21), K8several, L4, M4, M6, M8, N7(DP88), O7several, O10, P7(DP57), P8(DP61), P9two, P10(BW16), Q7several, R7several, R9(BH6), R10one, 3 dead

Miscellaneous: Azalea
‘Jenkinsii’ (an azalea). M4
‘J C van To’ (Mollis azalea). K8
‘Mesphistiphides’ (Name not confirmed; Mephistotheles ?). R7
‘Muriel Watson Jones’ (Name not confirmed; the Knap Hill azalea?) R7
‘Virginalis’ (Indian azalea). M4

Rhodotypies: Rosaceae (1+0=1)
kerrioides Beech wood

Rhus: Anacardiaceae (5+1=6)
copallina L. SHINING SUMACH. N America. H&S 1947, E10-GC, not found K10
Appendix 1: Catalogue of the current collection

**Ribes: Saxifragaceae (4+0=4)**

- *glabra* L. SMOOTH SUMAC. N America.
  - 'Laciniata' H&S 1957, B6 19, not found P10.
- *lancea* Lf. S Africa. P5+GC
- *trichocarpa* Miq. Japan, China. H&S 1948, not found Q5
- *typhina* L. STAGHORN SUMACH. E N America. not found Q5, gardens?

**Roses: Rosaceae (1+1=2)**

- *aureum* Pursh. GOLDEN CURRANT. USA, Mexico. L6+GC
- *fasciculatum var. chinense* Maxim. Korea. Berry, L5 (NM),
- *x gordonianum* Beaton. (odoratum *x sanguineum*) not found H11
- *sanguineum* Pursh. W N America. FLOWERING CURRANT 19+MM

**Robinia: Fabaceae - Papilionaceae (1+1=2)**

- *pseudoacacia* L. BLACK LOCUST. USA. C10+MM C11+MM, D13+MM
  - 'Rectissima' SHIPMAST LOCUST M9+GC

**Rosa: Rosaceae (1+1=2)**

- *B6(two apricot) B6(two old), H4 thorny, K6. Pear park eglantula* Rolfe. SWEET BRIAR. China. P10
  - 'Sanders White' H10

**Rosmarinus: Lamiaceae (0+1=1)**

- *officinalis* L. COMMON ROSEMARY. Asia minor.
  - pale flowered 07 09 R10
  - 'Corsican Blue' not found 07

**Salix: Salicaceae (11+2=13)**

- *alba* L. WHITE WILLOW. Europe, Asia.
  - 'Vitellina' GOLDEN WILLOW removed G4
- *babylonica* L. WEEPING WILLOW. E Asia. dead B11
- *caprea* L. PUSSY WILLOW. NE Asia. H&S 1947, not found I10, L2(NM),
- *daphnoides* Vill. VIOLET WILLOW. Europe, Himalaya. removed F4
- *gracilista* Miq. Korea, Japan. H&S 1949656, N6
- *magnifica* Hems. China. Cave 1989 J8 (NM); Cave 1986 R7,
- *matsudana* Koidz. BEIJING WILLOW. China. H&S 1947, Q8
  - 'Tortuosa' CORKSCREW WILLOW N3
- *pentandra* L. BAY WILLOW. Caucasus, Europe. Goudie 1934?, H5
- *purpurea* L. PURPLE OSIER. Europe, N Africa. not found L8
- *repens var. argentea* (Sm)Wimm & Grabn.
  - CREEPING WILLOW. Europe. H&S 1956, not found Q3 (dead?)
- *x sepalcalis* Simonk. (ala 'Tristis' *x babylonica*) Goudie 19347, not found C10
- *x seringeana* Gaud. (caprea *x elaeagnos*). H&S 1957, dead H3, cutting alive in nursery.

**Salvia: Lamiaceae (4+0=4)**

- *fulgens* (NNC). H11+GC
- *grahamii* see microphylla.
- *mexicana* L.Per. Mexico. II0+MM
- *microphylla* Kunth. SCARLET SAGE. H&S 1946, 19+MM
- *sclarea var. turkestanica* Mattet. Turkestan. 110+MM

**Sambucus: Caprifoliaceae (2+0=2)**

- *canadensis* L. ELDERBERRY. USA. MAF1984, P5
- *formosana* Nakai. E Asia. 5S(seed Korea) not found H8
Appendix 1: Catalogue of the current collection

Sapium: Euphorbiaceae (2+0=2)

japonicum (S&Z) Pax. & Hoffm. China, Japan, Korea.

sebiferum (L.) Roxb. CHINESE TALLOWTREE. China. Mike Steven 1986, R6

Sarcoococca: Buxaceae (2+0=2)


humilis (Rehd & Wils). Stapf. (hookeriana var. humilis). CHRISTMAS BOX. China. check 18 L4

Sassafras: Lauraceae (1+0=1)

albidum (Nutt.) Nees. (officinale) SASSAFRASS. USA. F10+MM

Schima: Theaceae (2+0=2)


wallichii (DC) Korth. (superba) India to Taiwan. Cave(ex Jellyman) L5(NM), Q5(NM).

Schinus: Anacardiaceae (2+0=2)

molle L. PEPPER TREE. S America. H11+MM

terebinthifolius Raddi. BRAZILIAN PEPPER TREE. Chile. R10+GC

Schizandra: Schisandraceae or Magnoliaceae (2+0=2)

coccinea Michx.f. WILD SASSAFRAS. USA L6+GC

grandiflora var. rubrifolia Schneid. (chinensis var. rubrifolia, rubrifolia). China. H&S 1938?

Schizophragma: Saxifragaceae (1+0=1)

integrifolium Oliv. China H11+RF

Sciadopitys: Taxodiaceae (1+0=1)

verticillata (Thunb) S&Z. Japan. Fraser 1986, J5+GC (NM)

Senecio: Asteraceae (3+0=3)

M6?

grandiflora Less. Mexico. H7

greyi Hook. f. New Zealand. I9

huntii (NNC) H11 I9

Sequoia: Taxodiaceae (1+0=1)

sempervirens (Lamb) Endl. COAST REDWOOD. USA. Goudie 1934, B6 B7 C7 C12 D5 D6 14 15 16 19 K4 R7

Sequoiadendron: Taxodiaceae (1+0=1)

giganteum (lindl) Bucholz. WELLINGTONIA. USA. B6+MM, not found C5

Sesbania: Fabaceae - Papilionaceae (1+0=1)

sp M4

Sinojackia: Styraceae (2+0=2)

I8

rehdéria Hu. China. H&S 1951, I8

xylocarpa Hu. China. H&S 1951, I8 Q5+GC

Smilax: Liliaceae (1+0=1)

menispermoides (NNC) Jellyman 1988, M4+AJ

Solanum: Solanaceae (1+0=1)

rantonnetii Curt. BLUE POTATO SHRUB. Argentina. H11+MM

Sollya: Pittosporaceae (1+0=1)

fusiformis Payer. (heterophylla) Australia. M4+RF

Sophora: Fabaceae - Papilionaceae (7+0=7)

japonica L. JAPANESE PAGODA TREE. China, Korea. G11+GC,

Puha(ex Frimley Pk) 1988, C11+GC, H5+GC (NM);
Appendix 1: Catalogue of the current collection

microphylla Ait. KOWHAI. NZ. S7 R8 P6,
  f. longicarinata (S.treadwellii) Q8(NM); Flatt(ex Cobb valley) J7(NM);
  Stephens Island form Hatch 1986 H10(NM).

microphylla x prostrata (NNC) not found H8

prostrata Hatch 1986, K5(NM)

tetraperta Ait. KOWHAI. NZ. P10; FRI1979, L1(NM), M1(NM)

X Sorbacia: Rosaceae (3+0=3)

aitchisonii Hemsl. (Spiraea aitchisonii) China, Kashmir. H&S 1937?, not found O7

kirilowii Max. China. Pugeti 1988, L5+GC (NM)

tomentosa (Lindl)Rehd. (Spiraea lindleyana) Himalaya. Appleton ex Kashmir 1988, L4+GC, L5+GC

X SORBOPYRUS: Rosaceae (2+0=2)

auricularis (Knoop)Schneid. H&S 1948, D12 (Pyrus auricularis)


Sorbus: Rosaceae (38+11=49)

americana arranensis (Name not confirmed). S5


aria (L.)Crantz. WHITEBEAM, Europe. M3, not found D12 Q5

‘Chrysophylla’ GOLDEN WHITEBEAM H&S 1957, Q5 O3, not found F11

‘Lutescens’ GOLDEN WHITEBEAM H&S 1957, PS 1980 P2 F3, not found F11

‘Majestica’ (‘Decaisneana’) H&S 1948, not found P10

‘Pendula’ H&S 1957, not found Q5

aucuparia L. MOUNTAIN ASH, ROWAN. Europe, Asia m. C11 D11

‘Asplenifolia’ FERN LEAF ROWAN H&S 1957, N1, not found D12

‘Dirkenii’ GOLDEN ROWAN H&S 1957, not found O1

‘Edulis’ (‘Moravica’) EDIBLE FRUITED ROWAN H&S 1957, R3

‘Fastigiata’ COLUMNAR ROWAN H&S 1957, O2

‘Xanthocarpa’ (‘Fructo Lutea’) YELLOW FRUITED ROWAN H&S 1949&57, D12 not found O1

bristoliensis Wilmott. BRISTOL WHITEBEAM. England. H&S 1957, not found R5

caloneura (Stapf.)Rehd. China. H&S 1957, Q5

commixta Hedl. Korea, Japan. H&S 1948, not found P9 G4

var. rufoferruginea Schneid. Japan. H&S 1957, not found O2


decora (Sarg)Schneid. N America. H&S 1957, not found Q5

discolor Hedl. China. H&S 1957, not found R3

domestica L. Europe, Asia minor, Africa. H8

epidendron Hand-Maz. China. H&S 1957, not found S4

esseretiauana Koehne. CHINESE ROWAN. China.

‘Flava’ H&S 1957, dead N1

glabrata (aucuparia var. glabrata) H&S 1957, Q5

gracilis (S&Z)K Koch. Japan. H&S 1957, not found Q5

huphensis Schneid. China. HUPEH ROWAN H&S 1952-57, G9, not found S3

var. aperta Schneid. China. H&S 1957, not found S3

hybrieda (L.)L. Europe, Finland, Norway. S3

‘Gibbsii’ H&S 1957, not found Q4

insignis (Hook f.)Hedl. Himalaya. H&S 1957, not found O2
intermedia  (Ehrh)Pers.  SWEDISH WHITEBEAM. Scandinavia. H&S 1957, not found H3 O2 Q5
koehneana Schneid.  WHITE FRUITED ROWAN. China.
    H&S 1958, not found O2; Appleton 1988, K10-GC (NM);
latifolia  (Lam)Pers.  SERVICE TREE OF FOUNTAINBLEAU. Europe. H&S 1957, not found Q5
x magnifica  (Name not confirmed). H&S 1951, not found I8
moravica  see S.aucuparia 'Edulis'. R3
matsumurana  (Mak)Koehne. Japan. H&S 1958, N3
meliosmifolia Rehd. China. H&S 1958, Q5
mougeoti  Soy-Willem. & Godr. France, Austria. H&S 1957, not found Q5
pinnatifida  (Ehrh)Bean. (S x thuringica) (aria x aucuparia). K11
pluripinnata  (Schneid.)Koehne. China. O3
randaiensis  (Hayata)Koidz. Burma, China. H&S 1957, not found P10
reducta Diels. Burma, China. dead H8, Q5 stock
sambucifolia  (Cham & Schlect.)Roem. Japan. H&S 1957, not found O2
sargentiana Koehne. China. H&S 1957, not found F9
scalaris Koehne. China. H&S 1957, not found O2 P3
subcuneata Britain. H&S 1957, not found Q5
x thuringiaca  (Ilse)Fritsch. Germany. H&S 1949&57, Kl l(pinnatifida), N3, not found P10 S3 S4 S5
vilmorinii Schneid. China. H&S 1948&57, not found L6 P3
wilsoniana Schneid. China. H&S 1948&57, not found B11 P4

Spartium: Fabaceae - Papilionaceae (1+0=1)
  junceum  L. Mediterranean. F9

Spiraea: Rosaceae (9+1=10)
  C6 C7 E9 I10 J9 L6 O7 O8 Q4
  sp.  Welch 1988, L5 (NM)
  x arguta  Zab. (multiflora x thunbergii). Hort. H&S 1934, not found H11
  x bumalda  Bursn. (albiflora x japonica) Hort.
    'Anthony Waterer'  19
  canariensis  (Name not confirmed). Q4
  chartacea  (Name not confirmed). L5+GC, Pukeiti 1988 (NM);
  x gieseleriana  Zab. (cana x hypericifolia) L5, R6 (NM).
  nipponica  Max. Japan. L6
  prunifolia  S&Z. BRIDALWREATH SPIRAEA. Japan, China not found O7
  thunbergii  Sieb. China, Japan. not found D9 I10 O7
  veilchii  Hems. China. D&D 1935?, Q4

Spondias: Anacardiaceae (1+0=1)
  axillaris  Roxb. HOG PLUM. USA. Jellyman(Nepal)1988, M3+AJ

Stachyurus: Hamamelidaceae (3+1=4)
    'Magpie'  VARIEGATED SPIKETAIL. H&S 1937, G4
  praecox  S&Z. EARLY SPIKETAIL. Japan. K6, not found O7

Staphylea: Staphyleaceae (5+1=6)
  bumalda  DC. Japan. Massey 19487, I2+GC
  colchica  Stev. Caucasus. H6+CN
Appendix 1: Catalogue of the current collection

x elegans  Zab. (cochleica x pinnata) H&S 1955, H4 J2+CN

'Hessel'  R3

holocarpa  Hemsl. CHINESE BLADDER NUT. China. H&S 1938, I4, not found N5

var. rosea  Rehd. & Wils. PINK FLOWERED BLADDER NUT. I8, not found H6

Stauntonia: Lardizabalaceae (1+0=1)

hexaphylla  Decne. STAUNTON VINE. Japan, Korea. D&D 1945, not found H6; Nichols 1989, G7(NM)

Stephanandra: Rosaceae (1+0=1)

incisa  (Thunb.)Zab. Japan, Korea. H5+GC

Stranvaesia: Rosaceae (4+0=4)

davidiana  Decne. China. C9+BB E5

var. salicifolia  (Hutchins)Rehd. China. D&D 1934, not found H5 I7


nittakayamensis  (Name not confirmed). FS(seed Taiwan) K9 (NM)

Strobilanthes: Acanthaceae (1+0=1)

anisophyllus  T Anderson. GOLDFUSSIA India. H11+GC

Stephananthus: Apocynaceae (1+0=1)

speciosa  (Ward & Harv.)Reber. S Africa. S5+GC

Stuartia: Theaceae (7+0=7)

G5

malacodendron  L. USA. M4+GC Freeman 1988

monadelpha  S&Z. Japan. E10+BB K6+BB, not found I7

pseudocamellia  Max. Japan. I7 M5, not located G5

var. koreana  (Nakai)Sealy. Korea. H&S 1938, G5+BB, not found Q5

pteropetiolata  (Hartia sinensis) Yunnan. H&S 1949, not found K11

serrata  Max. Japan. H&S 1956, Q4


Styrax: Styracaceae (4+0=4)

hemsleyana  Diels. China. H&S 1957, Q5; Appleton ex EWH 1988, J10+GC (NM);

japonica  S&Z. Japan. H7 H9 I6 I7 L5

var. fargesii  H&S 1957, P4


Sycopsis: Hamamelidaceae (1+0=1)


Symplocos: Symplocaceae (2+0=2)

paniculata  (Thunb)Miq. (crataegoides) SAPPHIRE BERRY. Japan, China. H&S 1949&54, K11, not found H11


Syringa: Oleaceae (9+36=45)

x hyacinthiflora  (Lemoine)Rehd. (oblasta x vulgaris) Hort. dead. R10

'Buffon'  (pink) R10

'Ester Staley'  not found P10 (single pink)

'Lamartine'  (lilac pink) not found G3

josikaea  type HUNGARIAN LILAC. Hungary. R10

microphylla  Diels. China. H11 I9, not found L3

x nanceiana  McKelvy. (henryi x sieversii) Hort(France)

'Floreal'  H&S 1956, not found P10, (whitish, late)

pinnatifolia  Hemsl. China. not found F9
Appendix 1: Catalogue of the current collection

*Appendix 1*

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**reticulata** (Bl) Hara. **JAPANESE TREE LILAC.** Japan. R6 S5

**villoso x josikaea** P9

**villoso** Vahl. **LATE LILAC.** China. I7, not found N7

**vulgaris** L. **LILAC.** Europe. C7 C10 E6 I5 O9 P9 P10 R10two

- "Belle de Nancy" H&S 1965, not found S9
- "Candeour" (Name not confirmed). not found S9
- "Edith Cavell" R10 (large white)
- "Favourite" (Name not confirmed). not found H8
- "Florence" not found H8
- "Glory of Horstenstein" not found S9
- "Henry Rounas" (Name not confirmed). P9
- "Hugo Koster" not found S9 (lilac)
- "Lavaliensis" not found S9
- "Massena" H&S 1965, not found S9 (large deep purpl)
- "Maud Notcutt" dead R10
- "Miranda" H&S 1956, not found P10, (violet, late)
- "Missimo" (Name not confirmed). H&S 1965, not found S9
- "Mme Francisque Morel" H&S 1965, not found S9
- "Mme Lemoine" R10 (double white)
- "Night" (Name not confirmed). not found D10
- "Pale Hyacinth" (Name not confirmed). not found P10
- "Peggy" (Name not confirmed). not found D9
- "Pink Spray" (Name not confirmed). not found S9
- "President Roosevelt" (Name not confirmed). not found D10
- "Princess Clementine" not found S9 (double yellow/white)
- "Priscilla" (Name not confirmed). not found D10
- "Romeo" not found D10, (red purple, late)
- "Royalty" not found D10, (blue lilac, late)
- "Sarah Sanos" (Name not confirmed). not found D10
- "Sensation" H&S 19567, not found S9 (red, silver edge)
- "Souvenir de Alice Harding" R10
- "Victor Lemoine" not found D9 (lilac double)
- "Violetta" not found D10 (dark violet double)
- "Volcan" not found S9 (deep red purple)
- "Waldock Rousseau" (Name not confirmed). not found H8 (soft lilac, white centre)

*Yunnanensis* Franch. **YUNNAN LILAC.** China. Slocock 1937&38, D9+GC K7+GC; Toptrees, LA (NM)

- "Rosea" H&S 195&647, P9, not found R9

**Syzygium: Myrtaceae (1+0=1)**

**australis** BRUSH CHERRY. Australia. G11+MM

**Taiwania: Taxodiaceae (1+0=1)**

**cryptomerioides** Hayata. **TAIWAN.** H&S 1947&55, C11 D11 13,

**Talauma: Magnoliaceae (1+0=1)**

**hodgsonii** Hook & Thoms. **HIMALAYA.** H&S 1962, N4

**Tamarix: Tamaricaceae (1+0=1)**

**juniperina** Bge. (chinensis) **China.** D9
Appendix 1: Catalogue of the current collection

Taxodium: Taxodiaceae (1+0=1)

distichum (L.) Rich. SWAMP CYPRESS. USA. B6 G3 G4 H3 H4 I2 I3 J2 O2
N6 N7 P5 P8 S7 Q3 Q4 Q5 Q7

Taxus: Taxaceae (3+6=9)

baccata L. COMMON YEw. Europe, Asia minor. C6 D6 D7 E6 L7 O6, not found K7
‘Erecta’ FULLHAM YEw. D7 M7, not found K7
‘Erecta Aurea’ GOLDEN YEw M7
‘Fastigiata’ IRISH YEw D7, not found N7
‘Fastigiata Aurea’ J9
‘Fastigiata Hibenaica Aurea’ L6

chinesis Rehd. CHINESE YEw. China, Taiwan. H&S 1955, P4
cuspidata S&Z. JAPANESE YEw. Japan. J7 L7
x media Rehd. (baccata x cuspidata). Hort.
‘Hicksii’ H&S 1949, 18

Tecomanthe: Bignoniaceae (1+0=1)
speciosa W Oliv. New Zealand. Overbye 1985, N4

Ternstroemia: Theaceae (1+0=1)
gymnanthera (Wight & Arn) T Sprague. (japonica) India, Japan. H&S 1947, not found;
Denes 1986, L5+GC

Tetracentron: Tetracentraceae (1+0=1)
sinense Oliv. China. Cave(Spicer, Jury)1988, N4+GC

Teucrium: Lamiaceae (1+0=1)
fruticans L. GERMANDER. Europe, Africa. P10

Thea: Theaceae

sinensis see Camellia sinensis H11; Cave 1988, L5(NM)

Thuja: Cupressaceae (3+9=12)

upright F4 R7
koraiensis Nakai. KOREAN ARBORVITAE. Korea. H&S 1949, E9+GC
occidentalis L. AMERICAN ARBORVITAE. E N America.
‘Ellwangeriana’ check M7
‘Erecta’ M7
‘Erecta Compacta Aurea’ ? L6
‘Little Gem’ M6
‘Pyramidalis Compacta’ O8 check
‘Rheingold’ not found M7 O7
orientalis L. CHINESE ARBORVITAE. China, Japan. D10,(labelled Biota orientalis)
‘Compacta Aurea’ not found L7,
plicata J Donn ex D Don. WESTERN RED CEDAR. N America. D6 17, not found J5
‘Aurea’ not found I8
‘Zebrina’ H&S 1949, G4 N8 O10 Q7, not found I8

Thujopsis: Cupressaceae (1+2=3)
dolabrata (L f.) Sieb & Zucc. HIBA ARBORVITAE. Japan. I7, not found N7
‘Nana’ M7
‘Variegata’ I7

Thunbergia: Acanthaceae (1+0=1)

sp H11+GC
Appendix 1: Catalogue of the current collection

Tibouchina: Melastomataceae (1+1=2)

semidecandra S.America. H11

urvilleana (DC)Cogn. Brazil.

‘Edwardsii’ H11

Tilia: Tiliaceae (15+1=16)

americana L. BASSWOOD. N America. H&S 1949&57, D10+GC McKeans (NM); not found C12 12;
cordata Mill. LITTLELEAF LIME. Europe. C6+MM G10+MM
xeuchlora K Koch. CRIMEAN LIME. Crimea. H&S, 13 J2
xeuropaea L. (cordata x platyphyllos). COMMON LIME. Hort. 111 J2, not found C5
henryana Szysz. China. J2; Gallen(Toptrees, Hillier)1988, K10+GC (NM)


mortkei Spath. (americana x petiolaris). H&S 1951, D12+IDS

mongolica Max. China. D11+MM (WL mortkei)
neglecta Spach. N America. D11 J2

paucicostata Max. China. H&S 1957, J2

Petiolaris’ DC. (americana ‘Pendula’) Europe. WEEPING SILVER LIME. D&D 1935, B12+IDS

platyphyllos Scop. BROADLEAF LIME. Europe. D&D 1935, C6+MM

‘Laciniata’ (‘Asplenifolia’) CUT LEAF LIME. H&S 1951, D11+MM
tomentosa Moench. SILVER LIME. Europe. D&D1935, J2 L3 B12

Toona: Meliaceae (1+0=1)
sinensis (Endl.)M.Roemer. China. CHINESE CEDAR. L6+MM

Torreya: Taxaceae (2+0=2)
californica Tort. CALIFORNIA NUTMEG. USA. H&S 1948, G3
nucifera S&Z. Japan. H&S 1949, J9

Trachelospermum: Apocynaceae (2+0=2)

asiaticum (S&Z)Nakai. (divaricatum) Korea, Japan. H&S 1949, 18

Trachycarpus: Aracaceae (1+0=1)

fortunei Wendll. CHUSAN PALM. China, Japan. H9, G9

Tricuspidaria: Tiliaceae

see Crinodendron

Tripterygium: Celastraceae (2+0=2)

wilfordii Hook f. (forrestii Loes.) China, Burma, Formosa. H&S 1949, P7+GC

Tristania: Myrtaceae (1+0=1)
laurina (Sm.)R Br. WATER GUM. Australia. N5 S10; Walker 1987 K8

Trochodendron: Trochodendraceae (1+0=1)
aralioides S&Z. Korea. Gallen 1988, L5+GC (NM);

Tsuga: Pinaceae (4+1=5)
canadensis L. EASTERN HEMLOCK. N America. H&S 1948, B12+E

‘Pendula’ H10

chinensis (Franch)Pritzel. CHINESE HEMLOCK. China. Gordon 1988, S8+GC (NM)
dumosa (D Don)Eichler. HIMLAYAN HEMLOCK. Himalaya. Gordon 1988, Q3+GC

heterophylla (Raf)Sarg. WESTERN HEMLOCK. W N America. H&S 1948, 06, P3+GC, not found B12
Appendix 1: Catalogue of the current collection

Ugni: Myrtaceae (1+0=1)
  molinae Turz. (Myrtus ugni). CHILEAN GUAVA. Chile, Bolivia. Heritage 1986, H11+GC

Umbus: Ubnaceae (12+6=18)
  B3 B6 C4 C5 C6 D4 D5 D6 G9 O4
  americana L. WHITE ELM. E N America. Horton 1919 D10+GC; not found B3 J13
  carpinifolia Gleditsch. SMOOTH LEAF ELM. Europe, D6 E4 E9 F6
    'Variegata' C12+MM D5 E10+MM I2+MM
  dodens (Name not confirmed). P2
  elegantissima Horwood. (glabra x plolei) Hort.
    'Jacqueline Hillier' H11+GC
  glabra Huds. WYCH ELM. Europe. K6, not found H5 F4
    'Camperdownii' CAMPERDOWN ELM not found D5.
    'Pendula' WEEPING WYCH ELM E9 C6
  x hollandica Mill. (carpinifolia x glabra). Hort. DUTCH ELM not found D4
  loebens (Name not confirmed). P2
  parviflora Jacq. CHINESE ELM. China. S5
  planty (Name not confirmed). P2
  procer a Salisb. ENGLISH ELM. Europe. not found D7
    'Argenteovariegata' VARIEGATED ENGLISH ELM. not found H6
    'Louis van Houtte' GOLDEN ELM not found H7
    'Purpurea' (NCC) PURPLE LEAF ELM E5+GC, not found B4 B6 C4 G10
  rubra Meuhl. SLIPPERY ELM. USA. C10+GC; not found B5 H13
    'Sarniensis' (Loud)Melv. (U/minor 'Sarniensis') WHEATLEY ELM. France. H5

Umbellularia: Lauraceae (1+0=1)
  californica (Hook & Arn.)Nutt. CALIFORNIA LAUREL. USA. H&S 1947, I10 J4 K2

Vaccinium: Ericaceae (1+0=1)
  corymbosum L. SWAMP BLUEBERRY. USA. L6

Viburnum: Caprifoliaceae (19+3=22)
  I7 18 110 17 M5
    x bodnantense Aberconway. (farrelli x grandiflorum) H&S 1949, not found I8
    x burkwoodii Burk. (carlesii x utile) D5 K6 17 110 N4
    carlesii Hemsl. Korea. D&D 1946, I7 18 Q4,
    dentatum L. (pubescens.Pursh). ARROWWOOD. USA. Hamilton 1988, J7+GC (NM);
    ellipticum Hook. USA. I7
    erubescens var. gracilipes Rehd. China. I8
    foetens DCne. E Asia. H&S 1949, not found I8
    fragrans Bunge. (farrelli. Stearn) China. Q9 O9
    japonicum Miq. Japan, Korea. E6+MM
    lobophyllum Graebn. China. not found L6
    macrocephalum Fort. CHINESE SNOWBALL. China. Slocock 1938, G5 110
    opulus L. GUELDER ROSE. Europe. C9, not found I8
    plicatum Thunb. JAPANESE SNOWBALL. E Asia. D&D 1934, not found C7 I8
    'Lanarth' H&S 1950, not found I8
    'Mariesii' not found I8
    f. tomentosum (Thunb)Rehd. DOUBLE FILE VIBURNUM. F5+MM H5+MM
  propinquum Hemsl. E Asia. 1938, E10+BB
Appendix 1: Catalogue of the current collection

prunifolium  L. SHEEPBERRY. USA. J7+GC Hamilton 1988 (NM);

rhytidophyllum  Hemsl. China. E5+MM J10+MM L6+MM

‘Roseum’  H&S 1948, not found I8

sieboldii  Miq. Japan. 18

Virgilla: Fabaceae - Papilionaceae (1+0=1)
capensis  L.  S Africa. not found P9 P10

Vitex: Verbenaceae (1+0=1)
agnus-castus  L.  CHASTE TREE. Europe, Asia minor. H&S 1947, E10+MM I7+GC, not found G10

Vitis: Vitaceae (5+1=6)

agrestis  Lam.  S Africa. not found P9

amurensis  Rupr.  AMUR GRAPE. Korea, Japan, China. H&S 1947, H8 H11

betulifolia  Diels & Gilg. China. 19

coignetiae  Pull. Japan, Korea. F6+GC

‘Pulchra’  Japan, China. H&S 1946. not found H11

riparia  Michx.  RIVER GRAPE. N America. Nichols 1988, I2+GC

vinifera  L.  WINE GRAPE. Caucasus.

‘Alicanthe Bouchet’ 19

Wattakaka: Asclepiadaceae (1+0=1)
sinensis  Stapf. China. H&S 1948, I8+GC

Weigelia: Caprifoliaceae (2+4=6)

florida  (Bge)A.DC.  China, Korea. H&S 1955, H3

‘Variegata’  H3, not found I8

‘Grace Warden’  H&S 19467, not found H8


‘Nivea’  not found H3

‘Newport Red’ Q4

‘Styriaca’  H&S 1955, not found G3

Widdringtonia: Cupressaceae (2+0=2)

juniperoides  (L.)Endl. (Callitris arborea) CLANWILLIAM CEDAR. S Africa. not found H7

whytei  Rendle. (W. cupressoides) M’LANJI CEDAR. S Africa. D9+GC

Wisteria: Fabaceae - Papilionaceae (4+2=6)

floribunda  (Willd)DC. Japan. E9+GC K6+GC

‘Alba’  J6+GC

f. macrobotrys  E9+GC

‘Rosea’  F8+GC

macrostachys  Nutt. USA. R5+GC

sinensis  (Siims)Sweet. CHINESE WISTERIA. China. M4

Zanthoxylum: Rutaceae (4+0=4)

E12

americanum  Mill.  TOOTHACHE TREE. EN America. H&S 1948, not found E11

oxyphyllum  Edgew. Nepal. Gallen(Hudson)1988, M3+GC;

planispinum  E.Asia. H&S 1948, not found E11

simulans  Hance. (bungel) China. H&S 1948&50, M7 S5, not found E11

Zelkova: Ulmaceae (3+0=3)

cretica  Spach. Crete. H&S 1958, R10; Cave(EWH)1988, H7+GC (NM);

davidii  Bean. (Hemiptelea davidii).  China, Korea. H&S 1949, not found H2

serrata  (Thunb.)Mak. (acuminata) KEYAKI. Japan. H&S 1955, D&D 1940, L4 N2,
References used to check plant names

Appendix 1: Catalogue of the current collection


Appendix 2

Grid map of the arboretum. Maps of Pear Park, Orchard Hill and Basinhead

*Acer laetum 'Aureum', Pear Park, April 1994.*
Plan showing arboretum only. Adapted from aerial photographs and Clapperton (1987).
Upper Parc Park; showing the College, The Avenues, and Linden Green in the configuration at 1968, before the workshops.
Lower Deer Path, showing Collage Course, lower Locker
Green, Nurserywood, and the Jumbos in the configuration
at 1968, before the workshops.
Orchard Hill (planted allowing the configuration drafted in 1981, before the workshops)
Orchard Hill (far end) showing the configuration that existed in 1989, before the workshops.

EASTWOODHILL ARBORETUM

Appendix 2: Maps
Appendix 2: Maps

EASTWOODHILL ARBORETUM

Basinhead, showing the configuration that existed in 1989, before the workshop.
Catalogue of the previous collection

EASTWOODHILL ARBORETUM
NGATAPA, GISBORNE

Inventory Part Three: The 'previous' collection

PLANT ACQUISITIONS ADDITIONAL TO THE CURRENT COLLECTION

Marion MacKay
Department of Plant Science
Massey University

First published 1989
Revised but not re-published 1993

Eastwoodhill Publication No 3.
Appendix 3: Catalogue of the previous collection

This catalogue has been compiled following a comprehensive inventory of all plants at the Arboretum. Listed herein are the plants that were obtained for Eastwoodhill by W.D. Cook, but which are apparently no longer in the collection. This catalogue is a companion to the 'Catalogue of Trees, Shrubs and Climbers' (Eastwoodhill Publication No. 1), which describes the current collection.

Acknowledgements

The preparation of this catalogue was completed with the support of the Massey University Agricultural Research Foundation, The C. Alma Baker Trust, and The New Zealand Lottery Board.

The assistance of the Eastwoodhill Trust Board and associated persons is gratefully acknowledged.
Appendix 3: Catalogue of the previous collection

Introduction

This catalogue, and its companion volume, are the result of a study initiated in 1986 on the plant material at the Eastwoodhill Arboretum. The project represents part of the inventory stage of a doctorate thesis on the botanical resource at the Arboretum, and in New Zealand, which has been initiated at the Department of Horticultural Science at Massey University.

Eastwoodhill is 3.5km from Gisborne in a relatively isolated rural area. Information on the Arboretum and the current collection can be found in the companion volume ‘Catalogue of Trees, Shrubs and Climbers.’ The collection was the work of the late W.D. Cook, horticulturist, of Gisborne. During his lifetime he imported some 5000 different species and cultivars of plants for his Arboretum. About 2500 exist today, a total of about 8000 trees in all. This document attempts to compile a record of those plants which were purchased but which no longer exist in the collection today.

The information for this document was gathered from the notes made by Cook in his reference books. The main reference he used for this purpose was W.J. Bean’s ‘Trees and Shrubs Hardy in the British Isles’ of which he had two sets, a 5th edition and a 7th edition. In these he noted the date of purchase and source of incoming plants. Occasional notes also appear in other books, but on the whole these corroborate the former.

The coding for the books in this catalogue is used to distinguish between the two sets of the text, ‘EWH’ referring to the set held at the Arboretum, and ‘lib’ referring to the set held in the library collection. The codes I, II and S are used to indicate the volume number, S indicates the supplement of the 5th edition.

Many of the entries in this catalogue are taken from hand written notes in the aforementioned books, and the legibility of some of the original entries is difficult. Therefore it is likely that there are errors in some of the dates, particularly it was hard to distinguish 3 and 5 in many cases.

In some cases plants are recorded in this list that also occur in the current catalogue. In these cases additional information has been found, for example record of another source or date of importation. These entries are indicated by an ‘+’.

The scientific names are those used in the editions of Bean in question. As much as possible these are cross referenced to names in current usage.

I wish to thank the Trust Board for their cooperation for the duration of this project.

Sources of plant material

Bod presumably Bodnant, Great Britain.
D, D&D Duncan and Davies Nursery, New Plymouth, New Zealand.
Goodwin Jack Goodwin, then Director of Parks, New Plymouth, New Zealand.
G Goudie’s Nursery, New Zealand.
Horton Hortons Nursery, New Zealand.
H&S, or Hill Hillier and Sons, Winchester, England.
HZ unknown.
IH unknown.
J unknown.
M, or Massey New Zealand Rhododendron Association Nursery, then at Massey University, Palmerston North, New Zealand.
McK probably Ian McKean, Rangiwahea, New Zealand.
P possibly F.C. Puddle, of Bodnant, Great Britain.
Russell either Russell Cook of Hawkes Bay, or Russell Mathews of New Plymouth, New Zealand.
S unknown.
Slocock Slocock Nursery, England.
Stevens Stevens Nursery, New Zealand.
Walker probably Walkers Nursery, Mayfair, Hastings, New Zealand.
Webb Webbs Nursery, New Zealand.
Wilson Wilsons Nursery, Christchurch, New Zealand.

Method of listing in this catalogue


For example;

\[ Abelia \text{ floribunda } \text{ Mexico. S1938,39,D&D1939,Sl941; (Bean I lib) } \]
\[ + \text{ Abelia } \text{ grabneriana } \text{ China. D1937, (Bean S lib) } \]
\[ + \text{ Abelia } \text{ x grandiflora } \text{ Hort. H&S1948 (Bean I lib) } \]

‘+’ Indicates a plant for which there is already a listing in the current catalogue. The entry in this document therefore represents either (i) further purchases by Cook, or, (ii) a purchase in the Cook era which no longer exists, the current catalogue entry representing another purchase. ‘Name not confirmed’ or ‘NNC’ after a plant name indicates a name that may not be valid, as that name has not yet been found in the literature.
Genera of plants in this document that are not in the current catalogue

21 additional families, 211 additional genera

**GYMNOSPERMAE:** No additional families, 5 additional genera.

**Coniferales**
- Cupressaceae: Callitris, Fitzroya, Fokenia
- Podocarpaceae: Saxegotheca
- Taxodiaceae: Athrotaxus

**ANGIOSPERMAE:** 21 additional families, 206 additional genera.

**Monocotyledonae**
- Agavaceae: Nolina
- Liliaceae: Dianella, Ruscus
- Poaceae: Bambusa

**Dicotyledonae**
- Aceraceae: Dipteronia
- Acanthaceae: Jacobinia, Mackaya, Ruellia
- Actinidiaceae: Actinidia
- Anacardiaceae: Harpephyllum, Smodingium
- Apiaceae: Bupleurum
- Apocynaceae: Carissa (Arduina), Mandevilla, Plumeria, Vinca,
- Araliaceae: Acanthopanax, Brassia, X Fatshedera, Panax
- Asclepiadaceae: Asclepias, Stephanotis
- Asteraceae: Artemesia, Cassinia, Chiliorichum, Eriocephalus, Montanoa, Mutisia, Ozothamnus
- Bombaceae: Fremontia
- Bruniaceae: Berzelia
- Byttneriaceae: Dombeya, Reevesia,
- Caesalpinaceae: Bauhinia, Caesalpinia, Parkinsonia, Poinciana, Schotia,
- Campanulaceae: Canarina
- Caprifoliaceae: Leycesteria, Symphoricarpos,
- Chenopodiaceae: Atriplex
- Cistaceae: Halimium, X Halimiocistus
- Combretaceae: Combretum, Quisqualis
- Convolvulaceae: Ipomaea, Quamoclit
- Coronaceae: Corokia
- Cunoniaceae: Weinnmania
- Cyathaceae: Hemitelina
Appendix 3: Catalogue of the previous collection

Diapensiaceae: Shortia
Ebenaceae: Royena
Ericaceae: Andromeda, Azalea, Calluna, Cassandra, Daboecia, Leiophyllum, Menziesia, Pentapterygium, Pernettya, Phylloclade, X Phyllothamnus, Rhodothamnus, Zenobia
Euphorbiaceae: Baloghia, Homalanthus
Eupteleaceae: Euptelea
Flacourtiaceae: Scolopia, Xylosma
Gesneriaceae: Mitraria, Rhabdothamnus, Sinowilsonia
Icacinaceae: Villaresia
Lamiaceae: Perovskia, Spacele
Lardizabalaceae: Sinofranchetia
Lauraceae: Beilschmiedia, Lindera
Malpighiaceae: Galphimia
Malvaceae: Plagianthus
Mimosaceae: Prosopis
Monimiaceae: Laurelia
Moraceae: Maclura
Myricaceae: Comptonia
Myrsinaceae: Ardisia
Myrtaceae: Agonis, Backhousia, Beaufortia, Calytrix, Eugenia, Hypocalymma, Lhottska, Psidium, Syncarpia, Thryptomene
Nyctaginaceae: Bougainvillea
Oleaceae: Phillyrea
Papavaceae: Dendromecon
Papilionaceae: Adenocarpus, Anagryis, Anthyllis, Barkly, Brachysema, Caragana, Carmichelia, Chordospartium, Chorizema, Colutea, Coronilla, Crotolaria, Desmodium, Halimodendron, Hovea, Lathyrus, Maackia, Notospartium, Podalyria, Psonlea, Pultenaea, Swainsonia, Ulex, Viminaria
Philesiaceae: Lapergeria, X Philageria, Philesia,
Pittosporaceae: Billardiera
Plumbaginaceae: Plumbago
Polemoniaceae: Cantua
Polygalaceae: Polygala
Polygonaceae: Polygonum
Proteaceae: Braeburn, Dryandra, Gevuina, Hakea, Lambertia, Leucadendron, Leucospermum, Persoonia, Petrophila, Stenocarpus, Telopea,
Rhamnaceae: Colletia, Zizyphus
Rosaceae: Docynia, Heteromeles, Holodiscus, Neviusia, Peraphyllium, Rubus, X Sorbaron
Rubiacaeae: Alberta, Bouvardia, Gardenia, Leptodermis, Luculia, Manettia, Mussaenda, Posoqueria, Rondeletia
Rutaceae: Acradenia, Adenandra, Boronia, Casimiroa, Coleonema, Correa, Diosma, Eriostemon, Murraya, Orix, Phebalium, Skimmia
Sapindaceae: Harpullia, Xanthoceorus
Saxifragaceae: Anopterus, Bauera, Fendlera, Pileostegia, Ungnadia
Appendix 3: Catalogue of the previous collection

<table>
<thead>
<tr>
<th>Family</th>
<th>Species</th>
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<td>Brunfelsia, Datura, Fabiana, Iochroma</td>
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<td>Caryopteris, Citharexylem, Holmskioldia, Lippia, Verbena,</td>
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<td>Winteraceae</td>
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<tr>
<td>Not assigned</td>
<td>Corysema, Panay</td>
</tr>
</tbody>
</table>
Plants noted by W D Cook as having been in the collection.

The numbers in brackets represent Species + Cultivars. (Only species and cultivars additional to the current collection, i.e. those marked '+' are not counted as that species or cultivar has already been counted in the current collection under another acquisition)

**Abelia: Caprifoliaceae (6+0)**

- *chinensis* (A. *rupestris* Lindl.) China. Webster (Bean I lib)
- *floribunda* Mexico. S1938,39,D&D1939,S1941; (Bean I lib)
- *graebneriana* China. D1937, (Bean S lib)
- *x grandiflora* (rupestris Hort.) Hort. H&S 1948 (Bean I lib)
- *longituba* China. Hill 1947, (Bean S lib)
- *triflora* Himalaya. Goodwin 1946, (Bean I lib)
- *umbellata* China. 1960 (Bean I EWH). Hillier, (RHS1). planted GD,
- *uniflora* China. Goodwin 1946, (Bean I lib)

**Abeliophyllum: Oleaceae**

- *distichum* Korea. H&S 1947, (Bean S lib)

**Abies: Pinaceae (9+4)**

- + *amabilis* N.America. S1944, H&S 1948; (Bean I lib)
- *balsamea* 'Hudsoniana'
- + *concolor* USA, Mexico. G1944
- + *Viola* N America, Mexico. H&S 1948 (Bean I lib)
- + *delavayi* China. H&S 1950, S1941 died, (Bean I lib)
- + *delavayi var. delavayi* (A. *fabri*) China. H1948 dead, (Bean S lib)
- + *delavayi var. georgei* (A. *georgei*) China. H1948, (Bean S lib)
- *faxoniana* (delavayi var. faxoniana) China. H&S 1948 1957 9ft, (Bean S lib)
- *forrestii* (delavayi var. *forrestii*) China. H&S 1948 1957 15ft, (Bean S lib)
- *gambei* see *pindrow var. brevifolia*
- *georgei* (related *faxoniana*) see *delavayi var. georgei*
- *humilis* (Name not confirmed). H1950, (Bean S lib)
- *koreana* Korea. H&S 1948 1957 7ft, (Bean S lib)
- *lasiocarpa* N.America
- + *Argentea Glauca* N America. H&S 1948, (Bean I lib)
- *lowiana* (concolor *Lowiana*) N America, Mexico. H&S 1948, (Bean I lib)
- + *magnifica* California. G1944, H&S 1948, Forestry dept 1962,
- *moreheimei* see *Picea pungens* 'Moreheimei'
- + *nebrodensis* (alba var. nebrodensis) Italy. H&S 1950, (Bean II lib)
- *nobilis* see procera
- + *nordmanniana* Caucasus, Asia minor. 1934-46
- *pindrow* Himalaya. H&S 1948, (Bean I lib)
- + *pindrow var. brevifolia* (gambei) Himalaya. H&S 1948, (Bean S lib)
- *pinsapo* Spain. Priestleys camp 1934, rest 1937-45
- *procera* 'Glaucu' N America, H&S 1948, W1937, (Bean I lib)
- *pungens* 'Moreheimei' see *Picea pungens* 'Moreheimei' (1957 12ft), (Bean I lib)
Appendix 3: Catalogue of the previous collection

+ *religiosa* Forestry dept 1962. (RHS1).
+ *spectabilis* var. *brevifolia* Himalaya. 1957 ft. (Bean S lib)

*sutchuenensis* (fargesii var. *sutchuenensis*) China. G1944, H&S 1948, 1957 ft. (Bean S lib)

*sutchuenensis* alpine form China. (Bean S lib)

+ *velchtii* Japan. S1938

*x vilminorii* (ponsapo x cephalonica) Spain. H&S 1948, 50 dead; (Bean I lib)

*virgata* (Name not confirmed, a form of *A. alba*?). H&S 1950, (Bean I lib)

*Abutilon: Malvaceae* (2+10)

*Abutilon: Malvaceae* (2+10)

**giant flowered** (Name not confirmed) D&D1945, (Bean I lib)

*insigne* Colombia, Venezuela.

‘Bright Red’ (Name not confirmed). D&D1947 (Bean I lib)

‘Buff Queen’ (Name not confirmed). Wilson 1946 (Bean I lib)

‘Cardinal’ (Name not confirmed). D&D1947 (Bean I lib)

‘Deep Pink’ (Name not confirmed). D&D1947 (Bean I lib)

‘Deep Rose’ (Name not confirmed). D&D 1947 (Bean I lib)

‘Mahogany’ (Name not confirmed). Wilson 1946, 47 (Bean I lib)

‘Mahogany Red’ (Name not confirmed). D&D1947 (Bean I lib)

Orange semi double (Name not confirmed). D&D 1948 (Bean I lib)

‘Purple Emporer’ (Name not confirmed). Wilson 1947 (Bean I lib)

‘Rose Queen’ (Name not confirmed). Wilson 1946, 47 (Bean I lib)

*megapotamicum* (vexillarium) Brazil. 1948 (Bean I lib)

+ *vitifolium* Chile. D&D1937, 40; (Bean I lib)

**Acacia: Fabaceae - Mimosaceae** (14+1)

*accola* Australia. (PPL)

*buxifolia* Australia. (PPL)

+ *decurrens* Australia. (PPL)

*discolor* (terminalis) Australia. (PPL)

*elongata* Australia. (Cook 1965)

*jonesii* Australia. (PPL)

*kettlewelliae* Australia. (PPL)

*linifolia* (linearis) Australia. (PPL)

*myrtifolia* Australia. (PPL)

*podalyriifolia* Australia. (PPL)

*pruinosa* Australia. (Cook 1965)

*pulchella* Australia. (PPL)

*rupicola* Australia. (PPL)

*stricta* Australia. (PPL)

*suaveolens* Australia. (PPL)

*verticillata* ‘Rewa’ PRICKLY MOSES. Australia. not found H8

**Acanthopanax: Araliaceae** (1+0)

*trifoliatus* China, Japan. Massey 1948, (Bean I lib)

**Acer: Aceraceae** (26+24)

+ *buergarianum* (trifidum) China. Stevens 1941, Japan 1920, (Stevens form noted as being useless). (Bean I lib)

*californicum* see *negundo* var. *californicum*

+ *campbellii* Himalaya. H&S1946, 48. (Bean S lib)
Appendix 3: Catalogue of the previous collection

+ **campestre** Europe, Asia minor. (PPL)
  + ‘Pulverulentum’ (Cook 1965)
+ **cappadocicum (laetum, colchicum)** Caucasus, Asia minor, Himalaya. D1939, (Bean I lib)
+ **‘Aureum’** Slocock 1938, (Bean I lib)
+ **caudatum** Himalaya, Upper Burma. Hill 1964, (RHS1).
+ **circinatum** N. America. H&S1937,47; (Bean I lib)
+ **cissifolium** Japan. (Bean EWH), planted GD;
  + *colchicum ‘Aureum’* see *A. cappadocicum ‘Aureum’*
+ **crataegifolium** HAWTHORN MAPLE. not found K11. Japan. H&S1948, (Bean I lib)
+ **creticum. Auct. (sempervirens. L., orientale. Auct.)** Mediterranean. H&S1936,48; (Bean I lib)
+ **davidii** China. D&D1947, Cook 1934; (Bean I lib)
  + ‘Horizontalis’ (‘George Forrest’)
    H&S1937,46,48, (B 1,lib) noted as planted Circus, GD (Bean, EWH)
+ **diabolicum** Japan. H&S1937, (Bean I lib)
+ **diabolicum f.purpureascens** Japan. H&S1946, (Bean I lib)
+ **distyllum** Japan. (Bean, EWH), noted as planted in Circus
+ **divergens (quinquelobum). K Koch not Glib.)** Asiatic Turkey. H&S1964, (Bean, EWH)
+ **erianthum** China. H&S1946,50; (Bean S lib)
+ **flabellatum** China. H&S1964, (Bean, EWH)
+ **forrestii** China. H&S 1937,47; (Bean S lib)
+ **ginnala (tataricum var. ginnala)** China, Japan. Horton 1919, (Bean I lib)
  + *grandidentatum* see *A. saccharum ssp. grandidentatum*
  + *griseum (nikoense var. ginnala)* China, Japan. Horton 1948, (Bean I lib)
+ **heldreichii** Greece, Bulgaria. H&S1947, (Bean I lib)
+ **henryi** China. H&S1937 died, Hill 1938; (Bean I lib)
+ **hersii sp1183** planted GD, (Bean, EWH)
+ **hookeri** Himalaya. S1939, D1945; (Bean I lib)
+ **hookerianum hillier** (Name not confirmed) D1946, (Bean I lib)
+ **japonicum** Japan. H1937, (Bean I lib)
  + ‘Aureum’ Japan1918, (Bean I lib). Hill 1964, (RHS1).  
    ‘Laciniatum’ Hill1964, (RHS1).
+ **laevigatum** China. H&S1948, (Bean I lib), planted OH GD, (Bean S lib)
+ **macrophyllum** N. America. D1937,38, (Bean, EWH)
+ **mandshuricum** China, Korea. H&S1947, (Bean, EWH), (Bean I lib)
+ **maximowiczii** China. H&S1947, (Bean, EWH), (Bean I lib)
+ **micranthum** Japan. H&S1947, (Bean I lib)
+ **mono (pictum)** China, Korea. H&S1948, (Bean, EWH),(Bean I lib), planted OH.
  + ‘Marmoratum’ PAINTED MAPLE. Japan, Korea. removed I10
+ **negundo** N. America.
  + ‘Albovariegatum’ D&D1937,45,46, (Bean I lib)
  + ‘Aureovariegatum’ D1937-46, (Bean I lib)
  + ‘Aureum’ H&S1937, (Bean I lib)
  + ‘Crispum’ D&D1937, (Bean I lib)
  + ‘Elegantissimum’ H&S1937, (Bean I lib)
  + var. *californicum* California. Slocock1938, (Bean I lib)
Appendix 3: Catalogue of the previous collection

+ var. violaceum N.America, D&D1937, (Bean I lib)
+ nigrum see A.saccharum ssp. nigrum
+ nikoense (maximowiczianum) Japan, Westmonbirt 1936, Slocock 1938, (Bean I lib)
+ oblongum Himalaya, China. (Bean, EWH), near Gleditsia in gdn.
+ osmastonii Himalaya H&S1954, (Bean I lib)
+ palmatum (polymorphum) Japan, D1937, (Bean I lib)
+ ‘Atropurpureum’ D1937, H1937, (Bean I lib)
+ ‘Bicolor’ D1945, (Bean I lib)
+ ‘Chishio’
+ ‘Dissectum Atropurpureum’ IH, (Bean I lib)
+ ‘Dissectum Flavescens’ H&S1964, (Bean, EWH)
+ ‘Dissectum Rubrum’ IH1937, (Bean I lib)
+ ‘Dissectum Wasbi-mo-o’ IH1937, (Bean I lib)
+ ‘Elegans Purpureum’ H1937, (Bean I lib)
+ ‘Lutescens’ (Bean, EWH). Hill1964, (RHS1).
+ ‘Luteum’ D1937, (Bean I lib)
+ ‘Nigricans’ H&S1938, (Bean I lib)
+ ‘Nigrum’ H&S1937, (Bean I lib)
+ ‘Osakasuki’ S1937 (Bean I lib)
+ ‘Rubrum’ D1937, H1937, S1938, (Bean I lib)
+ ‘Sanguineum Chishio’ D1937, (Bean I lib)
+ ‘Sanguineum Seigan’ S1937, (Bean I lib)
+ ‘Seigan’ IH1943, (Bean I lib)
+ ‘Septemlobum Atropurpureum’ D1946, H&S1937, (Bean I lib)
+ ‘Septemlobum Elegans Purpureum’ H&S 1937, (Bean I lib)
+ ‘Septemlobum Purpureum Superbum’ Slocock 1937, (Bean I lib)
+ ‘Septemlobum Rubrum’ H&S1937, Slocock 1938, (Bean I lib)
+ ‘Swminagashi’ (Name not confirmed) IH1938, (Bean I lib)
+ ‘Tsumigaki’ IH1937, (Bean I lib)
+ pensylvanicum N.America.
+ ‘Erythrocladum’ H&S1946, (Bean I lib)
+ platanoides Europe, Horton1919, (Bean I lib)
+ ‘Dissectum’ (PPL)
+ ‘Schwedleri’ H&S1937, (Bean I lib)
+ pseudoplatanus Europe, Asia.
+ ferythrocarpum H&S 1947, (Bean I lib)
+ ‘Leopoldii’ Slocock1938, (Bean I lib)
+ f.purpureum spaethii (‘Atropurpureum’) Europe, S1938, (Bean I lib)
+ reticulatum (Name not confirmed) H&S1964, (Bean, EWH), planted Circus.
+ violaceum (Name not confirmed) (Bean, EWH), planted GD.
+ quinquelobum see divergens Asiatic Turkey? (Rehder, EWH)
+ x rotundilobum (monspezzulatum x opalus var. obtusatum) Hort. (Rehder, EWH)
+ rufinerve Japan. H1946, (Bean I lib), planted on brothers.
Appendix 3: Catalogue of the previous collection

+ **saccharinum** (*dasyacarpum*) N.America. Slocock 1938, Horton 1919; (Bean I lib)
+ **Laciniatum**’ D1939,43, (Bean I lib)
+ **Pulverulentum** W1939, H1934,35, (Bean I lib)
+ **Pyramidale** (*Fastigiatum*) Hilli 1964, (RHS1).
+ **saccharum** N.America. H&S 1937, Slocok1938; (Bean I lib)
+ **saccharum ssp. grandidentatum** N.America. H&S 1948, (Bean I lib)
+ **saccharum ssp. nigrum** N America. H&S 1937, (Bean I lib)
+ **saccharum ssp. schneckii** N America. (Rehder, EWH), planted Circus.
+ **schermerii** (Name not confirmed) (Cook 1965)
+ **sikkimensis** Himalaya. 1947, (Bean, EWH), planted Circus.
+ **syriacum** Syria, Lebanon, Israel. H&S 1964, (Bean, EWH), (Redher, EWH)
+ **taronense** (*laxiflorum var. longilobum*) Burma, China. H&S 1964, (Bean, EWH)
+ **tataricum** Europe. H&S 1946, (Bean I lib)
+ **tenellum** (*mono var. tricuspidis*) China. H&S 1948, (Bean S lib), planted OH. H&S 1964, (Bean, EWH)
+ **trifidum** see *A.buergerianum*
+ **trautvetteri** Caucasus. H&S 1947, (Bean I lib)
+ **truncatum** China. H&S 1964, (Bean, EWH)
+ **vachonii** Japan. H&S 1947, (Bean, EWH), planted GD.
+ **ukurunduense** (*caudatum var. ukurunduense*) China. H&S 1947, (Bean I lib)
+ **velutinum** (*vanvolxemi* (*vanvolxemii*), Caucasus, Iran. H&S 1948, (Bean I lib)
+ **villosum** (*sterculiaceum*) (Bean suggests these are not synonyms). Himalaya. H&S 1964, (Bean, EWH)
+ **x tooeschense** var. *georgiana* Hort. GD
+ **sp KW9511** planted GD, (Bean, EWH)

Acradenia: Rutaceae (1+0)

+ **frankliniae** Tasmania. H&S 1947, (Bean S lib)

Actinidia: Actinidiaceae (5+0)

+ **coriacea** China. H&S 1950, (Bean I lib)
+ **giant** (Name not confirmed) D1947, (Bean S lib)
+ **kolomikta** China, Japan. H&S 1939,48, (Bean I lib)
+ **polygama** China. H&S 1947, (Bean I lib)
+ **rubricaulis** China. H&S 1948, (Bean I lib)

Adenandra: Rutaceae (2+0)

+ **fragrans** S.Africa. (Cook 1965). D&D1943, (Bean S lib)
+ **uniflora** S Africa. D1943,45, (Bean S lib)

Adenocarpus: Fabaceae - Papilionaceae (3+0)

+ **anagyrisfolius** Morocco. H&S 1948, (Bean I lib)
+ **deorticans** Spain. H&S 1950, (Bean I lib)
+ **frankenoides** (*viscosus*) Canary Island. H&S 1950, (Bean I lib)

Aesculus: Hippocastanaceae (8+4)

+ **austriana** (*discolor var. mollis*) N America. H&S 1950, (Bean I lib)
+ **californica** California. H&S 1946,50, (Bean I lib)
+ **x carnea** (*hippocastanum x pavia*) Hort.
+ **Briotii’** H1937, Slocok 1938, (Bean I lib)
+ **chinensis** China. H&S 1947, (Bean I lib)
Appendix 3: Catalogue of the previous collection

+ *flava* (octandra) N. America. Slocock 1938, (Bean I lib)
  
  var. *purpurascens* (octandra var. purpureascens, x hybrida) H&S 1946, (Bean I lib)

var. *sanguinea* (Name not confirmed) Below Bills, (Cook 1965)

*georgiana* (neglecta var. georgiana, silvatica) N. America. H&S 1937, (Bean S lib)

+ *glaabra* N. America. H&S 1948, (Bean I lib)

x *glaucescens* (*flava x silvatica*) N. America. H&S 1947, (Bean S lib)

+ *hippocastanum* Greece, Bulgaria. Horton 1919, (Bean I lib)

  ‘Flore Pleno’ (‘Baumannii’) N1935, (Bean I lib)

+ *indica* India. Slocock 1938, H&S 1937; (Bean I lib)

x *mutabilis* (*pavia x silvatica*) Hort.

  ‘Harbisonii’ H&S 1947, (Bean S lib)

  ‘Induta’ H1947, (Bean S lib)

x *neglecta* (*Erythroblastos*) N. America. H&S 1937, 47 died, (Bean I lib)

+ *parviflora* N. America. Slocock 1938, (Bean I lib)

pavia ‘Atrosanguinea’ N. America. H&S 1937, (Bean I lib)

+ pavia *flava* Hort. Slocock 1938, (Bean I lib)

rosea (seedling line of *flava var. purpureascens*) N. America. H&S 1948, (Bean I lib)

sanguinea (seedling line of *flava var. purpureascens*) N. America. H&S 1946, (Bean I lib)

turbinata Japan. H&S 1947, (Bean I lib)

wilsonii China. (Bean, EWH), planted Circus, GD1960.

Agonis: Myrtaceae (2+0)

*flexuosa* Australia. D1943, too tender, (Bean S lib)


Alberta: Rubiaceae (1+0)

*magna* S. Africa. (Cook 1965)

Albizia: Fabaceae - Mimosaceae (2+0)

kalkora China. (Bean I lib)

lophantha (distachya) Australia. (Cook 1965)

Alniphyllum: Styraceae (1+0)

fortunei China. H&S 1947, 48 died, (Bean S lib)

Abnus: Betulaceae (0+2)

+ *firma* (sieboldiana) Japan. (Rehder, EWH)

+ *glutinosa* ‘Aurea’ Europe. Hill 1964, (RHS1).

  glutinosa ‘Imperialis’ Europe. H&S 1947, (Bean I lib)

+ *incana* ‘Aurea’ Europe, Caucasus. H&S 1948, (Bean I lib)

  incana ‘Ramulis Coccineis’ Europe, Caucasus. H&S 1947, (Bean I lib)

+ *lanata* China. H&S 1947, (Bean I lib)

+ *nitida* India, Himalaya. Hill 1964, (RHS1).


+ *sinuata* N. America. Seattle 1951, (Bean, EWH)

Amelanchier: Rosaceae (3+0)

*alnifolia* N. America. H&S 1947, (Bean I lib)

+ *laevis* N. America. H&S 1946, (Bean S lib)

*oblongifolia* (canadensis L., not sens Weig.) N. America. H1937,48; (Bean I lib), planted Circus
Appendix 3: Catalogue of the previous collection

**stolonifera** N America. H&S1948, (Bean S lib)

**Amorpha: Fabaceae - Papilionaceae**
+ **fruticosa** N America. H1934, (Bean I lib)

**Ampelopsis: Vitaceae (1+0)**
+ **brevipedunculata** (Vitis b., Vitis heterophylla) Japan, Korea, China. H&S1948, (Bean II lib).
+ ‘Elegans’ (V.heterophylla ‘Elegans’) H&S1947, (Bean II lib).
+ **megalophylla** (Vitis megaphylla) China. H&S1948, (Bean I lib)

**Anagyriss: Fabaceae - Papilionaceae (1+0)**
+ **foetida** Europe. H&S1947, (Bean I lib)

**Andromeda: Ericaceae (1+0)**
+ **polifolia** Europe, Asia, America. D1948, (Bean I lib)

**Anopterus: Saxifragaceae (0+2)**
+ **glandulosa** Tasmania. D 1935,48; (Bean S lib)

**Anthyllis: Fabaceae - Papilionaceae (1+0)**
+ **barba-jovis** Mediterranean. H&S1950, (Bean I lib)

**Aralia: Araliaceae (0+2)**
+ **chinensis** ‘Albomarginata’ China. H1937, (Bean I lib)
+ **chinensis** ‘Aureomarginata’ China. H1937, (Bean I lib)

**Araucaria: Aracariaceae (1+1)**
+ **cookii** (columnaris) New Caledonia. D1937 died, (Bean I lib)
+ **cunninghamii** ‘Glaucia’ Australia. D1937, (Bean I lib)

**Arbutus: Ericaceae (2+1)**
+ **andrachne** Greece. H&S1933,47,50, (Bean I lib)
+ **x hybrida** (x andrachnoïdes) Greece. H&S1947, (Bean I lib)
+ **menziesii** N America. D1935, IS1938, RHS seed 1944; (Bean I lib)
+ **unedo** ‘Quercifolia’ Ireland, Asia minor. H&S1948, (Bean I lib)

**Ardisia: Myrsinaceae (1+0)**
+ **crenulata** (crenata, crispa) Japan to India. H&S1949, (Bean I lib)

**Arduina (Carissa): Apocynaceae (0+1)**
+ **bispinosa** ‘Grandiflora’ S.Africa. HZ1949, (Bean I lib)

**Aristolochia: Aristolochiaceae (4+0)**
+ **altissima** Sicily, Algeria. H&S1948, (Bean I lib)
+ **elegans** Brazil. 1957, (RHS1).
+ **grandiflora** Tropical America. 1957, (RHS1).
+ **macrophylla** (durior) N America. 1957, (RHS1)

**Arrostolchia: Eleocarpaceae (1+0)**
+ **macqui** (chilensis) Chile. Goodwin1947, (Bean I lib)
+ **racemosa** (serrata) New Zealand. (Cook 1965)

**Aronia: Rosaceae (1+1)**
+ **Aronia arbutifolia** ‘Erecta’ (Pyrus arbutifolia ‘Erecta’) N America. H&S1947, (Bean I lib)
+ **melanocarpa** (Pyrus melanocarpa.) N America. (Cook 1965)
Appendix 3: Catalogue of the previous collection

**Artemesia**: Asteraceae (3+0)
- *abrotanum* Europe, Spain. H1948, (Bean I lib), above cabin.
- *tridentata* N.America. (Cook 1965).

**Asclepias**: Asclepiadaceae (1+0)
- *curassavica* 1957, (RHS1).

**Athrotaxus**: Taxodiaceae (4+0)
- *cupressoides* Tasmania. H&S 1948, (Bean I lib)
- *laxifolia* Tasmania. H&S 1948, (Bean I lib)
- *lycopodioides* (Name not confirmed)  D1945, (Bean I lib)
- *selaginoides* Tasmania. D1941, (Bean I lib)

**Atriplex**: Chenopodiaceae (1+2)
- *halimus* Europe. D1938, (Bean I lib)
- *dentata* Chile. H&S 1950, (Bean I lib)
  + *integriofila* Chile. H&S 1948, S1949, (Bean S lib)
    - ‘Variegata’  H&S 1947, (Bean S lib)
  + *lanceolata* Chile. H1940, (Bean S lib)
  + *microphylla* Chile. H1930, 37, IH1945, (Bean I lib)
    - ‘Variegata’ (Cook 1965)

**Backhousia**: Myrtaceae (1+0)
- *citriodora* Australia. H1946, (Bean S lib)

**Baeckia**: Myrtaceae
- *virgata* Australia. D1939, (Bean I lib)

**Baloghia**: Euphorbiaceae (1+0)
- *lucida* Australia. D1947, (Bean I lib)

**Bambusa**: Poaceae (1+0)
- *gracilis* (Name not confirmed) (PPL)
- *nigra* see *Phyllostachys nigra*

**Banksia**: Proteaceae (8+0)
- *brownii* Australia. D&D1964, (RHS1).
  + *collina* Australia. H1945, (Bean S lib)
  + *ericifolia* Australia. D1945, (Bean S lib)
- *ericoides* (Name not confirmed)  D1941, T1947, (Bean S lib)
- *grandis* Australia. (Cook 1965). D&D1941, 46, (Bean S lib)
- *lehmannianna* Australia. D1946, (Bean S lib)
- *littoralis* Australia. 1949, (Bean S lib)
- *prionotes* Australia. (PFL).
  + *serrata* Australia. D1945, (Bean S lib)
  + *speciosa* Australia. D1946, (Bean S lib)
- *verticillata* Australia. (Cook 1965)

**Barklya**: Fabaceae - Caesalpinaceae (1+0)
- *syringifolia* Australia. HZ1949, (Bean S lib)

**Bauera**: Saxifragaceae (1+0)
- *rubioiides* Australia. D1938, (Bean S lib)
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*Bauhinia: Fabaceae - Caesalpinaceae (3+0)*

*alba (variegata 'Candida')* India, China. HZ1948, (Bean I lib)

*galpinii (punctata)* S.Africa. HZ1948, (Bean I lib)

*purpurea (triandra)* India, Burma, China. HZ1948, (Bean I lib)

*Beaufortia: Myrtaceae (2+0)*

*purpurea* Australia. (Cook 1965)

*sparsa* Australia. D1945,46, (Bean S lib)

*Beilschmiedia: Lauraceae (1+0)*

*tarairi* New Zealand. (Cook 1965)

*Berberidopsis: Flacourtiaceae*

+ *corallina* Chile. S1935, D1948, (Bean I lib)

*Berberis: Berberidaceae (26+7)*

+ *actinacantha* Chile. H&SI939, 50, (Bean I lib)

*brachypoda* China. RHS seed 1946, (Bean I lib)

*breveraniculata* (Name not confirmed) (Cook 1965)

*buxifolia* Chile. H&SI948, (Bean I lib)

*calliantha* Tibet. H&S1948, (Bean I lib)

*x carminea* Hort.

‘Barbarrosa’ H&SI948, (Bean S lib)

‘Buccaneer’ H&SI948, (Bean S lib)

*chillanensis var. hirsutipes* S.America. H&SI950, (Bean S lib)

*darwinii alibaculis* (Name not confirmed) (Cook 1965)

*darwinii coccinea (x stenophylla ‘Coccinea’?)* Hort. (Cook 1965)

*darwinii var. macrophylla (x antoniana) (darwinii x buxifolia)* Hort. H&SI959, (Bean I lib)

*dictophylla var. albicaulis* China, Yunnan. H&SI948,56, (Bean I lib)

*dielsiana* China. H&SI948, (Bean I lib)

*edgworthiana* Himalaya. (PPL)

*fortunei see Mahonia fortunei* China. (PPL)

*francisci-ferdinandii* China. 1935, (Bean S lib)

*gagnepainii* W.China. (Cook 1965)

*hookeri* Himalaya. (Cook 1965)

+ *hypokerina* Burma. H&SI948, (Bean I lib)

*insignis* Sikkim. H&SI948, (Bean S lib)

+ *jamesiana* China. RHS seed 1946,47, (Bean S lib)

*japonica see Mahonia japonica* Japan. H1935, (Bean I lib)

*koreana* Korea. H1937, D1939, (Bean S lib)

+ *lempergiana* China. H&SI947, (Bean S lib)

*linearifolia* Chile. H&SI948, (Bean S lib)

+ *x lologensis (darwinii x lologensis)* Hort. H&SI948, (Bean S lib)

*lomariifolia see Mahonia lomariifolia* China. H&SI946, (Bean I lib)

*montana* Argentina, Chile. H&SI937,48, (Bean S lib)

+ *morrisonensis* Taiwan. H&SI948, (Bean S lib)

+ *orthobotrys* Kashmir. H1937, (Bean S lib)

+ *panlanensis* China. H&SI947, (Bean S lib)

*pinnata see Mahonia pinnata* California. H&SI946, (Bean I lib)
Appendix 3: Catalogue of the previous collection

**polyantha** China.

**hirtipes** (Name not confirmed) (Cook 1965)

**repens var. rotundifolia** see *Mahonia repens var. rotundifolia*
N. America. H&S 1948, (Bean I lib)

**x rubrostilia** Hort. (Cook 1965)

‘Fireflame’ (Name not confirmed) (Cook 1965)

‘Sparkler’ (Name not confirmed) (Cook 1965)

+ **sargentiana** China. H&S 1948, (Bean I lib)

**sieboldii** Japan. S 1938, (Bean I lib)

**x stenophylla ‘Coccinea’** Hort. H&S 1959, (Bean I lib)

**x stenophylla ‘Corallina’** Hort. H&S 1937 died, (Bean I lib)

**subcaulalata** China. (FPL)

**thunbergii** Japan. (FPL)

‘Purpurea’ (Name not confirmed) (Bean I lib)

‘Erecta’ D1947, (Bean I lib)

+ **vernae** China. H&S 1949, (Bean I lib)

**verruculosa** Szechuan. H&S 1948, (Bean I lib)

**virescens var. ignorata** Himalaya. H&S 1948, (Bean I lib)

**wallichiana** Nepal. H&S 1939, (Bean I lib)

**wilsoniae** Szechuan. H&S 1948, (Bean I lib)

+ **yunnanensis** China. H&S 1948, (Bean I lib)

**Berzelia: Bruniaceae (1+0)**

**lanuginosa** S. Africa. H 1957, (Hortus 2)

**Betula: Betulaceae (13+5)**

**albo-sinensis** China. H&S 1946,48, (Bean I lib). Hill1964, (RHS1).

+ **albo-sinensis var. septentrionalis** China. H&S 1946, (Bean I lib)

+ **alaskana** (papyrifera var. humilis, nealaskana) N. America. H&S 1948, (Bean I lib)

**andrewsi** America. H&S 1948, (Bean I lib)

**chinensis** China, Korea, Japan. Hill1964, (RHS1).

**cylindrostachya (alnoides var. cylindrostachya)** Yunnan to India. H&S 1964, (Bean, EWH)

**davurica** China, Korea. (Catalogue 1980)

**delavayi var. forrestii (forrestii)** Yunnan. Hill1964, (Bean EWH)

+ **eremanii** Japan, Korea. 1957, (Bean, EWH)

**eremanii nipponica** (Name not confirmed) H&S 1947, (Bean I lib)


+ **x fetizowii** Hort. 1957, Circus, (Bean, EWH). H1966, (RHS1).


+ **jacquemontii** Himalaya. 1957, (Bean, EWH)

+ **japonica (platyphylla var. japonica)** Japan. S1938, (Bean S lib)

+ **japonica var. szechuanica (platyphylla var. szechuanica)** China. H&S 1947, (Bean S lib)

+ **japonica var. mandshurica (platyphylla var. japonica)** Japan. H&S 1939, (Bean S lib)

+ **lenta** N. America. H&S 1947, (Bean I lib)

**lilacinia** (Name not confirmed) (Bean, EWH)

+ **lutea (alleghaniensis)** N. America. H&S 1947, Massey1948, different; (Bean I lib)

**mandshurica (platyphylla var. mandshurica)** H&S 1950, (Bean I lib)

+ **maximowicziana** Japan. H&S 1939,46,50, (Bean I lib)
Appendix 3: Catalogue of the previous collection

+ *middendorffii* Siberia, Amur. Hill1964, (RHS1).
+ *papyrifera* N.America. H1934, (Bean I lib)

*papyrifera macrophylla* (Name not confirmed) H&S1964, (Bean, EWH)

+ *pendula* Europe.
  + ‘Darlecarlica’ H&S1939, (Bean I lib); H&S1964, (Bean, EWH)
  + ‘Fastigata’ H&S1939, (Bean I lib)
  + ‘Gracilis’ H1966, (RHS1).
  + ‘Purpurea’ Horton1914, (Bean I lib)
  + ‘Youngii’ H&S1939, (Bean I lib)
+ *populifolia* N.America. S1938, H&S1948, (Bean I lib)

* ‘Laciniata’ H1937, (Bean I lib)
+ *schmidtii* Japan, Korea, China. H&S1946,48, (Bean S lib)
+ *ulmifolia (grossa)* Japan. S1938, (Bean I lib)
+ *utilis* Himalaya, Kashmir. H&S 1937, (Bean I lib)

yun 4547 S1940, (Bean I lib)

Bignonia: Bignoniaceae

*grandiflora* see *Campsis grandiflora* China. (Cook 1965)

Billardiera: Pittosporaceae (1+0)

*longifolia* Australia. D, (Bean I lib)

Bomarea: Amaryllidaceae (1+0)

+ *multiflora* Columbia. D1947, (Bean S lib)
  + *werklei* Costa Rica. D1947, (Bean S lib)

Boronia: Rutaceae (4+0)

*elatior* Australia. (Cook 1965)

*heterophylla* Australia. (Cook 1965). D&D1959, (RHS1).

*megastigma* Australia. (Cook 1965), D&D1945 (Bean I lib)

*pinnata* Australia. (Cook 1965)

Bougainvillea: Nyctaginaceae (0+5)

*x buttiana ‘Mrs Butt’* D1947, (Bean S lib)

‘Marada’ (Name not confirmed) D1947, (Bean S lib)

‘Orange King’ (Name not confirmed) D1947, (Bean S lib)

‘Thurleys Special’ (Name not confirmed) D1947, (Bean S lib)

‘Wallflower’ (Name not confirmed) D1947, (Bean S lib)

Bouvardia: Rubiaceae (1+0)

*humboldtii (longiflora)* Mexico. D1947, (Bean I lib)

Bowkeria: Scrophulariaceae

+ *gerardiana* S.Africa. 1957, (Bean, EWH)

Braeburn: Proteaceae (1+0)

*stellatifolium* S.Africa. W1937, D1937, (Bean S lib)

Brachychiton: Asteraceae (1+0)

+ *acerifolius (Sterculia a.)* Australia. HZ1949, (Bean I lib)

*luridus (discolor, Sterculia discolor)* Australia. HZ1949, (Bean I lib)
Brachysema: Fabaceae - Papilionaceae (1+0)
  lanceolatum  Australia. HZ1949, (Bean I lib)

Brassaia: Araliaceae (1+0)
  actinophylla (Scheflera actinophylla)  Australia. HZ1949 (Bean I lib)

Brunfelsia: Solanaceae (2+0)
  americana  W.Indies. HZ1949, (Bean I lib)
  latifolia  Brazil. D1946, (Bean I lib)

Buddleia: Loganiaceae (8+13)
+ alternifolia China. H1934, S1937, D1942, H1942. (Bean S lib)
  asiatica  India. H&81947, (Bean I lib)
+ auriculata  S.Africa. H&81947, (Bean S lib)
  candida  Himalaya. H&81947, (Bean S lib)
  colvillei 'Kewensis'  Himalaya. H&81948, (Bean I lib)
  colvillei 'Rosea'  (Name not confirmed) H&81937, (Bean I lib)
+ crispa  India. H&81948, (Bean S lib)
+ davidii (variabilis)  China.
  'Black Knight'  Hill1964, (RHS1).
  'Etoile de France'  S1938, (Bean I lib)
  'Hollards Red'  (Name not confirmed)
  'Hollards Supreme'  (Name not confirmed)
  var. magnifica
  var. nanhoensis  A1939, (Bean I lib)
  'Pale Skies'  (Name not confirmed) (Cook 1965)
  'Pink Pearl'  D1947, (Bean I lib)
  'Powder Blue'
  'Rosea Floribunda'  (Name not confirmed) (Bean, EWH), H&81947, (Bean I lib)
  'Royal Red'  (PFL)
  'Seitekiana'  (Name not confirmed)
+ fallowiana  China. H&81947, (Bean S lib)
  'Alba'  H&81947, (Bean S lib)
+ farreri  China. S1935,37 W1937, (Bean S lib)
  lindleyana  China. (Bean I lib)
+ madagascariensis  Madagascar. D1947,1942, (Bean I lib)
  myriantha  China. H&81947, (Bean S lib)
+ pterocaulis  Himalaya, Burma. H1&8947, (Bean I lib)
+ salviifolia  S.Africa, planted garden, (Bean, EWH)
  stenostachya  China. RHSseed1944, (Bean S lib)
  sterniana  China. H&81948, (Bean S lib)
  variabilis  sec davidii
  x weyeriana 'Gold Glow'  (davidii var. magnifica x globosa) Hort. H&81946, (Bean S lib)

Bupleurum: Apiaceae (1+0)
  fruticosum  Europe. RHS1944, (Bean I lib)

Buxus: Buxaceae (1+0)
  balearica  Spain. H&81946, (Bean I lib)
+ sempervirens 'Argentea'  Europe. D1941, (Bean I lib)
Appendix 3: Catalogue of the previous collection

Caesalpinia: Fabaceae - Caesalpinaceae (2+0)

*coriaria* Tropical America. HZ 1949, (Bean I lib)
*gilliesii* Argentina. 1946, (Bean I lib)

Calliandra: Fabaceae - Mimosaceae

+ *portoricensis* Mexico, W. Indies. D1931, 41, (Bean I lib)

Callicarpa: Verbenaceae (1+0)

*americana* N. America. D1935, (Bean I lib)
+ *giralddii* (bodinieri var. giralddii) China. H1935, D1935, 45; (Bean S lib)
+ *japonica* Japan. D1935, (Bean I lib)
+ *purpurea* (dichotoma) Korea. Japan. D1939-46, (Bean I lib)

Callicoma: Cunoniaceae

+ *serratifolia* Australia. D1944-47, (Bean I lib)

Callistemon: Myrtaceae (1+1)

+ *citrus* (lanceolatus) Australia. 1938, (Bean S lib)
  + *Splendens* D1945, (Bean I lib)
  + *linearis* Australia. D1948, (Bean I lib)
  + *pallidus* Australia. W1937, (Bean I lib)
+ *phoenix* Australia. RHS, (Bean I lib)
+ *salignus* Australia. D1937, (Bean I lib)
+ *speciosus* Australia. 1938, (Bean S lib)

Callitris: Cupressaceae (4+0)

+ *arborea* (Widdringtonia juniperoides) S. Africa. S1937, (Bean S lib)
  + *cupressiformis* (rhomboidea) Australia. S1933, (Bean S lib). 1930, (Bean S lib)
  + *macleayana* Australia. (Cook 1965)
+ *quadri'valvis* (*Tetraclinus articulata*) Spain, Malta, N. Africa. (Cook 1965). 1933, (Bean S lib)
+ *oblonga* Tasmania. H&S 1948, (Bean S lib)

Calluna: Ericaceae (1+7)

*vulgaris* Britain. (PPL)
  + *Allportii* (PPL)
  + *Argentea* D&D D1938, (Bean I lib)
  + *Aurea* D&D D1938, (Bean I lib)
  + *H.E. Beale* (PPL)
  + *J.H. Hamilton* (PPL)
  + *Mimina* (PPL)
  + *Mullion* D&D D1939, (Bean I lib)

Calycanthus: Calycanthaceae

+ *floridus* N. America. Hill 1964, (RHS1).
+ *occidentalis* N. America. H&S 1964, (Bean, EWH)

Calytrix: Myrtaceae (2+0)

*mitchelliana* Australia. (Cook 1965)
*sullivani* Australia. (Cook 1965)

Camellia: Theaceae (138=2+136)

+ *Cornish Snow* (*suluenensis x cuspidata*) Hort. H&S 1948, (Bean S lib)
  + *Fair Lass* (*reticulata x suluenensis*), blackwater, (Cook 1965).
  + *fraterna* China. (Cook 1965).
Appendix 3: Catalogue of the previous collection

franchetiana  (Name not confirmed)  RHS seed 1946, (Bean lib)

higo types

‘Golden Temple’ see ‘Hatsu zakura’

+  ‘Hi No Hakama’  H1939, (Bean lib)
+  ‘Hi No Maru’  H1945, (Bean lib)
+  ‘Inamorata’  (Name not confirmed), opp car shed, (Cook 1965).
+  ‘Inspiration’  (reticulata × cuspidata)  (Cook 1965).

japonica  Korea, Japan.

‘Adolphe Andusson’  H1939, (Bean lib)
+  ‘A.M.Hovey’  (Name not confirmed), D&D1939, (Bean lib)
+  ‘Anemonoflora Alba’  (‘White Waratah’)  (Cook 1965).
+  ‘Anne Layard’  (Name not confirmed).  (Cook 1965).
+  ‘Apollo’  (Name not confirmed), Blackwater, (PPL).
+  ‘Araji shi’  (‘Beni-ara jishi’)  H1940,46,47, (Bean lib)
+  ‘Archduchess Augusta’  (Name not confirmed).  (Cook 1965).
+  ‘Arkisanzan’  (Name not confirmed).  (Cook 1965).
+  ‘Aspasia’  H1940, (Bean lib)
+  ‘Australis’  (Cook 1965).
+  ‘Beacon’  (Name not confirmed).  (Cook 1965).
+  ‘Berenice Boddy’  garden, (Cook 1965).
+  ‘Bicolor de la Reine’  (Name not confirmed).  (Cook 1965).
+  ‘Bonomiana’  at Bills, (Cook 1965)  (Bononia of the current catalogue?).
+  ‘Brenda’  (Name not confirmed).  (Cook 1965).
+  ‘Candidissima’  (Bean lib)
+  ‘Carnation Pink’  (Name not confirmed).  (Bean lib)
+  ‘Caroline Tuttle’  (Name not confirmed).  (Cook 1965).
+  ‘Chandleri Elegans’  (‘Elegans’)  H1939, (Bean lib)
+  ‘Chihu Hiku’  (‘Kiku’)  (Name not confirmed).  (Cook 1965).
+  ‘Chitosigeba’  (Name not confirmed).  (Cook 1965).
+  ‘Comte de Tol’  (Name not confirmed).  (Cook 1965).
+  ‘Comtesse du Wainut’  (Name not confirmed).  (Cook 1965).
+  ‘Comtesse Necini’  (Name not confirmed).  (Cook 1965).
+  ‘Constance’  (Cook 1965).
+  ‘Contessa Lavinia Maggi Rosea’  (Name not confirmed).  (Cook 1965)  (Could this be ‘Paolina Maggi Rosea’ which is ‘Mrs Henry Boyce’.
+  ‘Contessa Tozzoni’  (Name not confirmed).  (Cook 1965).
+  ‘Contessa Tozzoni var Rosea’  (Name not confirmed).  (Cook 1965).
+  ‘Countess of Ellesmere’  (Name not confirmed).  (Bean lib)
+  ‘Countess of Orkney’  (Cook 1965).
+  ‘Countess of Orkney Rosea’  (Name not confirmed).  (Cook 1965).
+  ‘Crimson Cup of Beauty’  (‘Kimberley’)  (Name not confirmed).  aspasia bed, (Cook 1965).
+  ‘Dark red frilled edge’  (Name not confirmed).  (Bean lib)
+  ‘Dawn’  (‘Akebono’)  (Cook 1965).
Appendix 3: Catalogue of the previous collection

+ ‘Deep Pink Salmon’ (Name not confirmed). (Bean I lib)
+ ‘Dionysia Poniatowski’ (Cook 1965).
+ ‘Donckelarii’ H1937, (Bean I lib)
+ ‘Double Pale Pink’ (Name not confirmed). Pine bank below beeches, (Cook 1965).
+ ‘Double Pink’ (Name not confirmed). behind cabin, (Cook 1965).
+ ‘Double Pink Special Masons’ (Name not confirmed). (Bean I lib)
+ ‘Double Pink Tippins’ (Name not confirmed). (Bean I lib)
+ ‘Double Rose Pink’ (Name not confirmed). (Bean I lib)

+ ‘Dr Covedale’ (Name not confirmed). Douglas Park, (PPL).
+ ‘Dr King’ backyard near tanks, (Cook 1965).
+ ‘Duchess of York’ (‘Lady Loch’, ‘Edward Billing’) (Bean I lib)
+ ‘Duke of York’ (‘Otahehu Beauty’) D&D1945, (Bean I lib)
+ ‘Edward Cole’ (Name not confirmed). (Cook 1965).
+ ‘Elisabeth’ lookout gully, (Cook 1965).
+ ‘Emporer’ (Name not confirmed). (Bean I lib)
+ ‘Eryldine’ (‘Eugene Lize’) (Cook 1965).
+ ‘Eugenie de Massena’ (Cook 1965).
+ ‘Eva’ (Name not confirmed). (Cook 1965).
+ ‘Fanny Sachioli’ (Name not confirmed). (Cook 1965).
+ ‘Fimbriata Alba’ (‘Fimbriata’) D&D1939, (Bean I lib)
+ ‘Fred Sanders’ (‘Fimbriata Superba’) H1939, (Bean I lib)
+ ‘G.C.Linton’ (Cook 1965).
+ ‘Gloire de Nantes’ (Cook 1965).
+ ‘Gosho Guruma’ (Cook 1965).
+ ‘Govenor Earl Warren’ on drive by scarlet vine, (Cook 1965).
+ ‘Grandiflora’ D&D1940, H1937, S1937, (Bean I lib)
+ ‘Great Eastern’ D&D1946, Wilson1946, H1940, (Bean I lib)
+ ‘Great Eastern’ (Australian) near ponderosa lemon (Cook 1965).
+ ‘Guest of Honour’ (Cook 1965).
+ ‘Hanapiki’ (Name not confirmed, Hanafuki ?). garden, (Cook 1965).
+ ‘Hanatasha Bowa’ (Name not confirmed, Ha-natashawan-Bawa?). (Cook 1965).
+ ‘Harriet Beecher Sheather’ H1945, (Bean I lib)
+ ‘Hashumishiro’ (Name not confirmed). (Cook 1965).
+ ‘Hassaku’ (‘Beni Hassaku’) H1946, (Bean I lib). H1939, (Bean I lib)
+ ‘Henri Favre’ H1940, (Bean I lib)
+ ‘High Hat’ (Cook 1965).
+ ‘Hikuru Gengi’ corner of white rail path, (Cook 1965).
+ ‘Hinemarie’ (Name not confirmed, Hinomaru?). garden middle bed, (Cook 1965).
+ ‘Isabella’ (Name not confirmed). (Isabel?) (Bean I lib)
+ ‘Jenny Jones’ (Name not confirmed). (Cook 1965).
+ ‘June McCaskill’ (Name not confirmed). (Cook 1965).
+ ‘La Graciola’ (‘Odoratissima’) D&D1942,46, H1945, H1940, (Bean I lib)
+ ‘Lady Audrey Buller’ (‘Nagasaki’) (Cook 1965).
Appendix 3: Catalogue of the previous collection

+ ‘Lady Clare’ (‘Akashigata’) D&D1939,42, H1937, (Bean I lib)
+ ‘Lady of the Lake’ (‘Francois Wiot’) (Bean I lib)
+ ‘Lady Parker’ (Name not confirmed). Wilson1939, D&D1939, (Bean I lib)
+ ‘Laurie Bray’ (Cook 1965).
+ ‘Lemichgerii’ (Name not confirmed). (Cook 1965).
+ ‘Light Pink’ (Name not confirmed). (Bean I lib)
+ ‘Lydia Shaw’ (Name not confirmed). (Bean I lib)
+ ‘Madame de Bisschop’ (Cook 1965).
+ ‘Madame Pepin’ D&D1939, (Bean I lib)
+ ‘Magnoliiflora’ S1945, (Bean I lib)
+ ‘Magnoliiflora Alba’ (‘Miyako Dori’) (Bean I lib)
+ ‘Marchioness of Exeter’ Webb, (Bean I lib)
+ ‘Mariana’ (‘Red Waratah’) (Cook 1965).
+ ‘Mathotiana’ D&D1942, D&D1939, (Bean I lib)
+ ‘Mercury’ H1950, (Bean I lib)
+ ‘Michata’ (Name not confirmed). below cabin carshed, (Cook 1965).
+ ‘Mikanike’ (Name not confirmed). (Cook 1965).
+ ‘Mrs A.M.Hovey’ above redwood, (Cook 1965).
+ ‘Mrs Bell’ (Name not confirmed). (Cook 1965).
+ ‘Mrs Bertha A.Harmes’ (Cook 1965).
+ ‘Mrs Cook’ (Name not confirmed). H1945, (Bean I lib)
+ ‘Mrs Swan’ gardens, (PPL).
+ ‘Myrtifolia’ (Cook 1965).
+ ‘Nancy Bird’ (Cook 1965).
+ ‘Nina Avery’ (Cook 1965).
+ ‘Nishiki’ (Name not confirmed). (Bean I lib)
+ ‘Nonpareil’ (Name not confirmed). H1945, (Bean I lib)
+ ‘Optima’ 1944, (Bean I lib)
+ ‘Peach Blossom’ (‘Magnoliiflora’ (UK)) H1939, (Bean I lib). 1946, (Bean I lib)
+ ‘Pink Cap of Beauty’ (Name not confirmed). (Cook 1965).
+ ‘Pink Clouds’ (Name not confirmed). (Cook 1965).
+ ‘Pink Czar’ (Name not confirmed). H1945, (Bean I lib)
+ ‘Preston Rose’ (‘Duchess de Rohan’) 1946, (Bean I lib)
+ ‘Prince Albert’ (‘Albertii’) (Bean I lib)
+ ‘Prince Frederick William’ H1940, (Bean I lib)
+ ‘Prince of Orange’ (‘Crusader’) (Cook 1965).
+ ‘Purpurea’ (‘Fuyajo’) H1946, (Bean I lib)
+ ‘Queen Bessie’ (Name not confirmed). Mrs Hindmarsh 1961, (Cook 1965).
+ ‘Red Czar’ (Name not confirmed). H1939, H1945, (Bean I lib)
+ ‘Red Pressii’ (‘La Pace Rubra’) (Bean I lib)
+ ‘Red Waratah’ (‘Mariana’) D&D1946, H1940, (Bean I lib)
+ ‘Rose Pink Waratah’ (Name not confirmed). D&D1939, (Bean I lib)
+ ‘Ruth Kemp’ (Cook 1965).
+ ‘Seiji’ (Name not confirmed). (Cook 1965).
+ ‘Shepherds Red’ (‘Speciosissma’) (Bean I lib)
Appendix 3: Catalogue of the previous collection

‘Shira Siku’ (Name not confirmed, Shiragiku=Purity?) (Cook 1965).
‘Shimeo Tome’ (Name not confirmed). (Cook 1965).
‘Shirobotan’ (Name not confirmed). (Cook 1965).
‘Single Dark Red’ (Name not confirmed). H1945, (Bean I lib)
  + ‘Single Red’ (Name not confirmed). S1939, (Bean I lib)
  + ‘Sode Kakushi’ (‘Gauntletii’, ‘Grandiflora Alba’, ‘Yokohama’) H1939, (Bean I lib)
  + ‘Souvenir de Bahuand Litou’ garden behind tulip beds, (Cook 1965).
  + ‘Spencers Pink’ H1947, (Bean I lib)
  ‘Sylvia’ blackwater, (PPL)
  ‘The Bride’ (Name not confirmed). backyard, (Cook 1965).
  + ‘The Czar’ D&D1939,42 (Bean I lib)
  ‘Tricolor’ (‘Sieboldii’) (Cook 1965).
  ‘Triumphans’ (‘Lady Parker Peony’) D&D1946, (Bean I lib)
  ‘Virginal’ (Cook 1965).
  ‘Virginia Franco’ (Cook 1965).
  ‘Vospers Rose’ (Name not confirmed). (Cook 1965).
  ‘Waiwhehu Beauty’ (Cook 1965).
  ‘White Pearl’ (Name not confirmed). Durant 1961, (Cook 1965).
  ‘William Ball’ (Name not confirmed). next to wrightii on back path, (Cook 1965).
  + ‘Wrightii’ D&D1939,46, (Bean I lib)
  + ‘Yoibijin’ H1939, I1H1944,47, (Bean I lib)
  ‘Zambo’ (Cook 1965).
  + oleifera (drupifera) China. H&S1947, (Bean S lib)
  + reticulata China. S1935, D1939, (Bean S lib)
    ‘Butterfly Wings’ (‘Houye Diechi’) (Cook 1965).
    ‘Chango Temple’ (‘Zhangjia Cha’) (Cook 1965).
    ‘Crimsontheumum Petal’ (‘Juban’) (Cook 1965).
    ‘Crimson Robe’ (‘Dataohong’) (Cook 1965).
    ‘Lion Head’ (‘Shizitou’) (Cook 1965).
    ‘Noble Pearl’ (Cook 1965).
    ‘Professor Tsai’ (‘Maye Diechi’) (Cook 1965).
    ‘Shot silk’ (‘Dayinhong’) (Cook 1965).
    ‘Willow Wand’ (‘Liuye Yinhong’) (Cook 1965).
  + saluenensis China. H&S1946, (Bean S lib)
    ‘Dr Doaks’ (Name not confirmed). (Cook 1965).
  + var. latifolia (Name not confirmed). (Cook 1965). H&S1948, (Bean S lib)
    Pink form H&S1948, (Bean S lib)
    Red Form H&S1948, (Bean S lib)
  ‘Salutation’ (suluenensis x reticulata). (Cook 1965).
  sasanqua Japan.
    ‘Apple Blossom’ (‘Fukuzutsumi’) H1939, (Bean I lib)
  + ‘Azuma Nishiki’ (‘Eastern Brocade’) D&D1938, (Bean I lib)
  + ‘Charles Michael’ (Cook 1965).
Appendix 3: Catalogue of the previous collection

‘Crimson King’  D&D1947, (Bean I lib)
+  ‘Hino Tsukama’  (Name not confirmed). H1946, H1945, (Bean I lib)
+  ‘Hinotsukama’  (Name not confirmed). gardens, (PPL).
+  ‘Hiryu’  (‘Kanjiro’). H1937, H1946, D&D1942, (Bean I lib)
  ‘Hugh Evans’  (‘Hebe’) blackwater (dead), (Cook 1965).
  ‘Lavender Queen’  (Cook 1965).
  ‘Lucinda’  (Cook 1965).
  ‘Mihaka’  (Name not confirmed). H1940, (Bean I lib)
  ‘Mikumiko’  (‘Mikuni Ko’, ‘Empire Red’). H1940, (Bean I lib)
+  ‘Mine no Yuki’  (‘White Doves’). D&D1942, (Bean I lib)
  ‘Mishiki’  (Name not confirmed). (Cook 1965).
+  ‘Monogono’  (Name not confirmed). Wilson1947, D&D1942, (Bean I lib)
+  ‘Onigaron’  (Name not confirmed). H1946, (Bean I lib)
  ‘Shirowabasuki’  (Name not confirmed). H1940, (Bean I lib)
+  ‘Shirowabasuki’  (‘Glory of Showa’). H1945, (Bean I lib)
  ‘Showa-no-Sakae’  (‘Glory of Showa’). (Cook 1965).
  ‘Tarona’  (Name not confirmed). H1945, (Bean I lib). H1939, (Bean I lib)
  +  ‘J C Williams’  (x williamsii hyd) Hort. H&S1948, (Bean S lib)
  +  ‘Mary Christian’  look out gully, (Cook 1965).

x williamsii
+  ‘Bartley Pink’  (Cook 1965).
+  ‘Donation’  garden, near big aspasia, (Cook 1965).
  ‘Elizabeth Rothschild’  (saluenensis x japonica  ‘Adolphe Andusson’). (Cook 1965).
  ‘Fragrans’  (Name not confirmed). (Cook 1965).
  ‘Francis Hanger’  (saluenensis x japonica  ‘Alba Simplex’). (Cook 1965).
  ‘Hiraethlyn’  (Cook 1965).
+  ‘J C Williams’  (x williamsii hyd) Hort. H&S1948, (Bean S lib)
  ‘Mary Christian’  look out gully, (Cook 1965).

Canarina: Campanulaceae (1+0)
campanulata  Canary Island. Mrs Taylor 1966, (RRS1).

Cantua: Polemoniaceae (3+0)
bicolor  S.America. (Bean, EWH)
buxifolia  Chile.  (Bean, EWH)
dependens  S.America. (Bean, EWH)

Caragana: Fabaceae - Papilionaceae (3+1)
arborescens  Siberia, Manchuria. D1938, (Bean I lib)
arborescens  ‘Lorbergii’  H&S1939, (Bean I lib)
franchetiana (gerardiana var. glabrescens)  China. RHS1946, (Bean S lib)
microphylla  Siberia, China. H&S1937, (Bean I lib)

Carmichelia: Fabaceae - Papilionaceae (3+0)
enysii  New Zealand. (Cook 1965). Hill1948, (Bean S lib)
flagelliformis  New Zealand. (Cook 1965)
petriei  New Zealand. (Cook 1965)

Carpinus: Betulaceae (1+0)
+  caroliniana  N.America. H&S1947, (Bean I lib)
laxiflora var. macrostachya  China. 1961, planted DP, (Bean, EWH)
Appendix 3: Catalogue of the previous collection

Carpodetus: Saxifragaceae
+ *serratus* New Zealand. Hillier, (RHS1).

Carya: Juglandaceae
+ *oleaeformis* (*pecan*, *illinoensis*) N.America. D1940, planted GD 1960, (Bean I lib)

Caryopteris: Verbenaceae (3+0)
+ *x clandonensis* Hort. H&S1950, (Bean I lib)
+ *incana* China. H&S 1950, (Bean I lib)
+ *tangutica* China. H&S1947, (Bean S lib)

Casimiroa: Rutaceae (1+0)

Cassandra: Ericaceae (1+0)
+ *calyculata* (*Chamaedaphne calyculata*) N.America. D1936, (Bean I lib)

Cassia: Fabaceae - Caesalpinaceae (7+1)
+ *alata* Tropical America. seed1962, (RHS1).
+ *angulata* Brazil. seed1963, (RHS1).
+ *australis* (*odorata*) Australia. seed1958, (RHS1).
+ *bicapsularis* (*candolleana*) Tropical America. D1946, (Bean I lib). HZ1949, (Bean S lib)
+ *corymbosa* Argentina. H&S1947, (Bean I lib)
+ ‘John Ball’ 1957, (RHS1).
+ *didymobotrya* Tropical Africa. HZ1949, (Bean I lib)
+ *grandis* Tropical America. seed1963, (RHS1).

Cassinia: Asteraceae (1+0)
+ *leptophylla* New Zealand. (Catalogue 1980)

Castanea: Fagaceae (4+3)
+ *alnifolia* N.America. H&S1948, (Bean S lib)
+ *crenata* Japan. H&S1948, (Bean I lib)
+ *dentata* N.America. H&S1948,50, (Bean I lib)
+ *henryi* China. H&S1947, (Bean S lib)
+ *mollisima* China. H&S1947, (Bean S lib)
+ *sativa* ‘Albomarginata’ Asia minor, Europe, N.Africa. H&S1947, (Bean I lib)
+ *sativa* ‘Heterophylla’ H&S1946, (Bean I lib)
+ *sativa* ‘Marron de Lyon’ (*‘Macrocarpa’*) H&S1948, (Bean I lib). H&S1947, (Bean S lib)
+ *visca* see *sativa*

Castanopsis: Fagaceae (2+0)
+ *chrysophylla* (*Chryssolepis chrysophylla*) California. H&S1946, (Bean I lib)
+ *cuspidata* (*Quercus cuspidata*) China, Korea. From current catalogue.

Castanospermum: Fabaceae - Papilionaceae
+ *australe* Australia. HZ1949, (Bean S lib)

Casuarina: Casuarinaceae (2+0)
+ *glauca* Australia. HZ1940, (Bean I lib)
+ *stricta* Australia. HZ1940, (Bean I lib)

Catalpa: Bignoniaceae (1+0)
+ *bignonioides* N.America. Horton 1921, (Bean I lib)
+ *bungei* China. S1940, (Bean I lib)
+ *ovata* China. S1940, (Bean, EWH), (Bean I lib)
Appendix 3: Catalogue of the previous collection

Ceanothus: Rhamnaceae (16+9)

*speciosa* N.America. S1937, (Bean I lib)

+Ceanothus* (Coeruleus) Mexico, Guatamala. W1947, (Bean I lib)

+Ceanothus* (Coeruleus) (Name not confirmed) H&S1948, (Bean I lib)

+A T Johnson* Hort. H1940, (Bean I lib)

+arbores* California. S1935, D1937,41, (Bean S lib)

+arbores* (now part of foliosus) California. H&S1948, (Bean I lib)

+azureus* California. W1947, (Bean I lib)

+azureus* (Name not confirmed) H&S1948, (Bean I lib)

+Burkwoodii* (‘Floribundas’ x ‘Indigo’). Hort. D1945, (Bean I lib)

+cyaneus* N.America. S1937, (Bean S lib)

+Delight* (papillosus x rigidus) Hort. H&S1948, (Bean I lib)

+x delilianus* (americanus x coeruleus). Hort.

+Gloire de Versailles* D1942,47, (Bean I lib)

+Indigo* (Bean I lib)

+Marie Simon* D1942, (Bean I lib)

+Richesse* (Cook 1965). D&D1959, (RHS1)

+dentatus* California. W1939, (Bean I lib)

+var. floribundas* D1939, (Bean I lib)

+Floridus* (Name not confirmed) A1939, (Bean I lib)

+Dignity* Hort. H1940, (Bean I lib)

+edwardsii* (Name not confirmed) D1937, Wilson 1939, (Bean I lib)

+foliosus* N.America. (Cook 1965)


+parryi* California. (Cook 1965)

+parvifolius* California. (Cook 1965)

+prostratus* California. H&S1948, (Bean S lib)

+purpureus* California. H&S1948, (Bean S lib)

+rigidus* N.America. H1934, S1935,37, (Bean I lib)

+Russelianus* (x lobbianus ‘Russelianus’) California. Slocock1938, (Bean S lib)

+thyrsiflorus* California. H1934, D1941, H1943,46; (Bean I lib)

+thyrsiflorus var. griseus (griseus) California. (Cook 1965)

+x veitchianus* (rigidus x griseus). California. (Cook 1965)

Cedrela: Meliaceae

+sinensis* (Toona sinensis) China. Slocock 1938, HZ1949, (Bean I lib)

Cedrela: Pinaceae (6+9)

+atlantica* N.Africa.

+‘Aurea’ H&S1946,48,50, (Bean I lib)

+‘Fastigata’ H&S1948, (Bean I lib)

+‘Aurea’ D1937, H1946, (Bean I lib)

+Deodara* Himalaya. D1942, (Bean I lib)

+‘Albospica’ H&S1948, (Bean I lib)

+‘Aurea’ D1937, H1946, (Bean I lib)

+‘Robusta’ H&S1948, (Bean I lib)
Appendix 3: Catalogue of the previous collection

V erticillata' H&S1948, (Bean I lib)
+ l libani var. brevifolia (brevifolia) Cypress. H&S1948, (Bean I lib)
+ l libani 'Sargentii' Lebanon. H&S1950, (Bean I lib)
Celastrus: Celastraceae (1+0)
+ rosthornianus China. H&S1946, (Bean S lib)
+ scandens N.America. D1942, (Bean I lib)
Celtis: Ulmaceae (1+0)
+ occidentalis Hill1965, (RHS1).
  reticulata N.America. (Bean, EWH)
Cephalotaxus: Taxaceae (2+0)
+ fortunei China. D1942,45,47, (Bean I lib)
  koreana (harringtonia koreana) Japan. Circus, (Bean, EWH)
  pedunculata fastigata (Podocarpus koreanus) (Name not confirmed)
    HZ1949, (Bean I lib)
Ceratonia: Fabaceae - Caesalpinaceae
+ siliqua Meditt. HZ1949, (Bean I lib)
Ceratopetalum: Cunoniaceae
+ gummiferum Australia. D1942, (Bean S lib)
Ceratostigma: Plumbaginaceae (2+0)
  griffithii Himalaya, Yunnan. (Cook 1965)
  minus China. H&S1947, (Bean S lib)
+ willmottianum China. H1947, (Bean S lib)
Cercidiphyllum: Cercidiphyllaceae
+ japonicum var. sinense China. S1935,37,39, (Bean S lib)
Cercis: Fabaceae - Papilionaceae
+ canadensis N.America. S1937, (Bean I lib)
+ chinensis China. D1934,48, (Bean I lib)
+ racemosa China. S1938,39,H&S1947, (Bean I lib)
Cestrum: Solanaceae (2+0)
+ aurantiacum Guatamala. 1957, (Bean, EWH)
+ elegans (purpureum) Mexico. (Cook 1965)
  parqui Chile. H&S1950, (Bean S lib)
  species B4367 S1940, (Bean S lib)
Chaenomeles: Rosaceae (2+22)
+ cathayensis (Cyonida cathayensis) China. S1937,40, (Bean I lib)
  japonica (Cyonida japonica) Japan.
    'Alarm' (Name not confirmed). D&D1946, (Bean I lib).
    'Double large pink' (Name not confirmed). H1936,(Bean I lib)
    macrocarpa (Name not confirmed) Wilson 1939, D&D 1946, (Bean I lib).
    'Salmon' (Name not confirmed). H1946, (Bean I lib)
    'Winter Cheer' (Name not confirmed). H 1937, (Bean I lib)
  maulei HI1937, (Bean I lib)
+ speciosa (Cyonida speciosa) China.
    'Atrococcinea' D&D1939, (Bean I lib).
    'Aurora' D&D1946, Hill1946, (Bean I lib)
    'Falconet Charlotte' H1937 (Bean I lib)
Appendix 3: Catalogue of the previous collection

‘Mallardi’  D&D1945, (Bean I lib)
‘Nivalis’  H 1920, (Bean I lib)
‘Orange Glow’ (Name not confirmed). (PPL)
‘Pink Perfection’ (PPL). (Cook 1965). D&D1945, (Bean I lib)
‘Rosa Grandiflora’ (Name not confirmed). (Cook 1965). Wilson 1939, (Bean I lib).
‘Rosa Flore Plena’ (‘Rosa Plena’?)  S 1939, (Bean I lib)
‘Rubra’ (Name not confirmed). Wilson 1939, (Bean I lib)
‘Rubra Grandiflora’  H1937, (Bean I lib)
‘Simonii’  (Cook 1965)

x superba  (japonica x speciosa). Hort. (Cook 1965)

‘Alba’  D&D1946, (Bean I lib)
‘Crimson and Gold’  (PPL)
‘Knap Hill Scarlet’  (Cook 1965). K1937, (Bean I lib).
‘Rowellane’  H&S1946, (Bean S lib)
‘Yaegatum’  (Name not confirmed).  H1946, (Bean I lib)
‘Yaegiki’  (Cook 1965), H1946, (Bean I lib).

Chamaecyparis: Cupressaceae (1+48)

+ lawsoniana  N America.

‘Allumi’  D1937, (Bean I lib)
‘Aurea’  D1946, (Bean I lib)
‘Blue Jacket’  (RHS1).
‘Drummondii’ (Name not confirmed) (PPL)

+ ‘Duncanii’  D1937,46, (Bean I lib)
‘Ellwoodii’  H1947, (Bean I lib)
‘Erecta Alba’  H&S1950, (Bean I lib)
‘Erecta Aurea’  D1937, (Bean I lib)
‘Erecta Viridis’  D1946, (Bean I lib)

+ ‘Filifera’  D1937, (Bean I lib)
+ ‘Filifera Aurea’ (Name not confirmed) D1937, (Bean I lib)
+ ‘Filifera Compacta’ (Name not confirmed) D1937,45, (Bean I lib)
+ ‘Filiformis Elegans’ (Name not confirmed) (PPL)

+ ‘Fletcheri’  D1937,45,46,47, (Bean I lib)
‘Forsteckeriana’  D1937, (Bean I lib)
‘Fraseri’  D1937,43,45,47, (Bean I lib)
‘Glaucia Veitchii’  D1937, (Bean I lib)
‘Golden King’  H&S1948, (Bean I lib)
‘Gracilis Pendula’  H&S1948, (Bean I lib)
‘Hillieri’  D1937, (Bean S lib)
‘Juvenila Stricta’  Wilson1947, (Bean I lib)

+ ‘Lutea’  D1934,37, (Bean I lib)
‘Lutea Nana’  H&S1948, (Bean I lib)
+ ‘Lycopodioides’  D19467, (Bean I lib)
‘Lycopodioides Aurea’ (Name not confirmed) (Bean I lib)
‘Milford Blue Jacket’ (Name not confirmed) D1937, (Bean I lib)
+ ‘Minima’  D1943, (Bean I lib)
'Minima Aurea Densa' (Name not confirmed) H&S1948, (Bean I lib)

'The catalogue of the previous collection'

'Veeping Threads' (Name not confirmed) (PPL)

'Wisselii' (PPL)

'nootkatensis' N.America. (PPL)

'Compacta' H&S7, (Bean I lib)

'Glaucal' H&S1948, (Bean I lib)

'Lutea' (PPL)

'obtusa' Japan, Taiwan

'Alba Spicata' (Cook 1965)

'Veeping Threads' (Name not confirmed) (PPL)

'Wisselii' (PPL)

'thoyoides', 'Ericoides' N.America. D1937, (Bean I lib)

'thoyoides leptocladal' (Name not confirmed) (PPL)

'Chiliotrichum: Asteraceae (1+0)

'amelloides' S.America. Hill1964, (RHS1).
Appendix 3: Catalogue of the previous collection

**Chimonanthus: Calycanthaceae (0+2)**
+ *fragrans (praeox)* China. D1937,45, (Bean I lib)
  + ‘Luteus’ (Cook 1965)
  + Stevens type (Name not confirmed). S1937, (Bean I lib)

**Chimonanthus: Oleaceae (0+1)**
+ *retusus* Korea, Japan. H&S1946, (Bean I lib)
  + *retusus Forrests form* H&S1947, (Bean I lib)
+ *virginicus* N.America. D1937, (Bean I lib)

**Chordospartium: Fabaceae - Papilionaceae (1+0)**
*stevensonii* New Zealand. H1934,35, (Bean S lib)

**Chorizema: Fabaceae - Papilionaceae (3+0)**
+ *cordatum* Australia. D1942, (Bean I lib)
  + *ilicifolium* Australia. D1942, (Bean I lib)
  + *varium* Australia. D1942, (Bean I lib)

**Cinnamomum: Lauraceae (1+0)**
+ *camphora* E.Asia, Africa. D1946, (Bean S lib)
  + *glanduliferum* China. H1934,35, (RHS 1)

**Cistus: Cistaceae (16+6)**
+ *alyssoides* see Halimium alyssoides (Cook 1965)
+ *albidus* S.W.Europe, N.Africa. (Cook 1965)
+ *algavensis* see Halimium ocyrnoides (PPL)
+ *alpestris* see Halianthemum alpestre Balkans.
  + *x aquilaria* (ladanifer x populifolius var. lasiocalyx) Spain, Morocco.
  + ‘Maculatus’ H&S1948, (Bean I lib)
  + *x canescens* (albidus x creticus) Algeria.
  + ‘Albus’ H&S1948, (Bean I lib)
  + *crispus* Europe. H1939, (Bean I lib)
  + *x cyrius* (ladanifer x laurifolia). France, Spain.
  + ‘Albus’ H&S1948, (Bean I lib)
  + ‘Albiflorus’ S1948, (Bean I lib)
  + *x florentinus* (monsperiensis x salviifolius) Europe. S1935, (Bean I lib)
  + *formosus* (Halimium lasianthum ssp. formosum) Mediterranean. (Cook 1965)
  + *gallipoli* (Name not confirmed) D1942, (Bean I lib)
  + *hirsutus* Spain, France. D1937, (Bean I lib)
  + *ladanifer ‘Maculatus’* Europe. D1937, (Bean I lib)
  + *laurifolius* Europe. D1942, (Bean I lib)
  + *x loretii* (stenophylla) (ladanifer x monspeliensis) Europe. D1937, (Bean I lib)
  + *x lasianthus* (ladanifer x hirsutus). Portugal. Hort. D1942, (Bean I lib)
  + *palhinhae* Portugal. H&S1948, (Bean I lib)
  + *psilosepalus* (hirsutus var. psilosepalus) Spain, Portugal. Hill1948, (Bean I lib)
  + *salviifolius* Europe. H&S1948, (Bean I lib)
  + *psilosepalus var. lasiocalyx* Spain, Portugal, Morocco. H1947, (Bean S lib)
  + *x purpureus* (creticus x ladanifer). Hort. S1935, D1942, (Bean I lib)
  + *salviifolius* Europe. D1937, (Bean I lib)
  + ‘Silver Pink’ (ladanifer x creticus). Hort. 1935,37, (Bean S lib)
  + ‘Sunset’ (C x pulverulentus) (albidus x crispus). S.W.Europe. (PPL)
villosus (creticus) Europe. D1937, (Bean I lib)

Citharexylum: Verbenaceae (1+0)

subseratum S. America. HZ1949, (Bean I lib)

Citrus: Rutaceae (2+7)

aurantium Tropical Asia. (Cook 1965).

limon Asia.

‘Lisbon’ (Cook 1965)

‘Meyer’ (Cook 1965)

x paradisi W. Indies. (Cook 1965)

+ sinensis Asia. (Cook 1965).

‘Bests seedling’ (Name not confirmed). (Cook 1965).

‘Coltman Pomelo’ (Name not confirmed). (Cook 1965).

‘Jaffa’ (Name not confirmed). (Cook 1965).

‘Len Gin Song’ (Name not confirmed). (Cook 1965).

‘Michael’ (Name not confirmed). (Cook 1965).

Cladrastis: Fabaceae - Papilionaceae (1+0)

+ sinensis China. H&S1947, (Bean I lib)

+ tinctoria (lutea) N. America. Slocock1938, (Bean I lib)

wilsonii China. H&S1947, (Bean S lib)

Clematis: Ranunculaceae (20+43)

afoliata (aphylla) New Zealand. (Cook 1965)

alpina France, Balkans. H&S1939,46, (Bean I lib)

alpina var. sibirica Norway, Siberia, Manchuria. H&S1946, (Bean I lib)

+ armandii China. D1935,47, (Bean I lib)

+ ‘Apple Blossom’ H&S1948, (Bean I lib)

‘Farquhariana’ (Bean I lib)

‘Baron de Verdis’ (Name not confirmed) H1946, Walker 1946, (Bean I lib)

buchananiana Himalaya. (an incorrect ID for C.rehderiana according to Lloyd) (PPL)

chrysocoma China. H&S1948, (Bean I lib)

+ cirrhosa Spain, Israel. H1937, (Bean I lib)

+ coccinea (texensis) Texas. H1935, (Bean I lib)

‘Constance Bouchard’ (‘Comtesse de Bouchard’ ?) Walker 1946, (Bean.I lib)

‘Cream Geganto’ (Name not confirmed) (Cook 1965)

‘Daniel Deronda’ (patens group). (PFL)

‘Duchess of Albany’ (texensis hyd). Hort. (Cook 1965)

‘Duchess of Edinburgh’ (florida gp). Hort. (Cook 1965)

x durandii (integrifolia x jackmanii) Hort. H1939, (Bean I lib)

+ ‘Fair Rosamund’ (patens group) Hort. H1946, (Bean I lib)

floribunda (Name not confirmed) H1946, (Bean I lib)

+ ‘Gipsy Queen’ (jackmanii group). Hort. 1939, (Bean I lib)

henryi China. H1946, (Bean I lib)

+ indivisa (paniculata) New Zealand. D1942,46, (Bean S lib)

integrifolia Europe, Asia. H1946, Walker 1946, (Bean I lib)
Appendix 3: Catalogue of the previous collection

**x jackmanii** (*lanuginosa* x *viticella*). Hort. (Bean I lib)

- ‘Jackmanii Alba’ (Bean I lib)
- ‘Jackmanii Rubra’
- ‘Jackmanii Superba’ Walker 1946, (Bean I lib)
- ‘Madame Edward Andre’ (PPL)
- ‘Mrs Chalmondely’ (PPL) (Cook 1965)
- ‘King George V’ (lanuginosa group). (PPL)
- ‘Lady Betty Balfour’ (viticella gp). Hort. (Cook 1965)
- ‘Lady Northcliffe’ (lanuginosa gp). Hort. (Cook 1965)

**lanuginosa group.** China.

- ‘Beauty of Worcester’ (PPL)
- ‘Blue Gem’ (PPL)
- ‘Crimson King’ (PPL). (Bean I lib).

+ ‘Marie Boisselot’ (‘Madame le Coutre’) (PPL)
- ‘Sensation’ (PPL)
- ‘William Kennet’ (PPL)
- ‘Lasurstern’ Hort. H&S 1946, (Bean I lib)

**x lawsoniana** (*lanuginosa* x *patens*). Hort. Walker 1946, (Bean I lib)

**lilacina** ‘Floribunda’ (NNC) (Bean I lib)

- ‘Lord Gifford’ (Name not confirmed) (Cook 1965)

**macropetala** China. Kew 1945, (Bean S lib)

- ‘Madame Baron Villard’ (jackmanii group). Hort. H&S 1948, (Bean I lib)
- ‘Madame Clare’ (Name not confirmed) H1946, Walker 1946, (Bean I lib)
- ‘Madame Koster’ (Name not confirmed) H&S 1948, (Bean I lib)
- ‘Marcel Moser’ (patens group). (PPL)

**markhamii** (macropetala ‘Markhamii’) (NNC) H&S 1948, (Bean I lib)

**meyeniana** China. H&S 1947, (Bean S lib)

**montana** ‘Grandiflora’ China, Himalaya. H&S 1948, (Bean I lib)

- ‘Mrs Hope’ (lanuginosa group). Hort. H1946, (Bean I lib)
- ‘Mrs Spencer Castle’ (viticella hyd) Hort. (Cook 1965)
- ‘Nelly Moser’ (lanuginosa group) Hort. H&S 1948, (Bean I lib)

+ **napaulensis** (forrestii) China, India. H&S 1948, (Bean S lib)

**patens** Japan. H1939, (Bean I lib)

- ‘Perle D’Azure’ (jackmanii group). (PPL)
- ‘Queen Alexandra’ (Name not confirmed) Walker 1946, (Bean I lib)

**rehderiana** China. RHS seed 1944, (Bean I lib)

- ‘Rose Fondat’ (Name not confirmed) (Cook 1965)
- ‘Royal Velours’ (viticella hyd) Hort. (Cook 1965)

+ **serratifolia** Korea. RHS seed 1944, H&S 1946, (Bean S lib)

+ **sieboldii** (florida ‘Sieboldii’) Japan. H&S 1948, (Bean I lib)

+ ‘Sir Garnet Wolesley’ (patens gp) Hort. H1946, (Bean I lib)

**songarica** Korea. H&S 1946, (Bean I lib)

**spooneri** ‘Rosea’ W. China. H&S 1946, (Bean S lib)

**tangutica** China. H&S 1947, (Bean I lib)

**tangutica var. obtusiuscula** China. D1938, (Bean S lib)
Appendix 3: Catalogue of the previous collection

‘The President’ (patens group). Hort. H&S 1948, (Bean I lib)

+ uncinata China. H&S 1947, (Bean I lib)

x vedrariensis (chrysocoma x montana var. rubens). Hort. H&S 1947, (Bean S lib)

+ ‘Ville de Lyon’ (viticella group). Hort. H&S 1948, (Bean I lib)

divicella group S. Europe.

‘Ascetiensis’ (PPL)

‘Duchess of Sutherland’ (PPL)

‘Ernest Markham’ (PPL)

‘Huldine’ (PPL)

‘King George’

violacea ‘Rubra Marginata’ (x triternata ‘Rubra Marginata’) (flammula x viticella).

Hort. H&S 1948, (Bean I lib)

Clerodendron: Verbenaceae (2+0)

bungei (foetidum) China. Cook 1944, (Bean I lib)

+ trichotomum Japan. 1921, (Bean I lib)

ugandense E. Africa. W1939, HZ1949, (Bean I lib)

Clethra: Clethraceae (4+1)

+ alnifolia N. America. planted GD 1960, (Bean, EWH)

‘Rosea’ H&S 1946, (Bean I lib)

arborea Madeira. W1937, (Bean I lib); D1939,45, (Bean S lib)

asplenifolia (Name not confirmed) (PPL)

+ barbinervis Japan. D1937, H&S 1948, (Bean I lib)

delayayi China. H&S 1946,48, (Bean S lib)

+ fargesii China. H&S 1946, (Bean S lib)

monostachya China. H&S 1948, (Bean S lib)

Cleyera: Theaceae (1+0)

fortunei Japan. H&S 1948, (Bean I lib)

Coleonema: Rutaceae (1+0)

pulchrum S. Africa. D1939,41, (Bean S lib)

Colletia: Rhamnaceae (1+0)

crucifera Uruguay. (Cook 1965)

Colutea: Fabaceae - Papilionaceae (4+0)

arborescens Europe, Africa. W1949, (Bean I lib)

x media (arborescens x orientals). Europe, Africa. Seed 1948, (Bean I lib)

melanocalyx Turkey. Seed 1948, (Bean I lib)

orientalis Caucasus. Seed 1948, (Bean I lib)

Combretum: Combretaceae (1+0)

loeflingi Tropical America. HZ1949, (Bean I lib)

Comptonia: Myricaceae (1+0)


Cordyline: Agavaceae (3+1)

australis ‘Albo Variegata’ (Cultivar not confirmed) New Zealand. (Cook 1965)

banksii New Zealand. (Cook 1965)

indivisa New Zealand. D&D1937, (Bean S lib)

pumila New Zealand. D&D1938, (Bean S lib)

+ terminalis Polynesia. D&D1938, (Bean S lib)
Coriaria: Coriariaceae (1+0)
  japonica Japan. Hill1946, (Bean I lib)

Cornus: Cornaceae (4+8)
  + alba Siberia to Korea.
    'Argentea Variegata' (Name not confirmed) Slococ1938, (Bean I lib)
    'Atrosanguinea' ('Sibirica') H&S1947, (Bean I lib)
    'Gouchauli' (RHS 2, EWH)
    'Spaethii' Slococ1938, (Bean I lib), (RHS 2, EWH)
    'Variegata Elegantissima' Slococ1938, (Bean I lib)
  alternifolia 'Variegata' N.America. H&S1939, (Bean I lib)
  asperifolia N.America. seed 1948, (Bean I lib)
  baileyi N.America. W1946, (Bean I lib), (RHS 2, EWH)
  canadensis N.America. H&S1948, (Bean I lib), (RHS 2, EWH)
  + controversa Japan, China. in azalea border white gate, (Bean I lib)
  + florida N.America. K1935, S1957, S1941; (Bean I lib)
  + florida f.rubra N.America. 1936,45, (Bean I lib)
  hemsleyi China, 1954 Camellia bed, rhodo bay. (Bean I lib), (RHS 2, EWH)
  + kousa Japan. S1935,37,41, (Bean I lib)
  + kousa var. chinensis China. S1937, (Bean S lib)
  + macrophylla Japan, China, Himalaya. H&S1947, (Bean I lib), (RHS 2, EWH)
  + mas Europe, Caucasus.
    'Aurea Elegantissima' H&S1946, (Bean I lib)
    'Variegata' H&S1947, (Bean I lib)
  + nutallii N.America. S1937,38,41, (Bean I lib)
  + officinalis Japan. H1937,D1946, (RHS 2, EWH)
  + stolonifera N.America. N1935, (Bean I lib), (RHS EWH)
    + 'Flaviramea' H&S1947, (Bean I lib)

Corokia: Cornaceae (1+0)
  x virgata (buddleiodes x cotoneaster). New Zealand. (Cook 1965). Hill1948, (Bean S lib)

Coronilla: Fabaceae - Papilionaceae (3+0)
  emerus Europe. H&S1948, (Bean I lib)
  glauca (valentina ssp. glauca) Europe. H&S1948,50, (Bean S lib)
  valentina Spain. H&S1948,50, (Bean S lib)

Corea: Rutaceae (2+0)
  alba Australia. (Cook 1965)
  speciosa (C.reflexa) Australia. (Cook 1965)

Corylopsis: Hamamelidaceae (2+0)
  platypetala China. D1946, (Bean I lib)
  sinensis China. S1940, H&S1947, (Bean I lib)
  + spicata Japan. D1945,46, (Bean I lib)
  + willmottiae (sinensis var. willmottiae) China. D1944,46,47, (Bean I lib)

Corylus: Betulaceae (2+0)
  + avellana Europe. Horton 1918, (Bean I lib)
  cornuta N.America. (Bean, EWH)
Appendix 3: Catalogue of the previous collection

+ **maxima 'Purpurea'** Europe, Asia minor. H&S1957, planted GD1960, (Bean, EWH)
  
  **tibetica** China. (Bean, EWH)
  
**Corysema:** (1+0)
  
  **cordata** (Name not confirmed) planted DP, (Bean, EWH)

**Cotoneaster:** Rosaceae (31+0)
  
  **acuminatus** Himalaya. H&S1948, (Bean I lib)
  
  **adpressus** China. S1939, (Bean I lib)
  
  **amoenus** China. S1940, (Bean I lib)
  
  **applanatus** (dielsianus)
  
  **bullatus 'Floribundas'** China. H&S1946, (Bean I lib)
  
  **congestus** (microphyllus var. glacialis) Himalaya. S1939, (Bean I lib).
  
  **conspicuus** Tibet. H&S1948, Slocock1938, (Bean I lib)
  
  **damneri** China. H&S1948, (Bean S lib)
  
  **dielsianus** China. D1934, (Bean I lib). Slocock1938, (Bean I lib)
  
  **dielsianus var. major** China. RHS seed, (Bean I lib)
  
  **divaricatus** China. H&S1948, (Bean I lib)
  
  **foveolatus** China. H&S1937, (Bean I lib)
  
  **frigidus** Himalaya. H1945, (Bean I lib)
  
  **froebellii** (Name not confirmed) S1937, (Bean I lib)
  
  **glaucophyllus** China. H&S1937, rare red berry, (Bean I lib)
  
  **harrobianus** China. D1935, seed1948, (Bean I lib)
  
  **henryanus** China. Slocock1938, (Bean I lib)
  
  **horizontalis** W.China. S1940, (Bean I lib)
  
  **humifusus** (damneri ?) China. H&S1948, (Bean I lib)
  
  **integrifolius** Europe. H&S1937, (Bean I lib)
  
  **lacteus** China. H1934, (Bean S lib)
  
  **lindleyi** (insignis) Iran, Turkistan. H&S1937, (Bean I lib)
  
  **microphyllus var. glacialis** see congestus
  
  **mupinensis** China. H&S1947, (Bean S lib)
  
  **multiflorus** Caucasus, E.Asia. H&S1937, (Bean I lib)
  
  **nitens** China. H&S1948, (Bean S lib)
  
  **nitidifolius** China. H&S1948, (Bean S lib)
  
  **nummularius** (racemiflorus var. nummularius) Caucasus, Himalaya. H&S1937, (Bean I lib)
  
  **obscurus** China. H&S1948, (Bean S lib)
  
  **pannosus** China. N1934, (Bean I lib)
  
  **prostratus** Baker. (rotundifolius.Wall ex Lindl.) Himalaya. H&S1947, (Bean I lib). S1938, (Bean I lib)
  
  **racemiflorus** Africa, W.Asia, Turkistan. H&S1937, (Bean I lib)
  
  **rotundifolius** Wall ex Lindl. see prostratus Baker. Himalaya
  
  **var. tongolensis** (distichus var. tongolensis) China. RHS1948, (Bean I lib)
  
  **salicifolius** China. 1945, (Bean I lib)
  
  **salicifolius rugosa henryii** (Name not confirmed) Slocock1938, (Bean I lib)
  
  **salicifolius vicari** (Name not confirmed) D1938, (Bean I lib)
  
  **sanfran** (Name not confirmed, could this be C.nanshan=adpressus var. praecox. China)
  
  **thymifolius** (microphyllus var. thymifolius) Himalaya. H1934, (Bean I lib)
Appendix 3: Catalogue of the previous collection

**Crotalaria: Fabaceae - Papilionaceae (1+0)**

- *laburnifolia* Asia, Africa. not found D7, D1935, 45, (Bean I lib)

**Cryptomeria: Taxodiaceae (0+5)**

- *japonica* Japan.

- ‘Compacta’ D1945, (Bean I lib)
  - ‘Dacrydioides’ D1945, (Bean I lib)

- ‘Elegans’ D1945, 47, (Bean I lib)

- ‘Elegans Aurea’ W1937, (Bean I lib)

- ‘Globosa Nana’ H&S1948, (Bean I lib)

- ‘Lobbii Nana’ (‘Globosa Nana’) (Cook 1965)

- ‘Nana’ 1934, (Bean I lib)

- ‘Plumosa’ (Name not confirmed) D1947, (Bean I lib)

- ‘Spiralis’ (Cook 1965), Hill 1948 (Bean I lib)
Appendix 3: Catalogue of the previous collection

Cunninghamia: Taxodiaceae
+ konishii Taiwan. H&S 1947, (Bean S lib)

Cupressus: Cupressaceae (9+5)
+ arizonica ‘Pyramidalis’ H&S 1950, (Bean I lib)
+ duclouxiana China. H&S 1948, (Bean S lib)
+ formosensis see Chamaecyparis formosensis Taiwan. G. 1934, Wilson 1947, (Bean S lib)
+ lusitanica ‘Glauc Pendula’ Mexico. H&S 1948, (Bean I lib)
+ macrocarpa California.
  + ‘Aurea’ D1937, (Bean I lib)
  + ‘Brunniana Aurea’ D1937, (Bean I lib)
  + ‘Pendula’ H&S 1950, (Bean I lib)

Cydonia: Rosaceae
see Chaenomeles

Cyrilla: Cyrillaceae
+ racemiflora N. America, W. Indies. H&S 1948, (Bean I lib)

Cytisus: Fabaceae - Papilionaceae (19+18)
+ albus Spain. (Cook 1965). Horton 1920, (Bean I lib)
  + battandieri Morocco. S1935, 37, (Bean S lib)
+ x beanii (purgans x arboini). Hort. D&D 1935, 3 1938, (Bean I lib)
+ beanii hirsutus (Name not confirmed) (Cook 1965)
+ decumbens (Spartium decumbens) S. Europe. (Cook 1965). D&D 1935, Hill 1946, (Bean I lib)
+ filipes Canary Island. D&D 1947, (Bean I lib)
+ fontanesii Spain. (Cook 1965). Lincoln 1950, (Bean I lib)
+ hybrids Hort.
  + ‘C.E.Pearson’ S1937, (Bean S lib)
  + ‘Diana’ (PPL)
  + ‘Donard Seedling’ S1937, (Bean S lib)
  + ‘Enchantress’ S1937, (Bean S lib)
  + ‘Fairy Queen’ (PPL)
  + ‘Goldfinch’ (PPL)
  + ‘Hibernica’ S1937, (Bean S lib)
  + ‘Hodgsinii’ (Name not confirmed) D&D 1946, (Bean S lib)
  + ‘Maria Burkwood’ S1937, (Bean S lib)
  + ‘Mrs Norman Henry’ (PPL)
  + ‘Park Farm hybrid’ (Name not confirmed) (PPL)
  + ‘Redstart’ (PPL)
+ x kewensis (ardoinii x multiflorus). Hort. Hill 1945, D&D 1935, (Bean I lib)
+ kewensis procumbens (Name not confirmed) (Cook 1965)
+ leiocarpus (Name not confirmed) Lincoln 1950, (Bean I lib)
+ leiocarpus scoparius (Name not confirmed) (Cook 1965)
+ nigricans C & S. Europe. (Cook 1965). Hill 1950, S1935, (Bean I lib)
+ x praecox (purgans x multiflorus). Hort. (Cook 1965). IH1934, S1941, D&D 1947, T1947, (Bean I lib)
+ purgans Spain, France, N. Africa. H&S 1951, (Bean EWH)
+ purpureus C & S. Europe. D&D 1935, Hill 1950, 51 (Bean I lib)
racemosus (spachianus) Hort. Anderson 1920, (Bean S lib)
reverchonii (Name not confirmed) (Cook 1965). Lincoln 1950, (Bean I lib)
scoparius Europe.
‘Burkwoodii’ 1937, (Bean S lib)
‘Crimson King’ S1939, D&D1946, (Bean S lib)
‘Geoffrey Skipworth’ S1937, (Bean S lib)
‘Lord Lambourne’ S1937, (Bean S lib)
‘Ruby’ (PPL)

sessilifolius C&S Europe, N.Africa. (Cook 1965). D&D1937, Lincoln 1950, (Bean I lib)
supinus C&S Europe. (Cook 1965). Lincoln 1950, (Bean I lib)
x versicolor ‘Hillieri’ (purpureus x hirsutus var. hirsutissimus). Hort. H&S 1957, (Bean EWH)

Daboecia: Ericaceae (1+5)
cantabrica Europe. (Cook 1965)
‘Alba’ (Cook 1965)
‘Alba Globosa’ (Cook 1965)
‘Atropurpurea’ (Cook 1965)
‘Bicolor’ (Cook 1965)
‘Rosea’ (‘Pallida’) (Cook 1965)

Dacrydium: Podocarpaceae (3+0)
bidwillii New Zealand. (Cook 1965)
colensoi New Zealand. D1935, (Bean S lib)
cupressinum New Zealand. D1937, (Bean S lib)
franklinii Australia. (Bean S lib)
intermedium New Zealand. (Cook 1965)

Daphne: Thymeleaceae (7+6)
aurantiaca China. H&S 1946, 47, 48, (Bean S lib)
x burkwoodii (caucasica x cneorum). Hort. 1946, (Bean I lib)
cneorum Spain to S.W. Russia. D1936, S1938,39,41, (Bean I lib)
cneorum ‘Major’ Europe. D1938, (Bean I lib)
dauphini (x hybrida) (collina x odorata). Hort. H&S 1948, (Bean I lib)
genkwa China, Korea, Japan. D1936,37,42,43, (Bean I lib)
genkwa violacea (Name not confirmed) H1939, (Bean lib)
japonica China. H&S 1947, (Bean I lib)
mezereum Europe, Asia minor. H1935, D1937,42,46, (Bean I lib)
mezereum f alba Goodwin 1946, H&S 1950, (Bean I lib)
‘Grandiflora’ H&S 1948, (Bean I lib)
odorodora China, Japan. S1937, D1945, (Bean I lib)
‘Alba’ H&S 1947, (Bean I lib)
‘Leucanthia’ (Cook 1965)
‘Variegata’ (Cook 1965).
retusa China. H&S 1946,47, (Bean I lib)

Datura: Solanaceae (2+0)
cornigera (Brugmansia knightii) Mexico. (Cook 1965)
suaveolens (Brugmansia suaveolens) Brazil. (Cook 1965)
Appendix 3: Catalogue of the previous collection

**Davidiaceae**
+ *involucrata* China. W1937, S1940, (Bean I lib)

**Debregeasia: Urticaceae (1+0)**
+ *longifolia* China, Himalaya, Java. H&S1947, (Bean I lib)

**Decaisnea: Lardizabalaceae**
+ *fargesii* China. S1935,37, (Bean I lib)

**Decumaria: Saxifragaceae**
+ *sinensis* China. H&S1947, (Bean I lib)

**Dendromecon: Papavaceae (1+0)**
+ *rigidum* California. Hill1950,51, (Bean I lib)

**Dermatobotrys: Scrophulariaceae (1+0)**
+ *saundersii* S.Africa. D&D1964, (RHS2)

**Desfontainia: Loganiaceae**
+ *spinosa* Chile. S1935,37, (Bean I lib)

**Desmodium: Fabaceae - Papilionaceae (2+0)**
+ *spicatum* China. H1935, (Bean S lib)
+ *tilifolium* Himalaya. H1934, (Bean I lib)

**Deutzia: Saxifragaceae (11+8)**
+ *chunii* China. H&S1948, (Bean I lib)
+ *compacta* China. H&S1948, (Bean I lib)
+ *crenata* China, Japan.
  + ‘Magnifica’ D1934, (Bean I lib)
  + ‘Sheenbarg’ D1934, (Bean I lib)
+ *discolor* China.
  + ‘Grandiflora’ D1934, (Bean I lib)
  + ‘Major’ D1934, (Bean I lib)
  + ‘Floribunda’ D1934, (Bean I lib)
+ *x elegantissima* (*purpurascens x sieboldiana*). Hort. D1934, (Bean I lib)
  + *gracilis* Japan. D1934, (Bean I lib)
  + ‘Campanulata’ D1934, (Bean I lib)
  + ‘Rosea’ (Name not confirmed) D1934, (Bean I lib)
+ *hookeriana* China, Nepal. H&S1947, (Bean S lib)
  + *x hybrida* (*longifolia x discolor*). Hort.
  + ‘Montrose’ S1939, (Bean I lib)
+ *longifolia’ Veitchii’ China. H&S1948, (Bean I lib)
+ *mollis* China. H&S1950, (Bean I lib)
+ *monbeigii* China. RHS seed1944, (Bean S lib)
+ *purpurascens* China. D, (Bean I lib)
  + *scabra* Japan, China. Horton, (Bean I lib)
+ *setchuenensis var. corymbiflora* China. H&S1948, (Bean I lib)
+ *taivanensis* Taiwan. D1949, (Bean S lib)
+ *wilsonii* China. Hill1950, (Bean EWH)

**Dianella: Liliaceae (1+0)**
+ *tasmanica* Tasmania. D1939, (Bean S lib)
Appendix 3: Catalogue of the previous collection

**Diervilla: Caprifoliaceae**

*see Weigelia*

**Diosma: Rutaceae** (3+0)

- *ericoides* S.Africa. (Cook 1965). D&D1941, A1939, (Bean I lib)
- *complexa* (Name not confirmed) W1935, D&D1939, (Bean I lib)
- *pulchra* *see Coleonema pulchrum* S.Africa. W1939, D&D1939, (Bean I lib)
- *pulchella* *(Agathosma corymbosa)* S.Africa. A1939, (Bean I lib)

**Dipelta: Caprifoliaceae** (2+0)

- *ventrica* China. H&S 1949, not found K12.
- *yunnanensis* China. H&S1957, (Bean EWH); H&S 1949 not found K12

**Diplacus: Scrophulariaceae** (1+0)

- *glutinosus* N.America. (Bean S lib)

**Dipteronia: Aceraceae** (1+0)

- *sinensis* China. H&S1937, (Bean I lib); Cutting H&S1981 dead H8

**Disanthus: Hamamelidaceae**

+ *cercidifolius* Japan, China. S1935 died, H1937 died, H1957 died, H1940,42, (Bean I lib)

**Docynia: Rosaceae** (2+0)

- *delavayi* China. H&S1957, planted DP1960, (Bean EWH)
- *docynioides (rufifolia)* China. (Cook 1965)

**Dodonaea: Sapindaceae**

+ *vicosa* New Zealand. D1945, (Bean I lib)

**Dombeya: Byttneriaceae** (4+0)

- *mastersii (burgessiae)* Kenya, Africa. HZ1949, (Bean I lib)
- *nyassica* Africa. (RHS 2, EWH)
- *sanguinea* (Name not confirmed) HZ1949,(Bean I lib)
- *spectabilis (rotundifolia)* Africa. HZ1949, (Bean I lib)

**Drimys: Winteraceae** (2+0)

- *aromatica (lanceolata)* Australia. S1935,37,39,41, D1939, (Bean I lib)
- *winteri* S.America. S1935, (Bean I lib)

**Dryandra: Proteaceae** (2+0)

- *floribunda* Australia. (Cook 1965). Wilson 1946, T1947, (Bean S lib)
- *formosa* Australia. (Cook 1965). D&D1941,42,45, (Bean S lib)

**Duranta: Verbenaceae** (0+1)

+ *plumieri (repens)* Mexico to Brazil. HZ1949, (Bean I lib)
  - *‘Alba’* HZ1949, (Bean I lib)

**Edgeworthia: Thymeleaceae**

+ *papyrifera* China, Japan. S1935,37,39,41, D1945, (Bean S lib)

**Ehretia: Ehretiaceae**

+ *macrophylla* Himalaya. H&S1937, (Bean I lib)

**Elaeagnus: Elaeagnaceae** (1+1)

+ *x ebbingei* *(microphylla x pungens).* Hort. 1960, (RHS 2, EWH)
+ *multiflora (longipes)* China, Japan. Horton, (Bean I lib)
- *pungens ‘Frederici’* Japan. H&S 1937, (Bean I lib)
- *umbellata* China. H&S1948, (Bean I lib)
Embothrium: Proteaceae (1+1)
+ coccineum Chile. D1933,38,42, S1939, (Bean I lib)
+ ‘Norquino’ H&S1950, (Bean I lib)
+ ‘Longifolium’ D1937,39,41,46, (Bean I lib)
‘Coombes Variety’ (Name not confirmed) H&S1948, (Bean I lib)
lanceolatum (coccineum var. lanceolatum) Chile. D1937,39,41,45,46, W1947, (Bean I lib)

Enkianthus: Ericaceae (3+0)
+ campanulatus Japan. H1934, D1936, ?1936, (Bean I lib)
  cernuus Japan. H1940, (Bean I lib)
  chinensis China. H&S1946, (Bean S lib)
  himalaicus (deflexus) China. planted GD, (Bean, EWH)
+ perulatus Japan. D1946, HZ1949, (Bean J lib)

Erica: Ericaceae (31+25)
  arborea Europe, Caucasus, Africa. Hill1947, (Bean I lib)
  arborea var. alpina Hill1947,48, (Bean I lib)
  australis Spain, Portugal. Hill1946,47,48, (Bean I lib)
  ‘Mr Robert’ Hill1946,50, (Bean I lib)
  andromedaeflora (holosericea) S.Africa. IH1945, D&D1946, (Bean I lib)
  baccans S.Africa. D&D1946, (Bean I lib)
  brevifolia (Name not confirmed) D&D1948, (Bean I lib)
  caffra S.Africa. (PPL)
  canaliculata (melandnera) S.Africa. Hill1948, (Bean S lib). A1945,46, (Bean I lib)
  carnea (herbacea) Europe.
    ‘King George’ H1945, (Bean I lib)
    ‘Mrs Beale’ (Name not confirmed) H1945, (Bean I lib)
    ‘Vivellii’ 1938, (Bean I lib)
    ‘Winter Beauty’ S1939, (Bean I lib)
  x cavendishiana (obetina x depressa). Hort. D&D1946, (Bean I lib)
  cerinthoides coronata (Name not confirmed) D&D1947, Wilson1947, (Bean I lib)
  cinerea Europe.
    var. coccinea 1934, (Bean I lib)
    ‘Rosea’ 1938, (Bean I lib)
    ‘Prince of Wales’ 1937, (Bean I lib)
  coccinea (petiveri) South Africa. D&D1945, (Bean I lib)
  concinna (verticillata) S.Africa. (Cook 1965)
  coronata (fascicularis) S.Africa. (Cook 1965)
  cruenta S.Africa. (Cook 1965). D&D1946, (Bean I lib).
  x darleyensis (hybrida) Europe. S1935,37, (Bean I lib). D&D1946, (Bean I lib)
  elegantissima (Name not confirmed) (PPL)
  erigena (mediterranea) Hort, not L.) France, Spain, Ireland.
    ‘Brightness’ (Cook 1965). Hill1947, (Bean I lib)
    ‘Hibernica’ (E.hibernica = E.erigena ‘Glauca’) Hill1948, (Bean I lib)
    ‘Rubra’ (PPL)
    ‘Superba’ Hill1946, (Bean I lib)
    ‘Gilva’ (Name not confirmed) D&D1947, (Bean I lib)
glandulosae S. Afri. D&D1946, (Bean I lib)
glauc e elegans (Name not confirmed) H1945, D&D1946, (Bean I lib)
hentyana (Name not confirmed) D&D1946, (Bean I lib)
‘Jubilee’ (Name not confirmed) (PPL)
lusitanica (codonodes) W. Europe. (Catalogue 1980)
mackayii (mackaiana) England, Spain.

‘Flore Plena’ H1945, (Bean I lib)
mammosae var. coccinea S. Afri. D&D1943,46, (Bean I lib)
nebacal yx (Name not confirmed) D&D1945, (Bean I lib)
parkeri S. Afri. D&D1946, (Bean I lib)
peeria ‘Rosea’ (Name not confirmed) (Cook 1965). D&D1947, (Bean I lib).
peziza S. Afri. (Cook 1965)
regia var. variegata S. Afri. (Cook 1965). D&D1948, (Bean I lib)
rubens S. Afri. D&D 1946, (Bean I lib)
stricta (terminalis) Europe. Hill 1948, (Bean I lib)
tetralix Europe. D&D1946, (Bean I lib)
umbellata Spain, Portugal, Morocco. Hill 1950, (Bean S lib)
vagans Ireland, Cornwall.

‘Improved’ (Name not confirmed) D&D1938, (Bean I lib)
‘St Keverne’ (Cook 1965)
ventricosa S. Afri.

‘Globosa’ (Cook 1965)
‘Breviflora’ (Cook 1965)
‘Coccinea’ (Name not confirmed) (Cook 1965)
‘Magnifica’ (Name not confirmed) D&D1948, (Bean I lib)
‘Splendens’ (Cook 1965)
verticillata S. Afri. D&D1946, (Bean I lib)
vulgaris see Calluna vulgaris (Cook 1965)
x wats onii (ciliaris x tetralix). Hort.

‘Dawn’ D&D1946, T1947, (Bean I lib)
x wilmorei Hort.

‘Flore Plena’ (Name not confirmed) D&D1946, (Bean I lib)

‘Winter Gem’ (Name not confirmed) D&D1938, (Bean I lib)

Eriobotrya: Rosaceae
+

+ japonica China. Ho1918, (Bean I lib)
prinosides see Photinia prionophylla China. H&S1948, (Bean I lib)

Eriocapnus: Asteraceae (1+0)
africanus S. Afri. D1934,42, (Bean S lib)

Eriostemon: Rutaceae (2+0)
myoporoides Australia. (Bean EWH)
nerifolia (Name not confirmed) (PPL)

Erythrina: Fabaceae - Papilionaceae (4+0)
acanthocarpa S. Afri. HZ1949, (Bean S lib)
blakei India. D1938,39,40,47, (Bean I lib)

+x crista-galli Brazil. D1946, W1939, (Bean I lib)
Appendix 3: Catalogue of the previous collection

**indicica (variegata)** Phillipines, Indonesia. HZ1949, (Bean S lib)

**speciosa** Brazil. HZ1949, (Bean S lib)

**Escallonia: Saxifragaceae (2+9)**

— ‘Donard Brilliant’ (langleyensis group). Hort. S1958, (Bean I lib)
— ‘Edinensis’ (langleyensis group). Hort. S1953, (Bean I lib)
— *floribunda* (bijida) S. America. (Cook 1965)
— ‘Freithei’ (rockii ‘Freithei’) H&S I946, (Bean EWH)
— ‘Glory of Donard’ (langleyensis group). Hort. (Cook 1965)
— ‘Iveyi’ (bijida x esonensis). Hort. S1937, (Bean S lib)
— ‘Mrs Gwen Anley’ (langleyensis group). Hort. D1942, (Bean I lib)
— *organensis* (laevis) Brazil. H&S1946, (Bean I lib)

**rubra** Chile. (Cook 1965)
— *rubra* var. macrantha (macrantha) Chile. (Cook 1965)
— ‘C F Ball’ (Bean I lib)
— ‘William Watson’ (langleyensis group). Hort. H1940, (Bean I lib)

**Eucalyptus: Myrtaceae (11+1)**

— *amygdalina* Australia. (Cook 1965)
— *forrestiana* Australia. H1945, (Bean I lib)
— *globosa* (Name not confirmed) (Cook 1965)
— *grossa* Australia. H1945, (Bean I lib)
— *lehmannii* Australia. D1949, (Bean I lib)
— *leucoxylon* Australia. H&S1948, (Bean I lib)
— ‘Rosea’ D1945, W1946, (Bean I lib)
— *macandra* Australia. H1937, (Bean I lib)
— *maculata citriodora* (Name not confirmed) D1941, (Bean I lib)
— *nicholi* Australia. D1939, (Bean S lib)
— *sideroxylon* ‘Rosea’ Australia. H&S1948, (Bean I lib)
— *steedmanii* Australia. D1941, (Bean I lib)
— *tetraptera* Australia. H1946, (Bean I lib)
— *torquata* Australia. D1941, (Bean I lib)

**Eucryphia: Eucryphiaceae (2+2)**

— *cordifolia* Chile. S1939, (Bean I lib)
— *x intermedia* (glutinosa x lucida). Hort. H&S1950, (Bean I lib)
— ‘Rostrevor’ H&S1950, (Bean S lib)
— *lucida* (billarderi)
— *x nymanensis* (glutinosa x cordifolia). Hort. S1937, (Bean S lib), (Rehder, EWH)
— *pinnatifolia* (glutinosa) Chile. S1935,37,39, (Bean I lib)
— Double form 1947 Hughes, (Bean I lib)

**Eugenia: Myrtaceae (8+0)**

— *eucalyptoides* Australia. (Cook 1965)
— *leuhammadii* (Syzygium L) Australia. (RHS 2, EWH)
— *myrtifolia* Australia. D&D, (RHS 2, EWH)
Appendix 3: Catalogue of the previous collection

*paniculata australis* (Name not confirmed) (*E.paniculata = Syzygium paniculatum, and E.australis = Syzygium australis*). Australia. (RHS 2, EWH)

*pendula* (Name not confirmed) (Bean I lib)

*readru* (Name not confirmed) (RHS 2, EWH)

*rehemannii* (Name not confirmed) (Bean I lib)

*smithii* (*Acmena smithii*). Australia. 1957, (RHS 2, EWH)

*ventenatii* (*Walterousia floribunda*). Australia. H, (RHS 2, EWH), (Bean I lib)

Euodia: Rutaceae (1+0)

+ *daniellii* China, Korea. H&S 1946, (Bean I lib)

+ *hupehensis* China. H&S 1946, (Bean I lib), (Bean, EWH)

velutina China. H&S 1947, (Bean S lib)

Euonymus: Celastraceae (15+4)


+ *alatus var. apterus* (*alatus var. subtriflorus*) China. S 1935, 37, 41, (Bean I lib)


bungeanus Korea, China. S 1940, (Bean I lib)

cornatus China. H 1964, (RHS 2, EWH)


+ *europaeus ‘Fructu coccineo’* H&S 1947, (Bean I lib)

+ *europaeus var. intermedius* Europe. H&S 1946, (Bean I lib)

+ *europaeus monstruosus* (Name not confirmed) S 1941, (Bean S lib), (Bean I lib)

*grandiflorus f. salicifolius* Nepal, Bhutan, China. H 1947, (Bean S lib)

*illicifolius* China. H&S 1948, (Bean S lib)

*japonicus* ‘Albomarginatus’ Japan. Horton, (Bean I lib)

*lanceifolius* Loes. (*hamiltonianus var. lanceifolius*) China. H 1946, (Bean S lib)

+ *latifolius* (L.) Mill. (*europaeus var. latifolius* L.) Europe, Asia minor.

H 1938, H&S 1947, (Bean I lib)

*latifolius* Marsh. see *atropurpureus*.

+ *maackii* (*hamiltonianus var. maackii*) Manchuria, Japan. H&S 1947, (Bean S lib)

*nikoensis* (*hamiltonianus var. nikoensis*) Japan. (RHS 2, EWH)

*oresbius* China. H&S 1946, (Bean S lib)

*oxyphyllus* Japan, China. H&S 1946, 48, 50, (Bean S lib)

+ *pendulus* Wall. (*lucidus* D. Don., *fimbriatus* Hort, not Wall.) Himalaya. H&S 1946, D 1946, (Bean S lib)

*phellomanus* China. H&S 1946, (Bean S lib)

*planipes* (*latifolius var. planipes*) Japan, Korea, N.E. China. (Cook 1965)

*radicans* (*fortunei var. radicans*) China. D 1945, (Bean I lib)

‘Roseo-marginatus’ (Name not confirmed) D 1945, (Bean I lib)

*sachalinensis* (*latifolius var. sachalinensis*) Sakhalim. H&S 1946, 48, (Bean I lib)

+sanguineus* China, Tibet. H&S 1947, (Bean I lib)

*semiexertus* (*hamiltonianus var. semiexertus*) Japan. (RHS 2, EWH)

suave (Name not confirmed) below bills, (Bean, EWH)

+ *tingens* Himalaya. H&S 1948, (Bean S lib)

*yedoensis* (*hamiltonianus var. yedoensis*) Japan. S 1935, 39, D 1946, (Bean I lib)

vidalii (Name not confirmed) (RHS 2, EWH)
Appendix 3: Catalogue of the previous collection

Eupatorium: Asteraceae (1+0)
- micranthum  Mexico. H&S 1947, 50, (Bean S lib)

Eupetela: Eupetelaceae (2+0)
- franchetii (pleiosperma)  Japan. H&S 1946, (Bean I lib)
- polyandra  Japan. H&S 1946, (Bean I lib); H&S 1949, 53, 59, dead 13, dead R3

Exochorda: Rosaceae (3+0)
- albertii (korolkowii)  Turkestan. D 1936, (Bean I lib)
- geraldii  China. S 1937, (Bean I lib)
- geraldii var. wilsonii  China. S 1937, (Bean I lib)
- grandiflora (racemosa)  China. D 1936, (Bean I lib)

Fabiana: Solanaceae (1+2)
- imbricata  Chile. B 1935, D 1942, (Bean I lib)
  - 'Prostrata'  H&S 1950, (Bean I lib)
  - 'Violacea'  D 1942, (Bean S lib)

Fagus: Fagaceae (1+6)
+ ferruginea (grandifolia, americana)  N. America. H&S 1948, (Bean I lib)
  - japonica  Japan. H&S 1946, (Bean I lib)
+ sylvatica  Europe.
  - 'Cuprea'  H&S 1946, (Bean I lib)
  - 'Grandidentata'  H&S 1939, (Bean I lib)
  - 'Heterophylla'  Horton 1918, Slocok 1938, (Bean I lib)
  + 'Pendula'  Horton 1918, (Bean I lib)
  + 'Purpurea'  D 1937, W 1947, (Bean I lib)
  - 'Purpurea Major' ('Riversii')  H&S 1937, (Bean I lib)
  + 'Purpurea Pendula'  H 1937, (Bean I lib)
  - 'Quercoides'  H&S 1947, 50, (Bean I lib)
  + 'Riversii'  S 1937, D 1947, (Bean I lib)
  + 'Tricolor' ('Purpurea Tricolor')  D 1937, (Bean I lib)
  - 'Variegata'  H&S 1937, (Bean I lib)
  + 'Zlatia'  D 1941, (Bean I lib)

Fatshedera: Araliaceae (0+1)
- ilizii 'Variegata'  D&D 1959, (RHS2).

Feijoa: Myrtaceae (0+4)
- sellowana
  - 'Cooledgill'  (Cook 1965). S 1944, H 1955, (Bean S lib)
  - 'Choiceana'  (Cook 1965)
  - 'Superba'  (Cook 1965). W 1937, (Bean S lib)
  - 'Splendens'  (Name not confirmed)  (Cook 1965). D&D 1946, (Bean S lib)

Fendlera: Saxifragaceae (1+0)
- rupicola  N. America. S 1935, H&S 1964, (Bean I lib), (Bean, EWH)

Ficus: Moraceae (1+1)
- pumila  China, Japan. (Cook 1965)
  - 'Mimina'  (Cook 1965)

Firmiana: Sterculiaceae (1+0)
- platanifolia (Sterculia platanifolia). Japan.
**Appendix 3: Catalogue of the previous collection**

**Fitzroya:** Cupressaceae (1+0)
- *patagonia* (cupressoides) S.America. H&S 1946, 50, (Bean I lib)

**Fokienia:** Cupressaceae (1+0)
- *hodginsii* China, Vietnam. 1934, (Bean S lib)

**Fontanesia:** Oleaceae
- *fortunei* (japonica) China. D 1939, (Bean I lib). H 1937, (Bean I lib)
- *philleyroides* W.Asia. D 1935, (Bean I lib)

**Forsythia:** Oleaceae (1+1)
- ‘Longwood’ (Name not confirmed) (Cook 1965)
  - *ovata* Korea. H&S 1948, (Bean S lib)
- *suspensa* Japan. D 1934, (Bean I lib)
- *suspensa var. sieboldii* Hort (Japan). 1934, (Bean I lib)

**Fothergilla:** Hamamelidaceae (2+0)
- *gardenii* N.America. H&S 1950, (Bean I lib). H 1948, (Bean S lib)
- *major* N.America. S 1937, 38, 39, (Bean I lib)
- *monticola* N.America. S 1935, 38, 39, (Bean I lib)

**Fraxinus:** Oleaceae (2+4)
- *angustifolia* Vahl. (angustifolia ssp. oxycarpa, oxyphyllea) W.Medit, N.Africa. H&S 1937, (Bean I lib)
- *angustifolia var. lentiscifolia* Europe, N.Africa. H&S 1950, (Bean I lib)
- *bracteata* see *griffithii*
- *engleriana* (Name not confirmed) H&S 1947, the glade, (Bean I lib)
- *excelsior* Europe, N.Africa.
  - *f.angustifolia* H&S 1957, D 1937, (Bean I lib)
  - ‘Aurea’ (Cook 1965)
  - ‘Aurea Pendula’ H&S 1950, (Bean I lib)
  - ‘Pendula’ (Cook 1965)
- *griffithii (bracteata)* China, Phillipines. H&S 1947, 48 (Bean I lib)
- *holotricha* Balkans. H&S 1947, (Bean I lib)
- *longicuspis* (either sieboldiana in part, or lamignosa in part, Bean disagrees) Japan, Korea. H&S 1947, (Bean I lib)
- *nigra* N.America, H 1957, sheep yards, (Bean I lib)
- *oregona* (latifolia) N.America. seed 1950 oregon, (Bean I lib)
- *platypoda* China. H&S 1948, (Bean S lib)
- *spalatha* Japan. H&S 1947, 50, (Bean I lib)

**Fremontia:** Bombaceae (2+0)
- *californicum* N.America. A 1937, D 1941 (Bean I lib); H 1937 (Bean S lib)
- *mexicanum* N.America. A 1933, H 1937, (Bean S lib)

**Fuchsia:** Onagraceae (4+1)
- *excorticata* New Zealand. D&D 1945, (Bean I lib)
- *macrostemma (magellanicana var. macrostemma)* Chile. Hill 1948, (Bean I lib)
- *magellanicana* Chile, Argentina. (Cook 1965)
- ‘Riccartonii’ Hort. D&D 1939, (Bean I lib)
- *splendens* Mexico. (Cook 1965)
### Appendix 3: Catalogue of the previous collection

**Galphimia: Malpighiaceae (1+0)**

- *glauca*  
  Mexico. HZ1949, (Bean S lib)

**Gardenia: Rubiaceae (2+1)**

- * florida* (*jasminoides, grandiflora*)  
  China, Japan. A1939, (Bean I lib)

- *Flore Plena*  (Name not confirmed) D&D1946, (Bean I lib)

- *thunbergii*  
  S Africa. (Cook 1965). A1939, 49, (Bean I lib)

**Garrya: Garryaceae**

- *elliptica*  
  N America. D1932, S1939, W1939, (Bean I lib)

**Gaultheria: Ericaceae (10+0)**

- *cuneata*  
  China. H&S1948, (Bean S lib)

- *forrestii*  
  China. H&S1947, (Bean S lib)

- *fragrantissima*  
  India. H&S1947, (Bean S lib)

- *hispida*  
  Australia. H&S1948, (Bean S lib)

- *hookeri*  
  Himalaya. H&S1946 died, (Bean S lib)

- *miqueliana*  
  Japan. H&S1950, (Bean S lib)

- *trichophylla*  
  Himalaya, W China. Hill1948, (Bean I lib)

- *veitchiana*  
  China. Hill1948, (Bean I lib)

- *wardii*  
  Tibet. H&S1948, (Bean S lib)

- *wisleynensis*  (Name not confirmed) H&S1950, (Bean S lib)

**Gaya: Malvaceae**

- *lyallii*  
  see *Hoheria lyallii*  
  New Zealand. W1939, (Bean I lib)

**Gelsemium: Loganiaceae (0+1)**

- *sempervirens*  
  N America. D1943, (Bean I lib)

**Genista: Fabaceae - Papilionaceae (11+0)**

+ *aetnensis*  
  Sicily. D1948, (Bean I lib)

+ *cinerea*  
  Spain. H&S1948, (Bean I lib)

- *dalmatica* (*silvestris*)  
  Adriatic coast. H&S1950, (Bean I lib)

- *falcata*  
  Spain. H&S1948, (Bean I lib)

- *germanica*  
  Europe. S1938, (Bean I lib)

- *gracilis*  (Name not confirmed) D1942, H&S1947, (Bean S lib)

- *januensis*  
  Italy Slovenia, Romania, Balkans. (Cook 1965)

- *lydia*  
  Balkans, Syria. H&S1950, (Bean I lib)

- *monosperma*  
  Spain, Portugal. S1935, H1937, (Bean I lib)

- *pilosa*  
  Europe, Sweden. H&S1947, (Bean I lib)

- *sagittalis*  
  Europe, Balkans. S1939, (Bean I lib)

- *stenopetala*  (Name not confirmed) D1948, (Bean S lib)

- *virgata* (*tinctoria* var. *virgata*)  
  Europe. H1950, (Bean I lib)

**Gevuina: Proteaceae (1+0)**

- *avellana*  
  Chile. Ford1946, H&S1946, D1947, (Bean S lib)

**Ginkgo: Ginkgoaceae (0+1)**

+ *biloba*  
  China. D1937, 42, 45, (Bean I lib)

+ *‘Fastigiata’*  
  H&S1948, (Bean I lib)

+ *‘Pendula’*  
  H&S1948, (Bean I lib)

**Gleditsia: Fabaceae - Caesalpinaceae (0+1)**

+ *caspica*  
  Iran, Transcaucasia. (RHS 2, EWH), planted GD1960, (Bean EWH)

+ *japonica*  
  Japan, China. D1937, H&S1946, planted circus, (Bean I lib)
Appendix 3: Catalogue of the previous collection

+ *koraiensis* (*Japonica koraiensis*) H&S1948, (Bean S lib)
+ *sinensis* China. H&S1946, (Bean S lib)
+ *triacanthos* N.America. D1935. circus, garden. (Bean I lib)

‘Pendula’ ('Bujotii') (Bean, EWH)

*Glochidion*: Euphorbiaceae (1+0)

*fortunei* China. H&S1948, Lushan Bot gdn, (Bean S lib)

*Glyptostrobus*: Taxodiaceae (1+0)

*sinensis* (Name not confirmed) D1939,40, (Bean S lib)

*Gordonia*: Theaceae (3+0)

+ *alatamaha* (*Franklinia alatamaha*) N.America. garden, (RHS 2, EWH), (Rehder, EWH)
+ *axillaris* (*anomala*) China. D1942 garden,cabin, (RHS 2, EWH), (Bean S lib)
+ *chrysantha* China. H&S1947,50, (Bean I lib)
+ *lasianthus* N.America. H&S1948, (Bean I lib)

*pubescentis* (NNC) H&S1950, (Bean I lib), (Rehder,EWH)

*Grevillea*: Proteaceae (7+1)

+ *alpina* 'Dallichiana' Australia. W1937, D1941,42, (Bean S lib)
+ *banksii* 'Forsters form' Australia. HZ1949, (Bean S lib)
+ *dimorpha* (*speciosa ssp. dimorpha*) Australia. W1937, D1941, (Bean S lib)
+ *fasciculata* Australia. D&D1959, (RHS2).
+ *obtusifolia* Australia. D1941, (Bean S lib)
+ *oleoides* (*speciosa ssp. oleoides*) Australia. (PPL)
+ *oleoides ssp. dimorpha* sec *dimorpha* Australia. (PPL)
+ *punicea* Australia. (PPL)
+ *robusta* Australia. H&S1948, (Bean S lib)
+ *sericea* Australia. W1959, (Bean S lib)
+ *williamsii* (*rosarinifolia*) Australia. D1941,42,43, W1939, (Bean S lib)

*Grewia*: Tiliaceae (2+0)

+ *occidentalis* Africa. H1940, (Bean I lib)
+ *parvijlorica* (*biloba var. parvijlorica*) N.China, Korea. (Cook 1965)

*Grevia*: Melianthaceae (1+0)

+ *sutherlandii* Africa. D1946, (Bean I lib)

*Griselinia*: Cornaceae (0+1)

+ *littoralis* 'Variegata' New Zealand. (Cook 1965)

*Gymnocladus*: Fabaceae - Caesalpinaceae

+ *canadensis* (*dioica*) N.America. Stevens1938, H&S1958, (Bean I lib)

*Hakea*: Proteaceae (2+0)

+ *cyclocarpa* Australia. D1947, (Bean S lib)
+ *eucalyptoides* (*laurina*) Australia. Wilson1947, (Bean S lib)

*Halesia*: Styracaceae

+ *carolina* Hill1964, (RHS2).

*Halimium*: Cistaceae (4+0)

+ *alyssoides* (*Cistus alyssoides*) Spain, France. (Cook 1965)
+ *lasianthum* (*Cistus lasianthus*) Portugal. (Cook 1965)
+ *lasianthum ssp. formosum* (*Cistus formosus*) Meditt.
+ *ocymoides* (*Cistus ocymoides, Helianthemum ocymoides*) Portugal, Spain. (Cook 1965)
Appendix 3: Catalogue of the previous collection

**Halimocistus: Cistaceae (1+0)**
- *wintonensis* Hort. D1946, (Bean I lib)

**Halimodendron: Fabaceae - Papilionaceae (1+0)**
- *argentatum* (halodendron) Transcaucasus, Turkestan. S1935, (Bean I lib)

**Hamamelis: Hamamelidaceae (3+3)**
- *x intermedia* 'Hiltingbury' Hort. H&S1947, (Bean I lib)
- *japonica* Japan. (Bean I lib)
- *Arborea* H&S1937, (Bean I lib)
- *Rubra* W1935, S1937, (Bean S lib)
- *Virginiana* (Name not confirmed) (Bean, EWH)

**Hamadendron: Papilionaceae (1+0)**
- *Transcaucasus, Turkestan. 519 35, (Bean I lib)

**Hamamelis: Hamamelidaceae (3+3)**
- *mollis* China. D1935,45,47, S1935, W1937, (Bean I lib)
- *sinensis* (Name not confirmed) (Bean, EWH)
- *vernalis* N.America. (Bean I lib)
- *virginiana* N.America. (Bean I lib). (Cook 1965)

**Hardenbergia: Fabaceae - Papilionaceae (1+0)**
- *comptoniana* Australia. D1941,47, (Bean I lib)

**Harpephyllum: Anacardiaceae (1+0)**
- *caffrum* S.Africa. HZ1949, (Bean II lib)

**Harpullia: Sapindaceae (1+0)**
- *pendula* Australia. HZ1949, (Bean I lib)

**Hartia: Theaceae**
- *sinensis* see *Stewartia sinensis* H&S1948, (Bean S lib)

**Hebe: Scrophulariaceae (3+4)**
- *x andersonii* (speciosa x salicifolia) (PPL)
- *Hagley Park* (rasouli x hulkeana). Hort. (PPL)
- *Hulkeana* New Zealand. D&D1937,45,46, (Bean II lib).
- *Macrocarpa var. latipetala* New Zealand. D&D1946, (Bean II lib).
- *Rainers Beauty* (Name not confirmed). (PPL)
- *speciosa* New Zealand. D&D1946, (Bean II lib).
- *stricta* New Zealand. (Catalogue 1980)
- *Violet Miekle* (Name not confirmed). (PPL)

**Helianthemum: Cistaceae**
- *alpestre* (oelandicum ssp. alpestre, Cistus alpestris) Balkans. D1945, (Bean I lib)
- *ocymoides* (Halimium ocymoides) Spain, Portugal. D1942, (Bean I lib)

**Hemitelia: Cyatheaceae (1+0)**
- *smithii* (Alsophila smithii, Cyathea smithii) New Zealand. (Cook 1965)

**Heteromeles: Rosaceae (1+0)**
- *arbutifolia* (Photinia arbutifolia) Santa Catalina. S1935, (Bean I lib)

**Hibiscus: Malvaceae (0+3)**
- *moscheutos* 'Rosea' N.America. D1939, (Bean I lib)
- *mutabilis* China. D1939, (Bean I lib)
- *syracuse* China, India.
  - *Coelestis* H1939, (Bean I lib)
  - *Montrosus* H1939, (Bean I lib)
Appendix 3: Catalogue of the previous collection

*Hoheria: Malvaceae (2+0)*
- angustifolia New Zealand. (Cook 1965)
- lyallii *(Gaya lyallii)*

*Holboellia: Lardizabalaceae*
+ latifolia China. (Bean, EWH)

*Holmskioldia: Verbenaceae (1+0)*
- sanguinea Himalaya. HZ1949, (Bean I lib)

*Holodiscus: Rosaceae (1+0)*
- discolor *(Spiraea discolor)* N. America. (RHS 2, EWH)

*Homalanthus: Euphorbiaceae (1+0)*
- populifolius Ceylon to Pacific. HZ1949, (Bean I lib)

*Hovea: Fabaceae - Papilionaceae (1+0)*
- celsii *(elliptica)* Australia. D1941,42, (Bean I lib)

*Hovenia: Rhamnaceae*
+ dulcis China, Himalaya. D1937, (Bean I lib)

*Hydrangea: Saxifragaceae (5+38)*
- acuminata see serrata
- arborescens ‘Grandiflora’ N. America. H&S1947, (Bean I lib)
- bretscheideri *(heteromalla ‘Bretscheideri’)* India, Himalaya, China. D1947, H&S1947, (Bean I lib)
- involucrata Japan. H&S1947,50, (Bean I lib)
- macrocephala *(Name not confirmed)* Japan? H&S1948, (Bean I lib)
+ macrophylla Japan.
  - ‘Aisisi’ *(Name not confirmed)*. (Cook 1965)
  - ‘Amaranta’ *(Name not confirmed)*. (Cook 1965)
  - ‘Blue Prince’ (Cook 1965)
+ ‘Blue Wave’ H&S1948, (Bean I lib)
  - ‘Cochloca Amonica’ *(Name not confirmed)*. (Cook 1965)
  - ‘Colonel Durham’ *(Name not confirmed)*. (Cook 1965)
  - ‘Florence Bolt’ *(Name not confirmed)*. (Cook 1965)
  - ‘F.Mathes’ *(Name not confirmed)*. (Cook 1965)
  - ‘Generale Vicomtesse de Vibraye’ *(Cook 1965)*
  - ‘Germaine Moulliere’ *(Name not confirmed)*. (Cook 1965)
  - ‘Goliath’ (Cook 1965)
+ ‘Hortensis’ *(f.hortensia)* H&S1948, (Bean I lib)
  - ‘King George’ (Cook 1965)
  - ‘Krimheld’ *(Name not confirmed)*. (Cook 1965)
  - ‘Lancelot’ *(Name not confirmed)*. (Cook 1965)
  - ‘Loreley’ (Cook 1965)
  - ‘Madame A. Riverain’ (Cook 1965)
  - ‘Madame Truffant’ *(Name not confirmed)*. (Cook 1965)
  - ‘Marie Mathies’ *(Name not confirmed)*. (Cook 1965)
  - ‘M.Ludenburge’ *(Name not confirmed)*. (Cook 1965)
  - ‘Montrose’ *(Name not confirmed)*. (Cook 1965)
  - ‘Mrs H.J. Jones’ *(Name not confirmed)*. (Cook 1965)
Appendix 3: Catalogue of the previous collection

'Neidersachsen' (Cook 1965)
'Neige Orleanise' (Name not confirmed). (Cook 1965)
'Neivrow Baardse' (Name not confirmed). (Cook 1965)
'Paris' (Name not confirmed). (Cook 1965)
'Parzival' (Cook 1965)
'Pasteur' (Name not confirmed). (Cook 1965)
'Peer Gynt' (Name not confirmed). (Cook 1965)
'Queen Wilhelmina' (Name not confirmed). (Cook 1965)
'Rose Perfection' (Name not confirmed). (Cook 1965)
'Rubis' (Name not confirmed). (Cook 1965)
'Schrone Dresdnerin' (Name not confirmed). (Cook 1965)
'Splendens' (Name not confirmed). (Cook 1965)
'Victoria' (Name not confirmed). (Cook 1965)
'W.E.Cartwright' (Name not confirmed). (Cook 1965)
'White Wave' (PPL)

+ petiolaris Japan, Korea. S1939,41, (Bean 1 lib)
+ quercifolia N.America. D1945, (Bean 1 lib)
  robusta (aspera ssp. robusta) China. H&S1947, (Bean S lib)
  sargentiana (aspera ssp. sargentiana) China. H&S1947, (Bean 1 lib)
  serrata (acuminata) Japan, Korea. (Bean S lib)
  'Grayswood' Japan, Korea. H&S1948, (Bean 1 lib)
+ strigosa (aspera ssp. strigosa) China. H&S1948, (Bean S lib)
+ villosa (aspera var. aspera) China, Taiwan. D1942, (Bean S lib)
+ xanthoneura (heteromalla) India, China, Himalaya. Massey 1948, (Bean 1 lib)

Hypericum: Hypericaceae (5+3)
  aureum Bartr. not Lour. (frondosum) N.America. H&S1947, (Bean 1 lib)
  calycinum Europe, Asia minor. H&S1947, (Bean 1 lib)
  forrestii (patulum var. forrestii) China, Assam, Burma. (Cook 1965)
  hircinum Europe. H&S1947, (Bean 1 lib)
+ x mosserianum 'Tricolor' (patulum x calycinum). Hort. H&S1947, (Bean 1 lib)
  patulum 'Grandiflorum' China. H&S1946, (Bean 1 lib)
  patulum var. henryi China. (Cook 1965)
  patulum 'Sungold' (kouytchense) China. (PPL)
  'Rowallane' (hookerianum 'Rogersii' x leschenaultii). Hort. H&S948, (Bean 1 lib)

Hypocalymma: Myrtaceae (1+0)
  robustum Australia. (Cook 1965). D&D1949, (Bean 1 lib).

Idesia: Flacouriaceae (0+1)
  polycarpa China. S1935, H1937, D1938, (Bean I lib)
  polycarpa special berrying H1939, (Bean I lib)

Ilex: Aquifoliaceae (11+5)
  altaclarensis 'Camelliifolia' (aquifolium x perado). Hort. H&S1948, (Bean 1 lib)
  aquifolium Europe.
  'Argenteomarginata' H&S1946, (Bean 1 lib)
  'Argenteoregina' ('Silver Queen') (Cook 1965)
Appendix 3: Catalogue of the previous collection

+ \textit{‘Aureomarginata’} D1939, H1946, (Bean I lib)
+ \textit{‘Aureoregina’} (‘Golden Queen’) (Cook 1965). H&S1948, (Bean S lib)
+ \textit{‘Ferox’} D1939, (Bean I lib)
+ \textit{‘Ferox Aurea’} H&S1948, (Bean I lib)
+ \textit{crenata} Japan.
  + \textit{‘Convexa’} Hill1964, (RHS2).
  + \textit{‘Mariesii’} Japan 1976, (RHS 2, EWH)
  + \textit{‘Variegata’} Hill1964, (RHS2).

\textit{forrestii} China. H&S1948, (Bean S lib)
\textit{fragilis} Himalaya. H&S1947, (Bean I lib)
+ \textit{franchetiana} China. H&S1948 (Bean I lib), planted 1960 GD,(RHS 2, EWH)
+ \textit{insignis (kingiana)} Himalaya. H&S1947, (Bean I lib)
+ \textit{macrocarpa} China. planted 1960 GD, (RHS 2, EWH)
\textit{opaca} N.America. (RHS 2, EWH)
+ \textit{pedunculosa} Japan. Hill1964, (RHS 2, EWH)
\textit{pekinesis} (Name not confirmed) (Bean, EWH)
\textit{pernyi} China. H&S1948, (Bean I lib)
+ \textit{platyphylla (perado var. platyphylla)} Madeira. H&S1948,(Bean I lib)
\textit{platyphylla maderensis?} (could this be \textit{perado = perado var. maderensis}) H&S1950, (Bean I lib)
\textit{rotunda} Korea, Japan, China. (Rehder, EWH)
\textit{rugosa} Japan.
  + \textit{argutidens} ? (Name not confirmed) (RHS 2, EWH)
\textit{serrata} Japan, China.
  + \textit{angusta} (Name not confirmed) S1941, (Bean I lib)
+ \textit{verticillata} N.America. S1938,39 H&S1948, (Bean I lib)
\textit{wilsonii} China, Taiwan. H&S1948, (Bean I lib), (RHS 2, EWH)
\textit{yunnanensis} China. (Bean, EWH)

\textbf{Illicium:} Illiciaceae (1+0)
+ \textit{anisatum} Japan. D1938, (Bean I lib)
\textit{floridanum} N.America. planted GD, (RHS 2, EWH)

\textbf{Indigofera:} Fabaceae: Papilionaceae (3+0)
+ \textit{gerardiana (heterantha)} Himalaya. D1934, (Bean I lib)
\textit{hebepestala} Himalaya. (PPL). (RHS2).
\textit{pendula} China. D1938, (Bean S lib)
\textit{potaninii} China. H&S1937,47, (Bean S lib)

\textbf{Iochroma:} Solanaceae (2+0)
\textit{lanceolatum (cyaneum)} S.America. (Cook 1965)
\textit{tubulosa} Tropical America. 1957, (RHS2).

\textbf{Ipomaea:} Convolvulaceae (2+0)
\textit{cneorum (Convolvulus cneorum?)} (Cook 1965)
\textit{learii (acuminata)} Tropical America. D&D1941, (Bean I lib)

\textbf{Itea:} Saxifragaceae (1+0)
+ \textit{illicifolia} China. H&S1947, (Bean I lib)
\textit{virginica} N.America. H&S1947, (Bean I lib)
+ \textit{yunnanensis} China. H&S1948,50, (Bean S lib)
Appendix 3: Catalogue of the previous collection

**Jacaranda: Bignoniaceae**
- *ovalifolia (mimosifolia)* Argentina. D1941,43,45, (Bean I lib)

**Jacobinia: Acanthaceae (1+0)**
- *magnifica (Justicia carnea, Jacobinia carnea)* S.America. HZ1949, (Bean I lib)

**Jasminium: Oleaceae (9+1)**
- *azoricum* Azores. D1949, (Bean S lib)
- *beesianum* China. D1942, (Bean S lib)
- *grandiflorum* L. Arabia. D1945, (Bean I lib)
- *heterophyllum (subhumile)* Himalaya, China. (Redber, EWH)
- *heterophyllum var. glabrifolium* Himalaya, China. H&S1948, (Bean S lib)
- *humile* Afghanistan, Szechuan. H&S1950, (Bean I lib)
- *nigidum* Admiralty Island. HZ1949, (Bean I lib)
- *nudiflorum (sieboldianum)* China. green whare, (Bean EWH)
- *officinalis* Iran to China. cabin, garden, (Bean EWH)
- *officinalis 'Grandiflorum' (officinale f. affine, grandiflorum Hort., not L.)* Himalaya. (Cook 1965)
- *parkeri* India. H&S1947, (Bean S lib)
- *revolutum (humile var. revolutum)* Himalaya, Kashmîr. N1935, (Bean I lib)
- *sambac* India. HZ1949, (Bean I lib)
- *x stephanense (beesianum x officinale)* Hort. H1934, (Bean S lib)

**Jovellana: Scrophulariaceae (1+0)**
- *violacea* Chile. (Cook 1965)

**Juglans: Juglandaceae (2+1)**
- *cathayensis* China. H&S1950, (Bean I lib)
- *cinerea* N.America. seed 1950 Wanganui, (Bean I lib)
- *cordiformis (ailantifolia var. cordiformis)* Japan, Sakhalin. Horton, (Bean I lib)
- *regia* Europe, Asia.
  - 'Laciniata' S1938, (Bean I lib)
  - 'Maxima' (RHS 3, EWH)
  - 'Wilson's Wonder' (Name not confirmed) (Cook 1965)
- *rupestris (microcarpa)* N.America. (RHS 3, EWH)
- *sieboldiana Maxim. (ailantifolia)* Japan. Horton, (Bean I lib)

**Juniperus: Cupressaceae (8+13)**
- *africanus* (Name not confirmed) D1935,45,46, (Bean I lib)
  - 'Glaucia' (Name not confirmed) H1943,45, (Bean I lib)
- *bermudiana* Bermuda Island. W1939, (Bean I lib)
- *cedrus* Canary Island. H&S1947, (Bean I lib)
- *chinensis* China. Japan. W1939, D1937,45, (Bean I lib)
  - 'Albo Variegata' D1945, (Bean I lib)
  - 'Aurea' D1945, (Bean I lib)
  - 'Aurea Variegata' D1943, (Bean I lib)
  - 'Prostrata Aurea' (Name not confirmed) D1943, (Bean I lib)
- *communis* Europe, Asia, America. D1937,45,H&S1948, (Bean I lib)
  - 'Compacta' D1943, (Bean I lib)
  - 'Compacta Aurea' (Name not confirmed) D1943, (Bean I lib)
+ *'Fastigiata' (f.sucicca)* D1937, (Bean I lib)
Appendix 3: Catalogue of the previous collection

'Hibernica Compressa'  
conferta  Sakhalin, Japan. H&S 1948, (Bean S lib)

excelsa 'Stricta'  
Caucasus, Asia minor. H&S 1947, (Bean I lib)

horizontalis  
N. America. D1937, (Bean I lib)

'Bar Harbor'  
H&S 1948, (Bean I lib)

'Douglasii'  
H&S 1950, (Bean I lib)

x media  
N.E. Asia.

'Pfitzerana'  
D1945, (Bean I lib)

'Pfitzerana Aurea'  
H&S 1948, (Bean I lib)

monosperma  
N. America. H&S 1947,48,50, (Bean I lib)

morrisonicola  
Taiwan. H&S 1948, (Bean S lib)

oxycedrus  
Mediterranean, Iran. H&S 1947, (Bean I lib)

pachyphlaea (depeana var. pachyphlaea)  
N. America, Mexico. H&S 1948, (Bean I lib)

prosera  
Africa. H&S 1947, (Bean I lib)

procumbens (chinensis var. procumbens)  
Japan. D1945, new drive, (Bean I lib)

recurva  
China, Burma. H&S 1948,50, (Bean I lib)

recurva var. coxii  
H1933, S1937, D1945, (Bean S lib)

sabina 'Knap Hill'  
Europe, Asia minor. D1937,45, (Bean I lib)

squamata  
Afghanistan to Taiwan. H&S 1948,50, (Bean I lib)

virginiana  
N. America. D1937, (Bean I lib)

'Glaucifolia'  
H&S 1948, (Bean I lib)

'Schotti'  
H&S 1948, (Bean I lib)

wallichiana (pseudosabina Hook. f., not Fisch & May.)  
Himalaya. H&S 1948, (Bean I lib)

Kadsura: Shisandraceae (1+1)

japonica  
Japan. H&S 1948, (Bean I lib)

'Variegata'  
H&S 1964, (Bean EWH), (RHS 3, EWH)

Kalina: Ericaceae (2+3)

angustifolia  
N. America. D1941, (Bean I lib)

'Ovata'  
H&S 1950, (Bean I lib)

'Rubra'  
H&S 1950, (Bean I lib)

glaucifolia (polifolia)  
N. America. S1937, (Bean I lib)

latifolia  
N. America. S1935,37,39, D1938, (Bean I lib)

'Clementine Churchill'  
H&S 1964, (Bean EWH)

Kennedia: Fabaceae - Papilionaceae (5+0)

comptoniana  
(Name not confirmed) (Bean S lib)

lindleyana  
(Name not confirmed) D1946, (Bean S lib)

prostrata  
Australia. D1947, (Bean S lib)

prostrata var. marginata  
(Name not confirmed) D&D1947, (Bean S lib)

rubicunda  
Australia. D1945, (Bean S lib)

stirlingii  
Australia. D1945,47, (Bean S lib)

Keteleaer: Pinaceae (1+0)

fortunei  
China. H&S 1947, (Bean I lib)

Knighta: Proteaceae

excelsa  
New Zealand. (Cook 1965)
Appendix 3: Catalogue of the previous collection

Koelreuteria: Sapindaceae (0+1)
+ *paniculata var. apiculata* China. H&S 1937, (Bean S lib)
  *paniculata ‘Fastigiata’* China. H&S 1950, (RHS 3, EWH)

Kolkwitzia: Caprifoliaceae
+ *amabilis* China. H1926, S1937,41, (Bean I lib)

Laburnum: Fabaceae - Papilionaceae (3+2)
+ *adami* (+ Laburnocytisus adami) Hort. (Cook 1965)
  *anagyroides* ‘Quercifolium’ Europe. H&S 1950?, (RHS 3, EWH)
  *caramanicum* Greece, Asia minor. H&S 1947, (Bean II lib)
  ‘Glasgow’ (Name not confirmed) (PPL)
  *x watereri* (alpinum x anagyroides). Hort. D1945, (Bean II lib)

Lagerstroemia: Lythraceae (0+1)
+ ‘Eavesii’ (x matthewii x indica). Hort. D1945,37, A1939, (Bean S lib)
  ‘Rubra’ Hort. D1945, (Bean S lib)

Lagunaria: Malvaceae
+ *patersonii* Australia. H1937, D1942, (Bean II lib)

Lambertia: Proteaceae (2+0)
+ *ericifolia* Australia. D1946, (Bean II lib)
  *formosa* Australia. W1946, D1946, (Bean II lib)

Lapergeria: Philesiaceae (1+1)
+ *rosea* Chile. D1937,41,42,47, (Bean S lib)
  ‘Alba’ (Cook 1965)

Larix: Pinaceae (7+3)
+ *dahurica* (gmelini) E. Siberia. H&S 1947, (Bean II lib)
  *europaea* (decidua) Europe
  ‘Fastigata’ H&S 1947, (Bean II lib)
  ‘Pendula’ H&S 1948, (Bean II lib)
  ‘Sibirica’ (Name not confirmed) H&S 1948, (Bean II lib)
  *x eurolepis* (decidua x kaempferi). Hort. H&S 1947,50, (Bean S lib)
  *gmelini* (dahurica)
  *griffithii* China. H&S 1948, (Bean II lib)
  *leptolepis* (kaempferi) Japan. H&S 1947, (Bean II lib)
  *occidentalis* N. America. H&S 1947,50, (Bean II lib)
  *x pendula* Salis. *americanas pendula* Loud. Hort?, H&S 1946, (Bean S lib)
  *potaninii* China. H&S 1947,50, (Bean II lib)
  *principis var. rupprechtii* (gmelini var. principis rupprechtii) Korea. H&S 1946,50, (Bean S lib)
  *sibirica* Russia. (Cook 1965)

Lathyrus: Fabaceae - Papilionaceae (1+0)
+ *pubescens* Chile. (Catalogue 1980)

Laurelia: Monimiaceae (2+0)
+ *novae-zealandiae* New Zealand. (Cook 1965)
  *serrata* Chile. H&S 1947, (Bean II lib)

Laurus: Lauraceae
+ *canariensis* (azorica) Canaries. (Bean EWH)

Lavandula: Lamiaceae (1+1)
+ *lanata* Spain. RHS seed 1946, (Bean S lib)
Appendix 3: Catalogue of the previous collection

‘Miss Donnington’ (Name not confirmed) RHS seed 1945, (Bean S lib)

Ledum: Ericaceae
+ stoechas Mediterranean. RHS seed 1946, (Bean S lib)

Leiothlyllum: Ericaceae (1+0)

buxifolium var. hugeri N. America. H&S 1947, (Bean II lib)

Leptodermis: Rubiaceae (2+0)

kumaonensis Himalaya. H&S 1947, (Bean S lib)

Leptospermum: Myrtaceae (1+5)

‘Australian pink’ (NNC) D1942, (Bean II lib)
persiciflorum (squarrosum) Australia. S1959, (Bean II lib)

Leucodendron: Proteaceae (9+0)


bolusii S. Africa. (PPL)

incisum (vestitum) S. Africa. D&D1948, (Bean II lib)
nutans S. Africa. (PPL)

Leucospermum: Proteaceae (7+0)

strictum (salicifolium) S. Africa. (Cook 1965)

venosum S. Africa. (Cook 1965)

Leucobothia: Ericaceae (1+0)

racemosa N. America. H&S 1946, (Bean II lib)

Leycesteria: Caprifoliaceae (2+0)
crocothyrsos Assam, removed, pest, (Bean EWH)

formosa Himalaya, as above.

Lhotskya: Myrtaceae (1+0)

genetyoides (alpestris) Australia. W1937, (Bean II lib)
Appendix 3: Catalogue of the previous collection

**Libocedrus: Cupressaceae (2+0)**
- *bidwillii* New Zealand. (Cook 1965)
- *decurrens* (*Calocedrus decurrens*) N.America. D1937, H&S1948, (Bean II lib)
- *formosana* (*Calocedrus formosana*) Formosa. circus, (RHS 3, EWH)
- *macrolepis* (*Calocedrus macrolepis*) Yunnan. (Cook 1965). Hill1950, (Bean S lib)
- *plumosa* New Zealand. (RHS 3, EWH)
- *tetragona* (*Libocedrus uvifera, Pilgerodendron uviferum*) Chile, Argentina. circus, (RHS 3, EWH). H&S1948 (Bean II lib)

**Ligustrum: Oleaceae (4+0)**
- *confusum* Himalaya, India. H1948
- *japonicum* Japan. H&S1948, (Bean II lib)
- *lucidum* China. H&S1948, (Bean II lib)
- *obtusifolium* Japan. (Bean, EWH)
- *ovalifolium 'Aureum' Japan. 1914, (Bean II lib)
- *sinense* China. H&S1948, (Bean II lib)
- *vulgare* Europe. (Cook 1965)
- *sp Yu* (Cook 1965)

**Lindera: Lauraceae (3+0)**
- *bensoin* N.America. Horton1920, H&S1948, (Bean II lib)
- *megaphylla* China. H&S1950, (Bean II lib)
- *praecox* Japan, Korea. (Cook 1965)

**Lippia: Verbenaceae (1+0)**
- *citriodora* (*Aloysia triphylla*) Chile. D1941, (Bean II lib)

**Liquidambar: Hamamelidaceae**
- *formosana* China. D1939, (Bean II lib)
- *orientalis* Asia minor. H&S1947, (Bean II lib)

**Liriodendron: Magnoliaceae**
- *chinense* China. H&S1937, (Bean II lib)

**Lithocarpus: Fagaceae (4+0)**
- *carnea* (Name not confirmed) (RHS 3, EWH) (Could this be *L. cornus* of W.China)
- *densiflorus* N.America. Washington Arboretum 1962, (Bean EWH)
- *densiflorus var. echinoides (echinoides)* N.America. Hill, (RHS 3, EWH)
- *pachyphyllus (Quercus pachyphylla)*. E.Himalaya.

**Lomatia: Proteaceae (5+0)**
- *ferruginea* Chile. H&S1947, (Bean II lib)
- *longifolia* Australia. H&S1948, (Bean S lib)
- *magellanica* (Name not confirmed) H&S1948, (Bean S lib)
- *obliqua (hirsuta)* Chile. H&S1947, (Bean II lib)
- *salalifolia* Australia. D, (Bean II lib)
- *tintoria* Tasmania. H&S1948, (Bean S lib)

**Lonicera: Caprifoliaceae (11+2)**
- *caprifolium* Europe, Caucasus, Asia minor. (Cook 1965)
- *chrysantha* Asia, Japan. H&S1947, (Bean S lib)
- *etrusca* Mediterranean. H&S1948, on white top fence near old shade house
### Appendix 3: Catalogue of the previous collection

<table>
<thead>
<tr>
<th>Name</th>
<th>Origin</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Etrusca var. pubescens</strong></td>
<td>Mediterranean</td>
<td>H&amp;S 1948 (Bean II)</td>
</tr>
<tr>
<td><strong>X heckrottii</strong></td>
<td>(sempervirens x americana)</td>
<td>N. America.H&amp;S 1946 (Bean II)</td>
</tr>
<tr>
<td><strong>Henri</strong></td>
<td>China. D1941</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Hildebrandiana</strong></td>
<td>Himalaya. D1934, 41, 42</td>
<td>(Bean II lib)</td>
</tr>
<tr>
<td><strong>Involutata</strong></td>
<td>N. America.</td>
<td>(RHS 3, EWH)</td>
</tr>
<tr>
<td><strong>Korolkowii</strong></td>
<td>Turkest. D1941</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Maackii</strong></td>
<td>China. Japan. G1937</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Nitida</strong></td>
<td>China. (Cook 1965)</td>
<td></td>
</tr>
<tr>
<td><strong>Plantierensis</strong></td>
<td>(brownii plantierensis)</td>
<td>Hort. H&amp;S 1946, (Bean II)</td>
</tr>
<tr>
<td><strong>Pyrenaica</strong></td>
<td>Spain. H&amp;S 1947</td>
<td>(Bean II)</td>
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<tr>
<td><strong>Quinquelocularis</strong></td>
<td>Himalaya. H&amp;S 1947</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Sempervirens</strong></td>
<td>N. America.</td>
<td>Slocok1938, D1941, 42, (Bean II)</td>
</tr>
<tr>
<td><strong>Splendida</strong></td>
<td>Spain. D1941</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Standishii</strong></td>
<td>China. D1932</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Syringantha</strong></td>
<td>China. S1935, H1940</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Tatarica</strong></td>
<td>Russia, Turkest. seed</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><em>Pulcherina</em></td>
<td>(‘Latifolia’)</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><em>Rosea</em></td>
<td>H&amp;S 1957</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>X tellmanniana</strong></td>
<td>(tragophylla x sempervirens <em>Superba</em>). Hort. S1937</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Tragophylla</strong></td>
<td>China. H&amp;S1948</td>
<td>(Bean II)</td>
</tr>
</tbody>
</table>

### Loropetalum: Hamamelidaceae

<table>
<thead>
<tr>
<th>Name</th>
<th>Origin</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Luehea</strong></td>
<td>Tiliaceae (1+0)</td>
<td></td>
</tr>
<tr>
<td><strong>Divaricata</strong></td>
<td>Sth America.</td>
<td>D&amp;D1949 (Bean II)</td>
</tr>
</tbody>
</table>

### Luculia: Rubiaceae (4+0)

<table>
<thead>
<tr>
<th>Name</th>
<th>Origin</th>
<th>Authors</th>
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<tbody>
<tr>
<td><strong>Gratissima</strong></td>
<td>Himalaya. H&amp;S 1950</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Funeiana</strong></td>
<td>(Name not confirmed)</td>
<td>H&amp;S 1950 (Bean II)</td>
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<tr>
<td><strong>Grandifolia</strong></td>
<td>Bhutan. 1957 (RHS3)</td>
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<tr>
<td><strong>Pinceana</strong></td>
<td>Nepal, Assam. (Cook 1963)</td>
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### Maackia: Fabaceae - Papilionaceae (3+0)

<table>
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<th>Name</th>
<th>Origin</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amurensis</strong></td>
<td>China. Hill1958</td>
<td>(RHS 3, EWH)</td>
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<tr>
<td><strong>Amurensis var. buergeri</strong></td>
<td>Japan. S1939, 40</td>
<td>(Bean II)</td>
</tr>
<tr>
<td><strong>Chinensis</strong></td>
<td>China. (RHS 3, EWH)</td>
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### Macadamia: Proteaceae (1+0)

<table>
<thead>
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<th>Name</th>
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<tr>
<td><strong>Ternifolia</strong></td>
<td>Australia. D1942, 46</td>
<td>(Bean II)</td>
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</table>

### Mackaya: Acanthaceae (1+0)

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<th>Origin</th>
<th>Authors</th>
</tr>
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<tbody>
<tr>
<td><strong>Bella</strong></td>
<td>S.Africa. HZ1948</td>
<td>(Bean II)</td>
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</table>

### Maclura: Moraceae (1+0)

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<th>Name</th>
<th>Origin</th>
<th>Authors</th>
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<tr>
<td><strong>Pomifera</strong></td>
<td>N. America.</td>
<td>(Cook 1965)</td>
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### Magnolia: Magnoliaceae (13+18)

<table>
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<th>Name</th>
<th>Origin</th>
<th>Authors</th>
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<tr>
<td><strong>Ashei</strong></td>
<td>N. America.</td>
<td>(RHS 3, EWH)</td>
</tr>
<tr>
<td><strong>Biondii</strong></td>
<td>China. Hill1964</td>
<td>(RHS3)</td>
</tr>
<tr>
<td><strong>Campbellii ‘Lanarth’</strong></td>
<td>(Cook 1965)</td>
<td></td>
</tr>
<tr>
<td><strong>Campbellii ssp. mollicomata</strong></td>
<td>‘Best pink’</td>
<td>(NNC) Himalaya. H&amp;S1946, 48, 50, (Bean II)</td>
</tr>
<tr>
<td><strong>Campbellii ssp. mollicomata</strong></td>
<td>‘Fastigiata’</td>
<td>H&amp;S 1947, (Bean II)</td>
</tr>
</tbody>
</table>

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For a full list of trees and their origins, please refer to the provided catalogue and sources mentioned.
Appendix 3: Catalogue of the previous collection

+ cocco Java. H&S1947, (Bean S lib)
+ dawsoniana China. H&S1937,47, (Bean S lib)
+ denudata (conspicua, heptapeta). China. D1926,37, H&S1947, (Bean II lib)
+ ‘Purple eye’ (Bean, EWH)
  late flowering. (Name not confirmed) (Bean, EWH)
+ ‘Picture’ (Name not confirmed) (Bean, EWH)
  pure white form (Name not confirmed) (Cook 1965)
+ ‘Triumphans’ (Name not confirmed) (Cook 1965)
+ fraseri (auriculata) N.America. H&S1937, (Bean II lib)
+ glauca (virginiana) N.America. D1934, S1937, (Bean II lib)
+ globosa (tarongensis) Himalaya. (Bean, EWH)
+ globosa var. sinensis (sinensis, nicholsoniana. Hort. not Rehd & Wils.) China. H&S1947, (Bean II lib)
+ grandiflora longifolia (Name not confirmed) D, (Bean II lib)
+ grandiflora ‘Undulata’ N.America. (Cook 1965)
+ ‘Highdownensis’ (sinensis x wilsonii) Hort. H&S1948, (Bean S lib)
+ hypoleuca (obovata) Japan. H1937,48, (Bean II lib)
+ kobus Japan. D1935,37, H1937, S1938,40,41, (Bean II lib)
+ liliflora (purpurea, pentapeta) China. D1924,37, (Bean II lib)
+ ‘Nigra’ D1942,43, (Bean II lib)
+ x loebneri (kobus x stellata). Hort. H1950, (Bean II lib)
+ ‘Merrill’ (Bean, EWH)
+ ‘Nigra’ (Name not confirmed) (Bean, EWH)
+ macrophylla N.America. H&S1937, (Bean II lib)
+ mollicomata see campbellii ssp. mollicomata
+ nicholsoniana see sinensis China. H&S1938, (Bean S lib)
+ nitida China, Tibet. H&S1948, (Bean S lib)
+ officinalis China. H&S1946,48,64, (Bean S lib)
+ ‘Flore Plena’ D1939, (Bean II lib)
+ pyramidata N.America. (Bean, EWH)
+ rostrata Tibet, China. H&S1947, (Bean S lib)
+ salicifolia Japan. H&S1937,47, D1945, (Bean II lib)
  var. concolor Japan. H&S1948, (Bean S lib)
+ sargentiana China. H&S1937, (Bean S lib)
+ sargentiana var. robusta China. H&S1946, (Bean S lib)
+ sinensis see globosa var. sinensis China. D1943, (Bean S lib)
+ soulangiana Hort.
+ ‘Alba’ H&S1937, (Bean II lib)
+ ‘Alba Superba’ D1947, (Bean II lib)
+ ‘Alexandrina’ D1941, (Bean II lib)
+ ‘Amabilis’ D1946, (Bean II lib)
+ ‘Brozzonii’ H&S1937,47, (Bean II lib)
+ ‘Lennel’ D1930,37,41, (Bean II lib)
+ ‘Norbettii’ D1937, (Bean II lib)
Appendix 3: Catalogue of the previous collection

+ ‘Rustica Rubra’ DI933,37, (Bean II lib)
+ ‘Speciosa’ DI942,46, (Bean II lib)
+ ‘Verbanica’ 3 planted GD1960, (Bean EWH)

*sprengeri* China. H&S1946, (Bean S lib)
+ *sprengeri var. diva* China. H&S1950, (Bean S lib)
+ *sprengeri var. elongata* China. H&S1946, (Bean S lib)
+ *stellata* Japan. Horton 1924,1937, (Bean EWH)
+ ‘Rosea’ Horton 1924, H1937, (Bean II lib)
+ ‘Waterlily’ garden. (Bean EWH). Hill, (RHS3).

+ *x thompsoniana* (*virginiana x tripetala*). Hort. H&S1937,50, (Bean II lib)
+ *tripetala* N.America. D1937, S1941, (Bean II lib)
+ *x veitchii* (*campbellii x denudata*). Hort. H&S1937, (Bean S lib)
+ *virginiana (glauc* N.America. D1937, S1937, H&S1947, (Bean EWH)
+ *x watsonii* (*hypoleuca x sieboldii*). Hort. H1937, D1938,43, (Bean II lib)
+ *wilsonii* China. H&S1948, S1937, D1955, (Bean S lib)

‘Lord Wakehurst’ DI937, 3rd bridge, (Bean S lib)

*Mahonia: Berberidaceae (5+0)*

+ *fortunei (Berberis fortunei)* China. daffodil hill. (Bean, EWH)
+ *japonica* see *Berberis japonica*
+ *lomariifolia (Berberis lomariifolia)* China, Burna. D&D1959, Slocock1938, (Bean EWH)
+ *nepaulensis* Nepal. H1950, (Bean S lib)
+ *pinnata (Berberis pinnata)* California, Mexico. H1950, (Bean S lib)
+ *repens var. rotundifolia* see *Berberis repens var. rotundifolia*

*Malus: Rosaceae (9+19)*

+ ‘Aldenham Purple’ (*from niedzwetzkyana*). Hort. H&S1947, (Bean II lib)
+ *angustifolia* N.America. S1939,41, (Bean II lib)
+ *x arnoldiana* (*ioribunda x baccata*). Hort. W1935,39, H1934,37, (Bean S lib)
+ ‘Atrosanguinea’ see *floribunda var. atrosanguinea*
+ *baccata* China. H1935, D1937, S1939,40, (Bean II lib)
+ ‘Gracilis’ S1939, (Bean II lib)
+ ‘Mandshurica’ H&S1947, (Bean II lib)
+ ‘Microcarpa’ (Name not confirmed) H&S1946, (Bean II lib)
+ ‘Coral’ (Name not confirmed) W1939, (Bean II lib)
+ *coronaria* N.America. S1941, (Bean II lib)
+ ‘Charlottae’ H&S1947, (Bean II lib)
+ ‘Crimson Glory’ (Name not confirmed) H1942, (Bean II lib)
+ ‘Crimson King’ (Name not confirmed) T1947, (Bean II lib)
+ ‘Crimson Red’ (Name not confirmed) (Cook 1965)
+ ‘Crimson Rod’ (Name not confirmed) H1942, (Bean II lib)
+ ‘Dartmouth’ Hort Wilson1939, (Bean II lib)
+ ‘David Nairn’ (Name not confirmed) D1946, T1947, (Bean II lib)
+ ‘Eastwoodhill Scarlet’ (Name not confirmed) (PPL)
+ ‘Echtermeyer’ (*purpurea ‘Pendula’*) (*Excellenz Thiel’ *niedzwetzkyana*). Hort. H&S1947, (Bean II lib)
+ ‘Eleyi’ (*niedzwetzkyana x spectabilis*). Hort. D1942,45,46, Wilson 1946,47, (Bean S lib)
Appendix 3: Catalogue of the previous collection

florentina  Italy. H&S1950, (Bean II lib)

floribunda  Japan. D1937,45,46, (Bean II lib)

floribunda var. atrosanguinea (x atrosanguinea) (halliana x sieboldii). D1937, (Bean II lib)

floribunda ‘Hillieri’ (Name not confirmed) (Bean, EWH)

‘Gibbs Golden Gem’ H&S1948, (Bean II lib)

glaucens  N.America. H&S1948, (Bean II lib)

‘Golden Hornett’

(jeal of zumi ‘Calocarpa’ according to Hillier. descendent of prunifolia rinki according to Bean). Hort. H&S1950, (Bean II lib)

‘Gorgeous’ (sieboldii x halliana). Hort. (Cook 1965)

halliana ‘Parkmanii’ Japan, China. W1935,39, H1937, S1940, (Bean II lib)

lancifolia  N.America. S1939,41, (Bean S lib)

‘Lemoinei’ (purpurea group). Hort. H1942, (Bean II lib)

x hartwigii (baccata x halliana). Hort. H&S1947, (Bean S lib)

‘Hillieri’ (scheideckeri group). Hort. H&S1946, (Bean II lib)

hupehensis (theifera) China. Slocock1938, (Bean S lib)

ioensis ‘Plena’ N.America. S1937, H1938, (Bean II lib)

‘John Downie’ Hort. D1939, W1939, D1947, (Bean II lib)

x kaido Hort. D1937, (Bean II lib), see madgeburgensis, and micromalus.

kansuensis  China. H&S1947, (Bean S lib)

‘Lady Northcliffe’ (baccata group). Hort. H&S1948, (Bean II lib)

var. rinki (M.ringo) Hupeh. S1939, (Bean II lib)

lancifolia  N.America. S1939,41, (Bean S lib)

‘Mammoth’ (Name not confirmed) H&S1948, (Bean II lib)

x micromalus (kaido.Parde.) (baccata x spectabilis). Hort. D1947, H&S1948, (Bean II lib)

‘Montreal Beauty’ (pumila group). Hort. W1957, (Bean II lib)

niedzwetzkyana (pumila var. niedzwetzkyana) Turkestan. W1935, (Bean II lib)

prattii  China. H&S1947, (Bean S lib)

prunifolia  Asia.

‘Cheals Golden Drop’ (Name not confirmed) (Cook 1965)

‘Fastigiata’  H&S1948, (Bean II lib)

‘Hornett’ (Name not confirmed) (Cook 1965)

var. rinki (M.ringo) Hupeh. S1939, (Bean II lib)

pumila  Armenia, Europe, Turkestan. (Cook 1965)

x purpurea (atrosanguinea x niedzwetzkyana). Hort. W1937, D1937, (Bean S lib)

‘Red Tipped Crab’ (coromaria ‘Elk River’ x niedzwetzkyana). Hort. H&S1948, (Bean II lib)

rehderiana (Name not confirmed) H1948, (Bean S lib)

‘Robert Nairn’ (Name not confirmed) D1946, T1947, (Bean II lib)

x robusta (baccata x prunifolia). Hort. H&S1950, (Bean II lib)

‘Red’ (this must be ‘Red Siberian’) (Cook 1965)

‘Yellow’ (this must be ‘Yellow Siberian’) (Cook 1965)

sargentii  Japan. S1941, Rest &BT, (Bean II lib)

x scheidekeri (floribunda x prunifolia). Hort. (Cook 1965)

scheiboldii (toringo) Japan. S1941, (Bean S lib)

sikkimensis  Himalaya. S1939,40, (Bean II lib)

‘Simcoe’ (baccata x niedzwetzkyana). Hort. H&S1947, (Bean II lib)

‘Sir Heaton Rhodes’ (Name not confirmed) 1942, (Bean II lib)
Appendix 3: Catalogue of the previous collection

‘Son of Gorgeous’ (Name not confirmed) (Cook 1965)
+ x soulardii (pumila x ioensis). N. America. S 1940, H&S 1947, (Bean II lib)
+ spectabilis China.
+ ‘Flore Albo’ (Name not confirmed) H&S 1948, (Bean II lib)
+ ‘Riversii’ H&S 1946, (Bean II lib)
+ x sublobata (prunifolia x sieboldii). Hort. H&S 1947, (Bean II lib)
+ toringoides China. S1938, (Bean S lib)
+ triloba Asia. S1939,41, (Bean II lib)
+ tschonoskii Japan. S1940,41, (Bean II lib)
‘Veitchs Scarlet’ (‘Red Pippins’ x robusta ‘Red Siberian’). Hort. H1937, (Bean II lib)
+ wilsonii (Name not confirmed) (Cook 1965)
+ ‘Wisley’ (medzwezskyana seedling). Hort. H&S 1947, (Bean II lib)
+ ‘Wrights Scarlet’ (Name not confirmed) H1942, (Bean II lib)
+ x zumi (baccata var. mandshurica x sieboldii). Japan. S1939, (Bean II lib)

Mandevilla: Apocynaceae (1+0)
suaveolens (laxa) Argentina. (Cook 1965)

Manettia: Rubiaceae (1+0)
bicolor (inflata) Paraguay, Uruguay. (Cook 1965)

Manglietia: Magnoliaceae (1+0)
+ hookeri China, Tibet. H&S 1950, (Bean S lib)
+ insignis Yunnan, Burma. H&S 1950, (Bean S lib)

Maytenus: Celastraceae
+ chilensis (boaria) Chile. S1937, (Bean S lib)

Melaleuca: Myrtaceae (5+0)
hypericifolia Australia. H&S 1948, (Bean II lib)
+ linariifolia Australia. D1939, (Bean II lib)
purpurifolia (Name not confirmed) (PPL)
radula Australia. D1946, (Bean II lib)
steedmanii Australia. D ?, (Bean II lib)
wilsonii Australia. (PPL)

Meliosma: Sabiaceae (3+0)
+ cuneifolia (dilenifolia ssp. cuneifolia) China. H&S 1946, (Bean II lib)
pendens (dilenifolia ssp. flexuosa) China. H&S 1948, (Bean S lib)
+ stewardii (myriantha ssp. stewardii) Japan. H&S 1947, (Bean S lib)
+ tenuis (dilenifolia ssp. tenuis) Japan. H&S 1950, (Bean S lib)
+ veitchiorum China. H&S 1948, (Bean II lib)

Menziesia: Ericaceae (3+0)
ciliicalyx Japan. H&S 1947, (Bean S lib)
ciliicalyx lasiophylla? Japan. H&S 1950, (Bean S lib)
purpurea Japan. H&S 1946,50, (Bean S lib)

Metrosideros: Myrtaceae
+ tomentosa (excelsa) New Zealand. (Cook 1965)

Michelia: Magnoliaceae
+ figo China. T1941, D1941,43, (Bean S lib)

Mitraria: Gesneriaceae (1+0)
coccinea Chile. D1944, (Bean S lib)
Montanoa: Asteraceae (1+0)

grandiflora  Mexico. HZ1949, (Bean II lib)

Morus: Moraceae (1+1)

‘Hicks’ (Name not confirmed) D1941, (Bean II lib)

nigra  Orient. D1941, (Bean II lib)

Murraya: Rutaceae (1+0)

exotica (paniculata)  Asia. HZ1949, (Bean II lib)

Mussaenda: Rubiaceae (2+0)

erythrophylla  W. Africa. HZ1949, (Bean II lib)

frondosa  E. Indies. HZ1949, (Bean II lib)

Mutisia: Asteraceae (5+0)

clematis  S. America. S1938, D1939,47, H&S1950, (Bean S lib)

decurrens  Chile. S1938, Hill1950, (Bean II lib)

ilicifolia  Chile. H&S1947, (Bean S lib)

oligodon  Chile. H&S1946,50, (Bean S lib)

retusa  Chile. H&S1946,50, (Bean S lib)

Myrica: Myricaceae (2+0)

carolinensis  (M. cerifera and M. pensylvanicum in part) N. America. H&S1948, (Bean II lib)

+  cerifera  N. America. H&S1947, (Bean II lib)

+  pensylvanica  N. America. RHS1944, (Bean II lib)

rubra  China, Japan, Korea. (Bean, EWH)

Myricaria: Tamaricaceae (1+0)

germanica  S. Europe, W. Asia. planted GD1960, (Bean EWH)

Myrtus: Myrtaceae (0+1)

+  bulbata  (Lophomyrtus bulbata) New Zealand. 1934, (Bean S lib)

communis  ‘Microphylla’ Mediterranean. H&S1946, (Bean II lib)

+  obtusata  (Lophomyrtus obtusata) New Zealand. W1937, (Bean II lib)

+  ugni  (Ugni molinae) Chile. D1925, (Bean II lib)

Nandina: Berberidaceae (0+2)

domestica  China

 ‘Folius Atropurpureus’ (Name not confirmed) D1949, (Bean II lib)

 ‘Gracilis’ (Name not confirmed) H1937, (Bean II lib)

Neillia: Rosaceae (1+0)

+  longiracemosa (thibetica)  China. H&S1948, (Bean S lib)

opulifolia lutea  see Physocarpus opulifolia lutea  N. America. W1937, (Bean II lib)

sinensis  China. (Bean, EWH)

+  thibetica  Himalaya. H1948, (Bean S lib)

Neolitsia: Lauraceae

+  glauca  (sericea)  Japan, Korea, China. H&S1948, (Bean II lib)

Nerium: Apocynaceae (0+8)

oleander  Mediterranean.

‘Aureum’ (Name not confirmed) (PPL)

‘Delphines Crimson’ (Name not confirmed) (PPL)

‘Dr Golfin’ (Cook 1965). IH1946, (Bean II lib).

‘Glass Point’ (Name not confirmed) D&D1945, (Bean II lib)

‘Gloire de Monplaisier’ (Name not confirmed) Hill1948,(Bean II lib).
Appendix 3: Catalogue of the previous collection

‘Luteum’ (Name not confirmed) D&D1945, (Bean II lib)
‘Luteum Plenum’ (Cook 1965). Hill1948, (Bean II lib).
‘Splendens’ D&D1938, (Bean II lib)

Nestegis: Oleaceae (1+0)
lanceolata New Zealand. (Bean II lib)

Neviusia: Rosaceae (1+0)
alabamensis N.America. H&S1947, (Bean II lib)

Nolina: Agavaceae (1+0)
longifolia Mexico. (Bean II lib)

Notelaea: Oleaceae
excelsa (Picconia excelsa) see Olea excelsa Canary Island, Madeira. Hill1951, (Bean S lib)

Nothofagus: Podocarpaceae (3+0)
+ antarctica Chile. H&S1948, (Bean II lib)
betuloides Chile. H1964, (Bean, EWH)
+ cliffortioides (solantri var. cliffortioides) New Zealand. 1934, (Bean II lib)
+ cunninghamii Tasmania. D1943, (Bean II lib)
+ dombeyi Chile. FR1962, (Bean EWH)
+ fusca New Zealand. H1940, (Bean II lib)
+ moorei Australia. H&S1947, (Bean II lib)
+ obliqua Chile. H&S1947, (Bean II lib)
+ prodera (alpina) Chile. H&S1947, (Bean S lib)
pumilio Chile. H&S1964 (Bean EWH)
uliginosa (antarctica var. uliginosa) Chile. H&S1950, (Bean II lib)

Nothopanax: Araliaceae
arboremen see Pseudopanax arboremen New Zealand. D&D1948, (Bean S lib)

Notospartium: Fabaceae - Papilionaceae (2+0)
carmichaeliae New Zealand. (Cook 1965). H1935, (Bean II lib)
glabrescens New Zealand. (Cook 1965). S1939, (Bean II lib)

Nuttallia: Rosaceae
cerasiformris (Oemleria cerasiformris) see Osmanoria cerasiformris

Nyssa: Nyssaceae (1+0)
biflora (sylvatica var. biflora) N.America. (Cook 1965)
+ sinensis China. 1961, (Bean, EWH)

Olea: Oleaceae (2+3)
+ europaea Mediterranean. H&S1948, (Bean II lib)
chrysanthaa (Name not confirmed, chrysophylla?) H&S1950, (Bean II lib)
excelsa (Notelaea excelsa) Canary Island, Madeira. Hill1950, (Bean II lib)
lanceolata see Nestegis lanceolata
‘Mangonilla’ (Name not confirmed) D&D1946, (Bean II lib)
‘Nevadillo Blanco’ (Name not confirmed) D&D1946, (Bean II lib)
‘Servilliana’ D&D1946, (Bean II lib)
+ verrucosa S.Africa. (Bean II lib)

Olearia: Asteraceae (3+4)
avicennifolia New Zealand. D1948, (Bean S lib)
chathamica New Zealand. D1934,47, (Bean S lib)
Appendix 3: Catalogue of the previous collection

**gunniana (phlogopappa)** Tasmania.

- **‘Blue Gem’** (Name not confirmed) S1937, (Bean S lib)
- **‘Lavender Beauty’** (Name not confirmed) S1937, (Bean S lib)
- **‘Pink Delight’** (Name not confirmed) S1937, (Bean S lib)
- **‘Splendens’** S1937, (Bean S lib)

**insignis (Pachystegia insignis)** New Zealand. D1934, (Bean S lib)

+ **paniculata** New Zealand. D1948, (Bean S lib)

**Orixa:** Rutaceae **(1+0)**

- **japonica** Japan. H&S1948, (Bean II lib)

**Osmanthus:** Oleaceae **(2+0)**

- **aquifolium (heterophyllus)** Japan. H1937, (Bean II lib)
- **delavayi** China. K1935, S1937, D1938, S1940,41, (Bean II lib)
- **forrestii (yunnanensis)** China. H1938, (Bean S lib)
- **fragrans** Himalaya, Japan, China. Horton 1919, HZ1949, (Bean II lib)

**Oxandra:** Rutaceae **(1+0)**

- **burkwoodii** Hort. S1938,40, (Bean S lib)

**Osmaroria:** Rosaceae **(1+0)**

- **cerasiformis (Nutallia cerasiformis, Oemleria cerasiformis)** California. (PFL)
- **suavis** (Name not confirmed) (Cook 1965)

**Ostrya:** Betulaceae **(1+0)**

- **carpinifolia** Europe, Asia minor, planted 1960 GD, (Bean, EWH)
- **japonica** Japan, China. H1948, (Bean II lib)
- **knowtonii** N.America

**Oxydendrum:** Ericaceae

- **arboream** N.America. W1937, S1938,37, (Bean II lib)

**Ozothamnus:** Asteraceae **(1+0)**

- **ledifolius** Tasmania. H&S1948, (Bean S lib)

**Paeonia:** Ranunculaceae **(2+0)**

- **delavayi** China. S1937, (Bean S lib)
- **lutea** China. S1940, (Bean II lib)
- **pubens (mollis)** Hort. S1944, (Bean II lib)

**Paliurus:** Rhamnaceae **(1+0)**

- **ramossimus (aubletii)** China. (Cook 1965)
- **spina-christi (australis)** S.Europe, Orient. D1957, (Bean II lib)

**Panax:** Araliaceae **(1+0)**

- **trifolius** N.America. D&D1943, (Bean S lib)

**Panay:** **(2+0)**

- **sambucifolium** (Name not confirmed) (Cook 1965)

**Pandorea:** Bignoniaceae **(1+0)**

- **pandorana** Australia. (Cook 1965)

**Parkinsonia:** Fabaceae - Caesalpinaceae **(1+0)**

- **aculeata** Tropical America. HZ1949, (Bean II lib)
Passiflora: Passifloraceae (3+2)
’Allardii’ (caerulea ‘Constance Elliot’ x racemosa). Hort. H&S 1950, (Bean II lib)
caerulea S. America. H&S 1948, (Bean II lib)
cinnabarina Australia. D1946, (Bean II lib)
edulis Brazil. D1946, (Bean II lib)
’Eynsford Gem’ Hort. D1946, (Bean II lib)

Paulownia: Bignoniaceae (1+0)
fortunei China, Japan. (RHS 3, EWH)

Pentapterygium: Ericaceae (1+0)
serpenst Himalaya. D1942 died, (Bean S lib)

Pentaphyllum: Rosaceae (1+0)
ramosissimum N. America. (RHS 3, EWH)

Pernettya: Ericaceae (3+2)
fures Chile. Hill1950,51, (Bean II lib)
micronata Chile. (Cook 1965). D&D1935, (Bean II lib)
’Bells Seedling’ Hill 1947, (Bean II lib)
’Davis Seedling’ 1950,51, (Bean II lib)
tasmanica Tasmania. H&S 1950, (Bean S lib)

Perovskia: Lamiaceae (1+0)
atriplicifolia Himalaya, Tibet. D1942, (Bean II lib)

Persoonia: Proteaceae (1+0)
pinifolia Australia. D1956, (RHS 3, EWH)

Petrophila: Proteaceae (1+0)
biloba Australia. (RHS 3, EWH)

Petteria: Fabaceae - Papilionaceae
+ ramentacea Caucasus. H&S1947,50, (Bean II lib)

Phellobium: Rutaceae (2+0)
billardieri (Name not confirmed) (Cook 1965)
squameum Australia. D&D1926-45, not found K5, K7

Phellodendron: Rutaceae (1+0)
+ amurense China. 1920, (Bean S lib)
+ amurense var. lavellei Japan. S1936, (Bean S lib)
+ japonicum (amurense var. japonicum) Japan. planted GD, (Bean II lib)
sachalinense (amurense var. sachalinense) Korea. China. Circus, (Bean II lib)

Philadelphia: Saxifragaceae (15+16)
’Argentine’ (virginalis group). Hort. planted GD1960, (Bean EWH), Hill1950, (Bean II lib).
’Avalanche’ (lemoniei group). Hort. H&S1948, (Bean II lib)
’Beauclerk’ (’Sybille’ x ‘Burfordensis’). Hort. planted Triangle, (Bean EWH)
+ ’Belle Etoile’ Hort. H1942, (Bean II lib)
’Banniere’ Hort. (cymosus group). outside triangle, (Bean EWH). Hill 1950, (Bean II lib)
’Boule d’Argent’ (polyanthus group). Hort. Hill1950, (Bean II lib)
’Burkwoodii’ (’Etoile Rose’ x virginale). Hort. Hill1936, (Bean II lib)
’Conquette’ (cymosus group). Hort. above concrete wall, (Bean EWH)
’Coupe d’Argent’ (lemoniei group). Hort. Hill1950, (Bean II lib)
coulteri Mexico. S1939, (Bean S lib)
Appendix 3: Catalogue of the previous collection

+ *delavayi* China, Burma. Hughes 1947, (Bean II lib)  
*delavayi var. calvescens* China. H&S 1947, (Bean II lib)  
‘Etoile Rose’ (purpureomaculatus group). Hort. (PPL)  
‘Favoirite’ (polyanthus group). Hort. Hill 1946, (Bean II lib)  
*grandiflorus (indorus var. grandiflorus)* N.Amercia. (Cook 1965)  
*incanus sargentianus* (could this be *incanus var. subcanus*)? H&S 1948, (Bean II lib)  
*x lemoinei* (coronarius x microphyllus). Hort. (Cook 1965)  
‘Cristus’ (Name not confirmed) D&D 1934, (Bean II lib)  
*levisi* N.Amercia. D&D 1934, (Bean II lib)  
*microphyllus* N.Amercia. H&S 1947, (Bean II lib)  
‘Mont Blanc’ (polyanthus group). Hort. D&D 1934, (Bean II lib)  
*multiflorum plenum* (Name not confirmed) (Bean II lib)  
*x nivalis* (coronarius x pubescens). Hort. D&D 1934, (Bean II lib)  
+ *pubescens var. ictectus (ictectus)* N.Amercia. H&S 1948, (Bean II lib)  
‘Purpureomaculatus’* (lemoinei x mexicanus’ ‘Rose Syringa’). Hort. (Cook 1965). Nairn, (Bean II lib).  
*sargentianus* (Name not confirmed) (PPL)  
*satsumi (satumanus)* Japan. D&D 1934, (Bean II lib)  
*schrenkii* Korea. S 1939, (Bean S lib)  
+ *sericanthus* China. H&S 1948, (Bean II lib)  
*speciosus (grandiflorus)* N.Amercia. D&D 1934, (Bean II lib)  
‘Sutymannii’ (Name not confirmed) (Cook 1965). D&D 1934, (Bean II lib).  
‘Sybille’ (purpureomaculatus group). Hort. Hill 1946, (Bean II lib)  
‘Virginale’ (virginalis group). Hort. D&D 1934, (Bean II lib)  
*wilsonii (incanus var. subcanus)* China. D&D 1934, (Bean II lib)  

X Philageria: Philesiaceae (1+0)  
*veitchii* Hort. H&S 1948, (Bean S lib)  

Philesia: Philesiaceae (1+0)  
*buxifolia (magellania)* Chile. H 1946, (Bean II lib)  

Phillyrea: Oleaceae (2+0)  
*decora* Caucasus. H&S 1946, (Bean II lib)  
*latifolia* Mediterranean. H&S 1946, (Bean II lib)  

Phoenix: Aracaceae  
+ *canariensis* Canaries. D 1941, (Bean II lib)  

Phormium: Agavaceae (1+6)  
*coelensoi* New Zealand. (Cook 1965)  
*cookianum* New Zealand.  
‘Tricolor’ (Bean S lib)  
+ *tenax* New Zealand.  
‘Bronze’ (Name not confirmed) (Cook 1965)  
‘Dwarf Red’ (Name not confirmed) (Cook 1965)  
‘Rosea Marginata’ (Name not confirmed) (Cook 1965)  
‘Rosea Variegata’ (Name not confirmed) D&D 1948, (Bean S lib)  
‘Summerse’ (Name not confirmed) H 1938, (Bean S lib)  
+ ‘Variegata’ (Cook 1965)
Appendix 3: Catalogue of the previous collection

Photinia: Rosaceae (3+0)
+ davidsoniae China. 1934,55, (Bean II lib)
  glomerata China. H&S1950, (Bean S lib)
  integrifolia Himalaya. H&S1947, (Bean S lib)
  prionophylla (Eriobotrya prionoides) China. RHSseed1944, (Bean S lib)
+ subumbellata (parvifolia) China. H&S1947, (Bean S lib)

Phygelius: Scrophulariaceae (1+0)
  capensis S.Africa. Goodwin 1947, (Bean II lib)

Phyllocladus: Podocarpaceae (1+0)
  rhomboiialis (asplenifolius) Tasmania. D1937, (Bean S lib)

Phyllodoce: Ericaceae (3+0)
  aleutica N.E.Asia to Alaska. H&S1950, (Bean S lib)
  empetriformis N.America. H&S1947, (Bean II lib)
  nipponica Japan. H&S1947, (Bean II lib)

X Phyllotamnus: Ericaceae (1+0)
  erectus Hort. H&S1950, (Bean II lib)

Physocarpus: Rosaceae (1+0)
  opulifolius Japan. H&S1958, (Bean EWH)
  ‘Aurea’ H&S1958, (Bean EWH)

Picea: Pinaceae (5+8)
+ abies (excelsa) Europe. D1946, Wilson1946, (Bean II lib)
  ‘Nana’ W1937, (Bean II lib)
  ‘Pendula’ W1937, (Bean II lib)
  ‘Pygmaea’ H&S1950, (Bean S lib)
+ albertiana (glaucav ar. albertiana) N.America. H&S1948 5ft 1957, (Bean II lib)
+ albertiana var. conica (glaucav ‘Conica’) N.America. H1942,45, H&S1948,50, (Bean II lib)
+ alcockiana (bicolor) Japan. H&S1948, 3ft 1957, (Bean II lib)
  asperata China. H&S1948, (Bean S lib)
  breweriana N.America. H&S1948, 15ft 1957, (Bean II lib), not found L12
+ complanata var. latisquamea (brachytyla latisquamea) China. H&S1948, 5ft 1957, (Bean II lib)
  glauca var. densata N.America. Clyde Robin 1962, (Bean EWH)
+ koyamae Japan. H&S1948, (Bean S lib)
  likiangensis China. H&S1950, (Bean S lib)
  likiangensis var. purpurea China. H&S1948, (Bean S lib)
+ morinda (smithiana) Himalaya. D. H, W, (Bean II lib)
+ morindoides (spinulosas) Himalaya. H&S1950, (Bean II lib)
+ obovata Europe, Siberia. H&S1948, 4ft 1957, (Bean II lib)
+ omorika Serbia. W1935,37, (Bean II lib)
  ‘Pendula’ H&S1950, (Bean II lib)
  ‘Pendula Glaucav (Name not confirmed) H&S1948, (Bean II lib)
+ orientalis Caucasus, Asia minor. seed 1937, (Bean II lib)
  ‘Aureospicata’ (‘Aurea’) H&S1948, (Bean II lib)
+ pungens N.America. D1937, Wilson1947, (Bean II lib)
+ ‘Glaucav 2nd bridge, (Bean EWH)
  ‘Glaucav pendula’ H&S1950, (Bean II lib)
  ‘Kosteriana Glaucav (Bean II lib)
Appendix 3: Catalogue of the previous collection

‘Moerheimii’ Wilson 1947, D1947, (Bean II lib)
+ rubra (rubens) N. America. 1947 7, (Bean II lib)
+ schrenkiana Turkestan. H&S 1948, (Bean II lib)
+ sitchensis N. America. H&S 1948, (Bean II lib)
+ wilsonii China. (Bean S lib)

Picrasma: Simaroubaceae
+ quassioides E. Asia. H&S 1948, (Bean II lib)

Pieris: Ericaceae (5+4)
+ ‘Flame of the Forest’ (‘Forest Flame’) (formosa ‘Wakehurst’ × japonica). Hort. H&S 1964, (Bean EWH)
  formosa Himalaya. D1943, S1941, (Bean II lib)
+ forrestii (formosa var. forrestii) Burma, China. D1943,46, (Bean S lib)
  ‘Jerymys’ H&S 1964, (Bean EWH)
  ‘Wakehurst’ H&S 1950, (Bean S lib)
  japonica Japan. D1945, (Bean II lib)
  ‘Pygmaea’ (Name not confirmed). (Cook 1965).
  ‘Variegata’ (Cook 1965)
  mariana (Lyonia mariana) N. America. H&S 1947, (Bean II lib)
  taiwanensis Formosa. Wilson 1939, D1940, (Bean S lib)
  sp F8945 H&S 1950, (Bean S lib)

Fílgerodendron: Cupressaceae
uviferum see Libocedrus tetragona H&S 1950, (Bean II lib)

Pilostegia: Saxifragaceae (1+0)
  viburnoides India, China, Taiwan. H&S 1948, (Bean S lib)

Pimelia: Thymeleaceae (3+0)
  decussata (ferruginea) Australia. D1947, (Bean S lib)
  longifolia Australia. D1945, (Bean S lib)
  spectabilis Australia. D1947, (Bean S lib)

Pinus: Pinaceae (8+2)
  albicaulis N. America. H&S 1948, (Bean II lib)
+ aristata N. America. 1964, (RHS 3)
+ armandii China. S1940, (Bean II lib)
  attenuata (tuberculata)
+ ayacahauite Mexico. H&S 1948,50, (Bean II lib)
+ banksiana N. America. 1964, (RHS 3).
+ canariensis Canaries. D1947, (Bean S lib)
+ caribea N. America. G1937, hill top behind cabin, (Bean II lib)
+ cembra Europe. H&S 1948, (Bean II lib)
+ cembroides Mexico to USA. (Bean II lib)
+ contorta Alaska to California. H&S 1948, (Bean II lib)
+ coulteri Mexico. H&S 1948,50, (Bean II lib)
+ echinata N. America. (RHS 3, EWH)
+ edulis (cembroides var. edulis) N. America. H&S 1948, (Bean II lib)
+ excelsa (griffithii, wallichiana) Himalaya, Afghanistan. H&S 1950, (Bean II lib)
  flexilis N. America. H&S 1948, (Bean II lib)
  gerardiana Himalaya. H&S 1950, (Bean II lib)
Appendix 3: Catalogue of the previous collection

+ **hartwegii** (montezume var. hartwegii) Mexico. H&S 1948, (Bean II lib)
+ **x holdfordiana** (ayacahuite x wallichiana). Hort. H&S 1948, (Bean II lib)
+ **laricio** Poir. (nigra var. maritima) Italy, Sicily, Corsica. H&S 1948, (Bean II lib)
+ **laricio var. pallasiiana** (Name not confirmed) H&S 1948, (Bean II lib)
+ **laricio var. leucoderms** (leucoderms, heldreichii var. leucoderms)
  Italy, Balkans. H&S 1948, (Bean II lib)
+ **mitis** N. America? H&S 1950, (Bean II lib)
+ **montana** (mugo) Central Europe, Balkans. H&S 1948, (Bean II lib)
+ **montana var. pumillo** Europe. H&S 1948, 50, (Bean II lib)
+ **montana var. uncinata** (uncinata) Pyrenees, Alps. H&S 1948, (Bean II lib)
+ **montezume** Mexico. H&S 1950, (Bean II lib)
+ **monticola** N. America. H&S 1948, (Bean II lib)
+ **muricata** N. America. 50 at new car shed, (Bean II lib)
+ **patula** Mexico. 1933, 34, 35, 37, 45, (Bean II lib)
+ **peuce** Albania, Greece. H&S 1948, 50, (Bean II lib)
+ **pinaster** Mediterranean. (Bean II lib)
+ **pinea** Mediterranean. (Bean II lib)
+ **resinosa** N. America. G1937, (Bean II lib)
+ **sabiniana** N. America. 1964, (RHS 3, EWH)
+ **sylvestris** 'Aurea' Europe. H&S 1947, 50, (Bean II lib)
+ **sylvestris** 'Globosa' (Name not confirmed) H&S 1948, (Bean II lib)
+ **tabuliformis** (sinensis) China. H&S 1948, (Bean II lib)
+ **taeda** N. America. 1964, (RHS 3, EWH)
+ **torreyana** California. 1964, (RHS 3, EWH)
+ **tuberculata** (attenuata) N. America. H&S 1948, 50, (Bean II lib)
+ **virginiana** N. America. H&S 1948, 50, (Bean II lib)
+ **yunnanensis** (tabuliformis var. yunnanensis) China. H&S 1948, (Bean II lib)

**Piptanthus**: Fabaceae - Papilionaceae

+ **nepalensis** (laburnifolius) Himalaya. Goodwin 1946, 1949, (Bean II lib)

**Pistacia**: Anacardiaceae (3-0)

+ **atlantica** Caucasus to Pakistan. H&S 1947, (Bean II lib)
+ **lentiscus** Mediterranean. H&S 1950, (Bean II lib)
+ **terebinthus** Mediterranean. H&S 1950, (Bean II lib)
+ **vera** Asia minor, Syria. H&S 1947, (Bean II lib)

**Pithecellobium**: Fabaceae - Mimosaceae

+ **pruinosum** Australia. HZ 1949, (Bean II lib)

**Pittosporum**: Pittosporaceae (8-2)

+ **bicolor** Australia. H&S 1947, (Bean II lib)
+ **daphniphyloides** Taiwan. H&S 1948, (Bean II lib)
+ **floribundum** Himalaya. S1940, (Bean II lib)
+ **heterophyllum** China. S1940, (Bean II lib)
+ **patulum** New Zealand. H&S 1948, (Bean II lib)
+ **rhombifolium** Australia. seed1963, (RHS3).
+ **tenuifolium** 'Silver Queen' (Cook 1965).
+ **tenuifolium** 'Variegatum' New Zealand. (Cook 1965)
+ **tobira** Japan, China. (PPL)
**Appendix 3: Catalogue of the previous collection**

**undulatum** Australia. too tender here, (Bean II lib)

**Plagianthus**: Malvaceae (2+0)
- **betulinus** New Zealand. (Cook 1965)
- **divaricatus** New Zealand. D&D 1934, (Bean S lib)

**Platanus**: Platanaceae
+ **x acerifolia** (*orientalis x occidentalis*). Hort. H&S 1947, (Bean II lib)
+ **orientalis** Europe, Asia minor. H&S 1946, (Bean II lib)
+ **orientalis var. cuneata** (*cuneata*). Europe. H&S 1937, (Bean II lib)
+ **orientalis var. insularis** (*cretica*). Europe. H&S 1937, (Bean II lib)
+ **racemosa** California. H&S 1947, (Bean II lib)

**Plumbago**: Plumbaginaceae (1+0)
- **capensis** (*auriculata*). S. Africa. (Cook 1965)

**Plumeria**: Apocynaceae (1+0)
- **acutifolia** (*rubra var. acutifolia*). Mexico, S. America. H&S 1949, (Bean II lib)

**Podalyria**: Fabaceae - Papilionaceae (4+0)
- **buxifolia** S. Africa. D&D 1947, (Bean II lib)
- **calyptrata** S. Africa. (Catalogue 1980)
- **laxifolia** S. Africa. (Cook 1965)
- **sericea** S. Africa. (Cook 1965)

**Podocarpus**: Podocarpaceae (4+0)
+ **alpinus** Tasmania. H&S 1947, (Bean II lib)
+ **andinus** (*Prumnopitys elegans*)
+ **chlilinus** (*salignus*). Chile. H&S 1947, Circus, (Bean II lib)
- **elatus** Australia. H&S 1949, (Bean II lib)
- **gracilior** E. Africa. H&S 1948, (Bean S lib)
+ **latifolius** S. Africa. H&S 1948, (Bean S lib)
+ **macrophyllus** China, Japan. H&S 1948, (Bean II lib)
- **nagi** Japan. H&S 1948, (Bean S lib)

**Poinciana**: Fabaceae - Caesalpinaceae (1+0)
- **regia** Madagascar. 1957, (RHS3).

**Polygala**: Polygalaceae (4+0)
- **grandis** (Name not confirmed) D1942, (Bean S lib)
- **myrificolia var. grandiflora** (*'Dalmaisiana'*) S. Africa. (Cook 1965). H1937, (Bean II lib).
- **oppositifolia** S. Africa. D1942, (Bean S lib)
- **virgata** S. Africa. D1942, (Bean S lib)

**Polygonum**: Polygonaceae (1+0)
- **baldshuunicum** Russia, Afghanistan, Pakistan. S1938,41, (Bean II lib)

**Populus**: Salicaceae (18+1)
+ **alba** (*Pyramidalis* (*'Bolleana'*) Europe, Africa, Asia. Horton 1913, G1947, (Bean II lib)
+ **angulata** (*deltoides* *'Carolin'*) N. America. H&S 1947, (Bean II lib)
- **balsamifera** (*tacamahaca*) N. America. (Cook 1965). H&S 1947, (Bean II lib)
- **x berolinensis** (*laurifolia x nigra* *'Italica'*). Hort. H&S 1947, (Bean II lib)
- **canescens** Europe. H&S 1947, (Bean II lib)
- **caudina** (*nigra var. pubescens, nigra ssp. caudina*) S. Europe, N. Africa. H&S 1948, (Bean S lib)
- **eugenei** (*x canadensis* *'Eugenei'*) N. America. G1947, (Bean II lib)
- **fremontii** N. America. H&S 1947, (Bean II lib)
Appendix 3: Catalogue of the previous collection

x generosa (deltoides 'Cordata' x trichocarpa). Hort. G1947, (Bean II lib)
grandidentata N.America. (Cook 1965). D&D1960, (Bean EWH)
lasiocarpa var. tibetica (Name not confirmed) (Cook 1965)
lasiocarpa var. violescens (Name not confirmed) (Cook 1965)
laurifolia India, Siberia, Japan. H&S1947, (Bean II lib)
mariandica (x canadensis 'Marilandica') Hort. G1947, (Bean II lib)
maximowiczii China, Japan. H&S1947, (Bean S lib)
monolifera (deltoides)
  ‘Aurea’ N.America. W1937, (Bean II lib)
nigra var. betulifolia France. S1947, (Bean II lib)
  + nigra ‘Italica’ Europe. S1947, (Bean II lib)
regenerata (x canadensis ‘Regenerata’) Hort. S1947, (Bean II lib)
robusta (x canadensis ‘Robusta’) Hort. G1947, (Bean S lib)
  + serotina (x canadensis ‘Serotina’) Hort. G1947, (Bean II lib)
  + serotina ‘Aurea’ (x canadensis ‘Serotina Aurea’) Hort. D1937, (Bean II lib)
  + suaveolens China. H&S1947, (Bean II lib)
tibetica (zechuanica var. tibetica ?) China. Circus, GD, (Bean EWH)
  + tremula Europe, Africa, Asia. H&S1948, (Bean II lib)
tremuloides N.America. Horton, (Bean II lib)
trichocarpa N.America. S1947, (Bean II lib)
violescens (zechuanica var. tibetica ?) China. H&S1960, planted GD, (Bean EWH)
  + wilsoneii China. H&S1937, (Bean S lib)
Posoqueria: Rubiaceae (1+0)
multiflora Brazil. HZ1949, (Bean II lib)
Potentilla: Rosaceae (2+5)
  fruticosa Europe.
    ‘Orbisula’ (Name not confirmed, P.arbuscula?) H&S1964, (Bean EWH)
    ‘Rigida’ (Name not confirmed, P.rigida?) H&S1964, (Bean EWH)
    ‘Veitchii’ (fruticosa var. veitchii, dawurica var. veitchii) (Cook 1965)
‘Katherine Dykes’ Hort. H&S1958, (Bean EWH)
‘Klondyke’ Hort. D&D1961, (Bean EWH)
x sulphurescens (arbuscula x dawurica). China. (Bean EWH)
wardii (Name not confirmed) (Cook 1965)
Prinsepia Rosaceae
  + uniflora China. S1937,39, (Bean S lib)
Prosopis: Fabaceae - Mimosaceae (1+0)
nigra (Name not confirmed) seed1948, (Bean S lib)
Prostanthera: Lamiaceae (2+2)
coccinea (Name not confirmed) D1940,41 died, (Bean S lib)
  ‘Edgintonii’ (Name not confirmed) D1946, (Bean S lib)
incisa Australia. H1945, (Bean S lib)
  ‘Coccinea’ (Name not confirmed) (PFL)
  + ovalifolia Australia. D1945, (Bean S lib)
  + rotundifolia Australia. H1937,45, D1942, T1947, (Bean S lib)
Appendix 3: Catalogue of the previous collection

Protea: Proteaceae (13+3)
- cynaroides S.Africa. (Bean S lib)
- grandiceps S.Africa. (Bean S lib)
- incompta (coronata) S.Africa. (Cook 1965)
- laticolor S.Africa. (Bean S lib)
- latifolia (eximia) S.Africa. (Bean S lib)
- latifolia 'Glauc'a' S.Africa. (Bean S lib)
- longiflora (aurea) S.Africa. (Cook 1965)
- longiflora rubra (Name not confirmed) (Cook 1965)
- marginata (taurifolia) S.Africa. (Bean S lib)
- mellifera S.Africa. (Bean S lib)
  - 'Alba' (Bean S lib)
- neriifolia S.Africa. (Bean S lib)
- pulchella S.Africa. (Bean S lib)
- scolymocephala S.Africa. (Bean S lib)
- susannae S.Africa. (Bean S lib)

Prumnopitys: Podocarpaceae
- elegans see Podocarpus andinus Chile. D1937,45, H&S1948, (Bean II lib)

Prunus: Rosaceae (30+38)
- ambigua (Name not confirmed) H&S1947, (Bean II lib)
  + amygda/us (dulcis) N.Africa.
  + 'IXL' Wilson 1947, (Bean II lib)
  + 'Early Jordan' (Name not confirmed) Wilson 1947, (Bean II lib)
  + 'Lady Lyle' (Name not confirmed) W1937, (Bean II lib)
  + 'Monovale' (Name not confirmed) Wilson 1947, (Bean II lib)
  + 'Paper Shell' (Name not confirmed) Wilson 1947, (Bean II lib)
  + apetala (tschonoski) Japan. S1940, (Bean S lib)
  + armeniaca C.Asia, China. A1939, (Bean II lib)
    var. ansu Japan. H&S1948, (Bean II lib)
    var. manshdurica Korea, H&S1948, (Bean II lib)
  + avium 'Plepa' Europe. Slocock 1938, (Bean II lib)
- besseyi (pumila var. besseyi) N.America. S1937, (Bean II lib)
  + x blireana (cerasifera 'Aropurpurea' x mume). Hort. D1942,45,46, T1947, (Bean II lib)
    'Moseri' D1945, (Bean II lib)
  + campanulata Japan. S1939, D1940,43,45,47, (Bean S lib)
    'Pendula' (Name not confirmed) (Ingram)
  + 'Plena' H&S1947,48, (Bean S lib)
  + canescens China. H&S1947, (Bean II lib), (Ingram)
  + cerasifera Asia minor.
  + 'Lindsayae' H&S1950, (Bean II lib)
  + 'Nigr' D1942,45, (Bean II lib)
  + 'Pissardi' ('Atropurpurea') D1942, (Bean II lib)
- 'Pissardi Diversifolia' (var. diversifolia) D1937, (Bean II lib)
- 'Vesuvius' (Cook, 1965)
cerasus  S.W. Asia. (Cook 1965)
concina  China. H&S 1946, (Bean S lib), (Ingram)
decora  (Name not confirmed) (Ingram)
dehiscens (tangutica)  China. H&S 1948,50, (Bean S lib)
demissa (virginiana var. demissa)  N.America. H1947, (Bean II lib)
erecta  (Name not confirmed, serrulata,f.erecta = Amanogawa ?) (RHS 3, EWH)
fasciculata  N.America. H&S 1947, (Bean II lib)
fruticosa  Europe. (Ingram)
glandulosa  China.

‘Alba Plena’  (Cook 1965)
‘Rosea’  (Cook 1965)
glandulosa salicifolia  (Name not confirmed)  (Ingram)
‘Hiawatha’  (Name not confirmed)  (PPL)
incisa  Japan. S1938,40, (Bean S lib)
tintegri folia  California. H&S 1947, (Bean II lib)
japonica  China to Korea. D1939, (Bean II lib)

Flore Plena’  (Name not confirmed)  Horton ?, (Bean II lib)
x juddii  (sargentiana x yedoensis)  Hort. H&S 1948, (Bean II lib)

kanzakura rubra  (x kanzakura ‘Rubescens’)  (campanulata x lannesiana var. speciosa)  Hort.

laurocerasus  Europe, Asia minor. Horton 1911, (Bean II lib)
longipes simonzi  (Name not confirmed)  (RHS 3, EWH)
lusitanica  Spain, Portugal. Horton 1914, (Bean II lib)
magnifica  (Name not confirmed) 1937
maritima  N.America. S1939,40, (Bean II lib)
mume  Japan. W1937, (Bean II lib)

Charles Abraham’  (Name not confirmed)  (PPL)
‘Celestial Dawn’  D1945, (Bean II lib). D1937, (Bean II lib)
‘Rosea Flore Plena’  D1945, (Bean II lib)
‘Splendens’  D1945, (Bean II lib)
‘The Geisha’  D1937, (Bean II lib)

nigra  N.America. H&S 1947, (Bean II lib)
nipponica  Japan. S1939,41, (Bean S lib), (Ingram)
‘Okame’  (x incam ‘Okame’)  (campanulata x incisa). Hort. H&S 1950, (Bean II lib)
padus  Europe, Asia, Japan. N1935, S1937, (Bean II lib)

‘Albertii’  H&S 1937,47, (Bean II lib)
‘Flore Plena’  (‘Plena’ ?) (Cook 1965)
‘Knap Hill’  (Name not confirmed)  (Cook 1965)
‘Watereri’  Slocock 1938, (Bean II lib)
persica  China.

‘Alba Plena’  (Cook 1965)
‘Carsons Red’  (Name not confirmed)  (Cook 1965)
‘Clara Meyer’  D1945, (Bean II lib)
‘Harbinger’  (Name not confirmed)  H1942, (Bean II lib)
‘Harbinger White’  (Name not confirmed)  (Cook 1965)
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‘Iceberg’ (Cook 1965)
‘Magnifica’ W1937, (Bean II lib)
‘Rosea Plena’ (Name not confirmed) (Cook 1965)
‘Sanguinea Flore Plena’ D1946, (Bean II lib)
‘Sanguinea Splendens’ (Name not confirmed) D1945, (Bean II lib)
‘Wendle Weeping’ H&S1958, (Bean II lib)

*pilosiuscula* China. (Ingram)
*pilosiuscula var. media* China. S1940, (Ingram), (Bean S lib)
*platycarpa* (Name not confirmed) S1940, (Bean S lib)
*platycarpa media?* (Name not confirmed) S1940, (Bean S lib)
*prostrata* Balkans to Asia minor. H&S1947, (Bean II lib)
*pseudocerasus* China. (Cook 1965)

‘Watereri’ see *sieboldii* (PPL)

+ *puddum* (cerasoides) China. H&S1948, (Bean II lib)
+ *sargentii* Japan. S1940, (Bean II lib)
+ *sargentii bestinthiflorum* (Name not confirmed) H&S1947, (Bean II lib)
+ *coparia* Iran. H&S1948, (Bean II lib)
+ *serotina* N.America. Slocock1938, (Bean II lib)

*serrula f.splendens* see *serrulata ‘Hisakura’*
+serrula var. tibetica (serrula) China. H&S1950, (Bean S lib), (Ingram)
*serrulata* China.

‘Albo Rosea’ (Name not confirmed) (Ingram)

+ ‘Alisons Pink’ (Name not confirmed) W1939, (Bean II lib)
+ ‘Amano-gawa’ (*Erecta*, *serrulata f. erecta*) H1946, (Bean II lib). S1937, (Bean II lib)
+ ‘Asano’ (*serrulata f. geraldinae*) H&S1947, (Bean II lib)
+ ‘Ashi-botan’ (Name not confirmed) H1937, (Bean II lib)
+ ‘Botrykawa’ (Name not confirmed) D1937, (Bean II lib)
+ ‘Daikoku’ (Cook 1965)

‘Fugenzo’ see ‘J.H. Veitch’

+ ‘Hisakura’ (*serrulata f.splendens*) D1937, Wilson 1947, (Bean II lib)
+ ‘Hokusai’ H&S1948, (Bean II lib)
  H1937, D1945, Wilson1946, (Bean II lib)
+ ‘Kanzan’ (*serrulata f.purpurascens*) H&S1948, (Bean II lib)
+ ‘Kazakura’ (Name not confirmed) D1937, (Bean II lib)
+ ‘Kofugen’ (‘Fugenzo’) D1937, (Bean II lib)
+ *f.longipes* (‘Shimidsu’) H&S1948, (Bean II lib). Slocock1938, (Bean S lib)
+ ‘Mt Fuji’ (Not the same as ‘Shirotae’ according to Bean & Hillier)
  D1957, Wilson1947, (Bean II lib)
+ ‘New Red’ (Name not confirmed) Wilson 1946, (Bean II lib)
+ ‘Ojoichin’ (*lannesiana ‘Ojoichin’*) D1937, (Bean II lib)
+ ‘Okiku’ H&S1947, (Bean II lib)
+ ‘O’Naden’ (*lannesiana ‘Ohnaden’*) H1937, D1937, (Bean II lib)

*pendula lanceolata* (Name not confirmed). (Ingram)
‘Splendens’ (is this ‘Hisakura’ ?) H&S1950, (Bean S lib)
+ ‘Tai Haku’ H&S1948, (Bean II lib)
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'Temari' (*lannesiana ‘Temari’*) (Cook 1965)
+ ‘Yukon’ D1946, (Bean II lib)
+ *x sieboldii* (*‘Takasago’, pseudocerasus ‘Watereri’, serrulata f. sieboldii*) (apetala x speciosa). Hort. D1937, (Bean II lib)
+ ‘Pendula’ (Name not confirmed) W1946, (Bean S lib)
+ ‘Superba’ (Name not confirmed) W1939, (Bean S lib)
+ ‘Watereri’ (Name not confirmed) D1939, (Bean II lib)

*spinosa ‘Plena’* Europe, N.Africa, W.Asia. (Cook 1965)

*subhirtella* Japan.
+ var. *ascendens* H&S1950, (Bean II lib)
+ ‘Ascendens Flore Plena’ (Name not confirmed) H&S1948, (Bean II lib)
+ ‘Autumnalis’ S1938, (Bean II lib)
+ ‘Fukubana’ H&S1946, (Bean II lib)
+ ‘Pendula’ H1935, (Bean II lib)
+ ‘Pendula Rosea’ H&S1950, H1937, (Bean II lib)
+ ‘Pendula Rubra’ H&S1946, (Bean II lib)

*tangutica (dehiscens)* China. H&S1948, (Bean II lib)

*tenella* Russia, Asia to Siberia. garden, (Bean EWH)
+ *tchonoskii (apetala)* (RHS 3, EWH)
+ *tomentosa* China, Japan. S1938,39, (Bean II lib)
+ ‘Rosea’ (Name not confirmed) S1940, (Bean II lib)
+ var. *endotricha* China. S1938, (Bean II lib)

*triloba* China. Cook, (Bean II lib)
+ ‘Flore Plena’ D1942, (Bean II lib)
+ *x virginiana var. demissa* N.America. (Ingram)
+ *x wrightii* Hort. H1945, (Bean II lib)
+ *x yedoensis (yoshino) (speciosa x subhirtella).* Japan. Japanl920, S1939,41, (Bean S lib)
+ 7728 S1941, (Bean S lib)
+ ‘Purpurdens’ (‘Pendula’) H&S1947,50, (Bean S lib). D1937, (Bean II lib)

Pseudolarix: *Pinaceae*
+ *amabilis* China. H&S1939,46,48, (Bean II lib)

Pseudowuga: *Pinaceae* (2+4)
+ *japonica* Japan. H&S1947,50, (Bean II lib)
+ *macrocarpa* N.America. H&S1947,50, (Bean II lib)
+ *menziesii (taxifolia)* N.America.
  + ‘Fletcheri’ (fletcheri) H&S1948, (Bean S lib)
  + ‘Glaucap’ H&S1950, (Bean II lib); gone H7
  + ‘Moreheimii’ (moreheimii) H&S1948, (Bean S lib)
  + ‘Pendula’ H&S1948, (Bean II lib)

*wilsoniana* China. H&S1950, (Bean S lib)

Psidium: *Myrtaceae* (1+0)
+ *cattleianum* Brazil. RHS1962, (RHS3).

Psoralea: *Fabaceae - Papilionaceae* (1+0)
+ *pinnata* S.Africa. HZ1949, (Bean II lib)

Pterocarya: *Juglandaceae* (1+0)
+ *caucasica (fraxinifolia)* Caucasus. S1941, (Bean II lib)
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rhoifolia Japan. H&S 1947, (Bean II lib)
stenocarpa? (Name not confirmed) M1939, (Bean II lib)
Pterostyrax: Styracaceae (1+0)
dissecta (Name not confirmed) W1937, (Bean II lib)
hisida Japan. H&S 1937, S1937, (Bean II lib)

Pultenaea: Fabaceae - Papilionaceae (1+0)
rosea Australia. D1942, (Bean II lib)

Punica: Punicaceae (0+2)
granatum Europe, Himalaya.
‘Albo Plena’ (‘Multiplex’) H&S1948, (Bean II lib)
‘Andre Leroy’ HZ1949, (Bean II lib)
‘Nana Gracillima’ H&S1948, (Bean II lib)

Pyracantha: Rosaceae (1+1)

angustifolia China. H1935, (Bean II lib)
coccinea ‘Lalandei’ Italy, Asia minor. 1934, (Bean II lib)
rogersiana (crenulata var. rogersiana) China. (Cook 1965)
yunnanensis (crenato-serrata) China. (Cook 1965)

Pyrus: Rosaceae (2+1)

alnifolia (X Sorbopyrus alnifolia) Hort. H&S1948, (Bean II lib)
auricularis (X Sorbopyrus auricularis) Hort. H&S1947, (Bean II lib)
foigneri (Sorbus foigneri) China. H&S1947, (Bean II lib)
foliola (Sorbus foliola) Himalaya, Burna, China. H&S1947, (Bean II lib)
rehderiana (Name not confirmed, Sorbus rehderiana?) H&S1948, (Bean S lib)
salicifolia ‘Pendula’ Caucasus. H&S1937, (Bean II lib)

Quamoclit: Convolvulaceae (1+0)
lobata (Mina lobata, Ipomaea versicolor) Mexico. (RHS 4,EWH)

Quercus: Fagaceae (15+5)

alnifolia Cypress. D1958, (RHS 4,EWH)
ambroziana (hispanica ‘Ambroziana’) Spain, Portugal, Italy. planted DP, (Bean EWH)
aquifoluids (semecarpifolia) China. planted DP, (Bean EWH)
arkansana N.America. H1964, (RHS 4,EWH)
breweri (garryana var. breweri) California. H&S1964, (RHS 4,EWH)
castaneifolia Caucasus, Iran. H&S1946, (Bean II lib)
cerris ‘Variegata’ Europe, Asia minor. H&S1947, (Bean II lib)
chrysolepis var. vacciniifolia see vacciniifolia N.America. (Cook 1965)
conferta (frainetto) Balkans, Italy. H&S1939,50, (Bean II lib)
crispula see mongolica var. grosseserrata Japan. (RHS 4,EWH)
cuspidata see Castanopsis cuspidata Japan, Korea. H&S1947, (Bean II lib)
dentata Japan. H&S1947, (Bean II lib)
douglasi N.America. Hill1964, (RHS 4,EWH)
echinoides see Lithocarpos echinoides N.America. D&D1958, (RHS 4,EWH)
edithae (Name not confirmed) M1939, (Bean S lib)
emeryi N.America. (RHS 4,EWH)
engelmannii N.America. (RHS 4,EWH)
Appendix 3: Catalogue of the previous collection

frainetto var. shirainum (Name not confirmed) (Cook 1965)
glabra see Lithocarpus glabra China, Japan. H&S1937, (Bean II lib)
grosseserrata (mongolica var. grosseserrata) Japan. H&S1947, (Bean II lib)
hartvissiana Bulgaria, Asia minor. H1964, (RHS 4,EWH)
hondai (Name not confirmed) Berry 1966, (Bean EWH)
hypoleucoides N.America. H1964, (R.HS 4,EWH)
+ ilex Mediterranean. Horton, (Bean II lib)
  ‘Latifolia’ planted GD1960, (Bean EWH)
+ ilicifolia N.America. planted PP, (Bean EWH)
+ lamellosa Himalaya. H&S1946, (Bean S lib)
x leana (imbricaria x velutina). N.America. H&S1946, (Bean II lib)
+ libani Syria, Asia minor. H&S1946, (Bean II lib)
lusitanica Webb, not Lam. Spain, Portugal. Mason 1939, (Bean II lib)
+ lyra N.America. H&S1947, (Bean II lib)
+ mirbeckii (canariensis) Spain, Africa. H&S1939,47,50, (Bean II lib)
+ mirbeckii ‘Latifolia’ (canariensis ‘Latifolia’) 1950,51, (Bean II lib)
+ myrsinifolia (vibrayeana) Japan, China. H&S1947, PP, (Bean II lib)
pachyphylla see Lithocarpus pachyphyllus H&S1947, (Bean II lib)
+ prinus N.America. H&S1947, (Bean II lib)
robur Europe.
+ ‘Concordia’ H&S1950, (Bean II lib)
  ‘Dissecta’ (Name not confirmed) H&S, (Bean II lib)
+ ‘Filicifolia’ H&S1946,50, (Bean II lib)
+ ‘Heterophylla’ (‘Fenessii’) H&S1947, (Bean II lib)
  ‘Purpureascens’ H&S1946,50, (Bean II lib)
+ rubra N.America. H&S1946,48, (Bean II lib)
  ‘Aurea’ H&S1937,50 died, (Bean II lib)
sadleriana California. (Cook 1965)
+ salicina (stenophylla) Japan. Mason 1939, (Bean II lib)
serrata Thunb. see glandulifera
+ sessiliflora (petraea) Europe, Asia minor. S1938, (Bean II lib)
+ ‘Mesplifolia’ H&S1939,47, (Bean II lib)
  ‘Rubicunda’ (‘Purpurea’) H&S1947, (Bean II lib)
+ shumardii var. schneckii (shumardii) N.America. H&S1964, (Bean EWH)
+ suber Europe, N.Africa. seed gisborne tree, (Bean II lib)
vaccinifolia (chrysolepis var. vaccinifolia) N.America. 1958, PP, (R.HS 4,EWH)
+ vibrayeana (myrsinifolia) China, Japan. PP, (Bean II lib)
Quisqualis: Combretaceae (1+0)
  indicum Burma to New Guinea. HZ1949, (Bean II lib)
Raphiolepis: Rosaceae (1+0)
  x delacourii (‘indica x umbellata’). Hort. H&S1946, (Bean II lib). D&D1959, (RHS4).
Reevesia: Byttneriaceae (1+0)

	hyssoidea  China to Java. Hill 1937, (RHS 4,EWH)

Rhabdodamus: Gesneriaceae (1+0)

solandri  New Zealand. D&D 1945, (Bean II lib)

Rhiphilhamnus: Verbenaceae

+ cyanocarpus (spinosus)  Chile. Circus, (RHS4).

Rhododendron: Ericaceae (191+19)

+ aberconwayi  Yunnan. Massey 1962, (Bean EWH)

aeruginosum (campanulatum ssp. aeruginosum)  Sikkim, Bhutan. D&D 1947, (Bean II lib)

albrechtii  Japan. McK 1946, M1947, (Bean S lib)

annae  Yunnan, Burma. Hill 1964, (Bean EWH)

anthopogon  Himalaya, Kashmir. H&S 1947, (Bean II lib)

apodeuctum (dioecustum ssp. apodeuctum)  Yuruna, Burma. D1947, (Bean S lib)


+ arboreum  Kashmir, Nepal, Sikkim. D1945, (Bean II lib)

  'Bennets variety'  (Name not confirmed). Cabin Park, (FPL).

  + 'Kermesium'  (Name not confirmed). D&D 1937, (Bean II lib)

  'Pink'  (Name not confirmed). Cabin Park, (FPL).

  + 'Rubrum'  (Name not confirmed). W1937, (Bean II lib)


  'Roseum'  (Name not confirmed). (Cook 1965)


  'Rothschild Best Blue'  Hill 1948, (Bean II lib)

  'Tower Court'  (Name not confirmed). (Cook 1965)

aureum (chrysanthum)  Korea, Japan, China. beyond cabin, (Bean S lib)

auriculatum  Hupeh. D1935, 41, (Bean II lib)

baileyi (thyodocum)  E. Himalaya. H&S 1950, (Bean S lib)

baratum  Himalaya. D1935,37, H&S 1947, (Bean II lib)

  + 'Meteor'  (Name not confirmed). (Cook 1965)

  Pink form  (Name not confirmed). (Cook 1965)

basilicum  China. (Cook 1965)


beesianum (collectum, emaculatum)  Yunnan, Szechuan, Himalaya. H&S 1950, (Bean S lib)

broughtonii aureum  (Name not confirmed) cabin, (Bean EWH)

bullatum (edgeworthii)  Yuruna, Bhutan, Tibet, Burma.


caeruleum (rigidum)  Yuruna. H&S 1950, (Bean S lib)


calophyllum  (Name not confirmed). (could this be calophyllum?). (Cook 1965)


  'Red Form' ('Gigha')  Hill 1964, (Bean EWH)

camelliaeflorum  (Name not confirmed). M1964, (RH63).
Appendix 3: Catalogue of the previous collection

**campanulatum**  Kashmir, Bhutan. D1947, (Bean II lib)

*‘Knap Hill’*  Hill1950, (Bean II lib)

**campylocarpum**  Nepal, Sikkim, Assam, Burma, Tibet.

H&S1948, Russel1949, (Bean S lib) D&D1945, Massey1947, (Bean II lib)

*‘Early Morley’*  (Name not confirmed) D&D1945, (Bean II lib)


var. cremastum  Hill1964, (RH63).


**camtschat1cum**  Alaska, Russia, Japan. H&S1950, (Bean S lib)


**cantabile (russatum)**  Yunnan, Szechuan. D&D1947, Massey1947, Hill1950, (Bean S lib)

**catacosomum**  (Name not confirmed) M1947, H&S1950, (Bean II lib)

**cephalantheum**  Szechuan, Yunnan, Tibet, Burma.


**cephalanthum var. crebreflorum (crebreflorum)**  Burma, Assam. (Bean S lib). H&S1948, (Bean S lib)


**charitopes**  Burma. H&S1948, (Bean S lib). Hill1964, (Bean EWH)

**chartophyllum (yunnanense)**  H&S1948, (Bean S lib)

**chasmananthum (augustinii ss. chasmanthum)**  Yunnan, Tibet. M1947, H&S1947, (Bean S lib). Massey1962, (Bean EWH)

**chasmanthoides (augustinii)**  China. H&S1948, M1947, (Bean S lib)

**chryseum (rupicola var. chryseum)**  (Bean says *chryseum = multiens*) H&S1964, (Bean EWH)


**cinnarinum**  Nepal. McK1946, M1947, (Bean S lib).

var. hlandfordii.florum  Nepal. BB1961, (Bean EWH)

var. raylei (roylei)  Nepal. D&D1944, (Bean S lib). Hill1964, (Bean EWH)

**concatenans**  China. H&S1950, (Bean II lib). Hill1964, (Bean EWH)

**coriaceum**  Yunnan. Stead1945, (Bean S lib)

**cosmetum (saluenense var. chameunum)**  Yunnan. H&S1964, (Bean EWH)

**cowianum**  Hill1964, (RH56).

**crassum**  China, Upper Burma. (Cook 1965)

**cuneatum (ravum)**  Yunnan. H&S1950, (Bean S lib)

**dalhousiae**  Nepal, Bhutan, Sikkim. D&D1947, (Bean S lib). Massey1962, (Bean EWH)


**decorum**  China. M1947, (Bean II lib). D1935,37, (Bean II lib)


**delavayi (arboreum ssp. delavayi)**  Yunnan. M1947, McK1946, (Bean S lib)

**diaprepes**  Yunnan. D1945, M1947, (Bean S lib)

**dicroanthum**  Yunnan. H&S1964, (Bean EWH)

**didymum (sanguineum ssp. didymum)**  China. H&S1948, (Bean S lib). H1964, (Bean EWH)


*‘Kirkii’*  (Name not confirmed). Cabin Park, (PPL).


Pink Form (Name not confirmed). Bod 1964, (RH63).

+ elliotti India. (Cook 1965)

KW20303 Circus, (PPL).


eriogynum (anthosphaerum). D&D1944, (RY38).


eximium (falconeri ssp. eximium) India. H&S1948, (Bean II lib)

exquisitum (oretropes 'Exquisitum') Yunnan, Szechuan, Tibet. H&S1947, (Bean S lib)

falconeii Nepal to Bhutan. D1935, (Bean II lib). D1937, (Bean II lib)

fargesi (oreodoxa var. fargesi) Hupeh, Szechuan. H&S1948, (Bean II lib). Massey1962, (Bean EWH)

fasciata Yunnan. H&S1947, (Bean II lib). 1961, (Bean EWH)


var. album Hill1964, (RH56).

var. majus (Name not confirmed) Hill 950, (Bean II lib)

fictolacteum (reux ssp. fictolacteum) Yunnan, Szechuan. Massey 1962, (Bean EWH)


fittianum ('Fittianum') Hort. H&S1950, (Bean S lib). Hill1964, (Bean EWH)


+ floccigerum Yunnan. M1962, (Bean EWH)


'Magnifica' (Name not confirmed). (Cook 1965). Harrison1962, (RH56).


fulgens Himalaya. D&D1935,37, (Bean II lib)


glaucum (glaucophyllum ?) E.Himalaya. H&S1947, (Bean S lib).


glischrum Himalaya. (Cook 1965)

+ grande Nepal, Bhutan. D1935, (Bean S lib)

+ griersonianum Yunnan. D1935, (Bean S lib)

+ griffithianum (ucklandii) Nepal, Assam. D1935,73, (Bean II lib)

+ Rubrum (Name not confirmed). (Cook 1965)


hemiichotum Szechuan. H&S1950, (Bean S lib)


hirsutum European Alps, Yugoslavia. H1947, (Bean II lib)

hodgsonii Nepal, Bhutan. H&S1947, (Bean II lib). Hill1964, (Bean EWH)


hormophorum Yunnan, Szechuan. Hill1950, (Bean II lib)

hyperythrum Fornosa. M1947, (Bean S lib)

hypoglaucum Szechuan, Hupeh. D1947, (Bean S lib)
Appendix 3: Catalogue of the previous collection


*impeditum (litangense)* China. Wilson 1946, Massey 1947, Hill 1947, (Bean II lib)

*imperator (uniflorum var. imperator)* Burma. H&S 1947, 50, (Bean S lib)

*inequale* (Name not confirmed). (Cook 1965)

**KW20301** Cabin Park, (PPL).

*insigne* Szechuan. H&S 1947, 50, (Bean S lib)

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*irroratum* Yunnan. 1935, (Bean S lib)


*keiskei* Japan. H&S 1950, (Bean II lib)


*keysii* Himalaya, Bhutan. H&S 1947, 50, (Bean II lib)


*lanatum* Himalaya, Sikkim. 1964, (RH56).

*lapponicum* Scandinavia, N. America. D 1941, 42, 47, (Bean II lib)

*ledifolium* D 1941, 42, H 1937, (Bean II lib)


*litangense (impeditum)* J 1964, (RH56).


*longistylum* 1941, cabin, (Bean S lib). D&D (RY38).


*lutum* Europe, Caucasus. (Cook 1965)


*maddeni* Himalaya. (Cook 1965)

*makinoi* Japan. H&S 1947, (Bean S lib)

*mallotum* Burma. M 1947, (Bean S lib)


*megalocalyx* China, Burma. Stead 1945, (Bean S lib)

*mergeratum* Himalaya, Burma. H&S 1946, (Bean EWH)

*meliananthum (mekongense var. meliananthum)* Burma, Yunnan, Tibet. H&S 1950, (Bean S lib)


*microleucum (orthocladum var. microleucum)* Yunnan. H&S 1950, (Bean S lib). Hill 1964, (Bean EWH)


*mopinense* Szechuan. H&S 1947, (Bean II lib)

*mucronulatum* China, Russia, Korea, Japan. Wilson 1946, M 1947, (Bean S lib)

*myrtilloides (campylognynum Myrtilloides group)* Burma. H&S 1948, (Bean S lib)

*neriiflorum* Yunnan, Bhutan. D 1947, M 1947, McK 1946, (Bean S lib)

*neriiflorum ssp. euchaites* Yunnan, Tibet, Burma. M 1947, McK 1946, (Bean S lib)

*nitens (calosrotum ssp. riparium Nitens group)* Burma. H&S 1950, (Bean II lib). Hill 1964, (Bean EWH)

*niveum* Sikkim. H&S 1950, (Bean II lib)


*nuttalli* Assam, Tibet, Burma. D 1941, (Bean S lib)

*nuttalli var. stellatum* Tibet. F 1946, (Bean S lib)

*obtusum* (Bean S lib)
Appendix 3: Catalogue of the previous collection


+ occidentale N.America. D1937,42, (Bean II lib)

oleifolium (virgatum ssp. oleifolium) Yunnan, Tibet. H&S1947, (Bean S lib, RH47)


orthocladium Yunnan, Szechuan. H&S1948, (Bean S lib)
patulum Burnna. H&S1950, (Bean II lib)

pentaphyllum Japan. H&S1947, (Bean S lib)

pocophorum Tibet. H&S1950, (Bean II lib)

polyandrum (Name not confirmed). Russell 1950, (RH47).

+ ponticum Spain, Portugal, Asia minor. (Cook 1965)

praecox (Name not confirmed). (Cook 1965)

prostigatum (Name not confirmed) H&S1947, (Bean S lib)


pubescens Yunnan. H&S1950, (Bean II lib)
pumilum Sikkim. H&S1950, (Bean S lib)
punctatum (minus) N.America. H1947, (Bean II lib)

+ racemosum Yunnan, Szechuan. H1935, D1935, (Bean II lib)

‘Forrest form’ Hill1948, (Bean II lib)

radicans (calostratum ssp. keleticum Radicans group)
Tibet. H&S1947,50 (Bean S lib). Hill1964, (Bean EWH)

ravum (cuneatum) Yunnan, Szechuan. H&S1947, (Bean S lib)

repens (forrestii Repens group) Tibet, Yunnan, Burnna. H&S1948,50, (Bean S lib)

rex China. (Cook 1965)

KW pink 4504 (Cook 1965)
rhabdotum Bhutan, Assam. M1947, (Bean II lib)

rockii KW158 (Name not confirmed). (Cook 1965)

rockii KW184 (Name not confirmed). (Cook 1965)
saluense Tibet, Yunnan, Burnna. H&S1947,50, (Bean S lib)
sargentianum Szechuan. H&S1948,50, (Bean S lib). Hill1964, (Bean EWH)
sabrum ‘Red Emperor’ (Cook 1965)

+ schlippenbachii Korea, Russia, China. S1935, H1942, (Bean II lib)

scintillans Yunnan, Szechuan. H&S1947,50, M1946, (Bean S lib). Hill1964, (Bean EWH)

scyphocalyx (dichroanthum ssp. scyphocalyx) Yunnan, Burnna. H&S1950, (Bean II lib)
Appendix 3: Catalogue of the previous collection


siderum Bod1963, (RH56).

simsii Yunnan, Hong Kong, Burma, Thailand, Taiwan. D&D1942, (Bean S lib)


smirnowii Asiatic Turkey. D1935, (Bean II lib)

souliei Szechuan. M1947, (Bean II lib)


‘Wellsi’ Douglas Park, (PPL).

sterophyllum (Name not confirmed) H&S1950, (Bean II lib)

stewartianum Yunnan. H&S1950, (Bean S lib)


sutchuenense var. geraldii Hupeh, Szechuan. Hill1947, (Bean II lib)

taronense (Name not confirmed). Bod1964, (RH63).

temoense (Name not confirmed). Russell 1947, (RH47).


tsangoense (charitopes ssp. tsangpoense) Tibet. H&S1950, (Bean S lib)

tsangoense var. priniflorum (priniflorum) India, Burma. Hill1950, (Bean S lib)

tsariense Bod1964, (RH63).

tschonoskii (Name not confirmed). Hill1960, (RH47).

ungernii Asiatic Turkey, Russia. H&S1950, (Bean II lib)

uniflorum Tibet, Burma. H&S1950 not true? (Bean II lib)

valentianum Yunnan. H&S1948, (Bean S lib)

vaccinoides Tibet, Sikkim, Assam, Burma. H&S1964, (Bean EWH)


vernicosum Szechuan, Yunnan. 1935, (Bean S lib)


virgatum Nepal, Sikkim, Nepal. S1935, (Bean II lib)


wallchii Nepal, Assam. M1962, (Bean EWH)

wardii (croceum) Szechuan, Yunnan. Tibet. M1947, H&S1947,50, (Bean S lib)


wilsoniae Central China. H1947, (Bean II lib)

xanthocodon (cinnabarimum ssp. xanthocodon) Tibet. H&S1950, (Bean S lib)

yedoense Korea. D&D1942, (Bean S lib)

yedoense var. poukhanense Korea. 1937,42, (Bean S lib)


var. praecox Hill1964, (Bean EWH)


Rhododendron hybrids (0+256)

Appendix 3: Catalogue of the previous collection


‘Alison Johnstone’ (concatenans x yunnanense). (Cook 1965)


‘Apology’ D&D1960, (RR1958)

arboreum x ‘Pink Pearl’ (Cook 1965)


‘Ariel’ (discolor x ‘Memoir’). Hill 1964, (RR1958)


‘Asagi’ (kaempferi x simsii var. eriocarpum). Hill1960, (RR1958)


‘Avalanche’ (calophytum x ‘Loderi’). Hill1963, (RR1958,RH56)

‘Bagsbot Ruby’ (thomsonii hyd). D1945, (RY38).

‘Barbara’ (campylocarpum var. elatum x ‘Loderi’). M1964, (RR58).

‘Barbara Jackman’ (Name not confirmed). Douglas Park, (RR1958)


‘B.de Bruin’ (catawbiense hyd). Cabin Park, (PPL).


‘Bernard Crisp’ (hardyhybrid x ‘Pink Pearl’). (Cook 1965)


‘Bibiani’ (arboreum x ‘Moser’s Maroon’). M1965, (RH64).

‘Bilranum’ (Name not confirmed). (Cook 1965)


‘Blue Peter’ D1945, G1944, (RY38).


Appendix 3: Catalogue of the previous collection


'Bo-Peep' (lutescens x moupinense). Hill1963, (RH56).

'Boule de Neige' (caucasicum x hardy catawbiense hyd). Horton 1918, Cabin Park, (PFL).

+ 'Bow Bells' ('Corona' x williamsianum). Massey 1962, (RR1958)

+ 'Britannia' ('Queen Wilhelmina' x 'Stanley Davis'). D&D1947, (RH47).


'Buttercup' (campylocarpum x 'A.W.Hardy'). (Cook 1965)

'Butterfly' (camplyocarpum x 'Mrs Milner'). (Cook 1965). D1945, (RY38).

'Byzantium' (Name not confirmed). (Cook 1965).

'Calmose' (calophytum x griersonianum). Hill1964, (RR1958)

+ 'Calstocker' (calophytum x 'Dr Stocker'). Harrison1962, (RR1958).

+ 'Canary' (campyllocarpum x discolor x Loderi). (Cook 1965)


+ 'Carita Inchmery' (campyllocarpum x 'Naomi'). Harrison1962, (RR1958)


+ 'Chancellor' (Waterers, before 1860). D&D1962, (RH56,RR1958)


+ 'Charles Smith' (Name not confirmed). McK1946, (RY38).

+ 'Charm' (forrestii var. repens x 'Shilsoni'). Bod1964, (RR58).

+ 'Chaste' (campyllocarpum x 'Queen of the May'). Hill1964, (RR1958)


+ 'Choremia' (arboresum x haematodes). Bod, (RR1958)


+ 'Cilpinense' (ciliatum x moupinense). (Cook 1965)

+ 'Coalition' H1942, (RY29).


+ 'Concessum' (Cook 1965)


+ 'Cunninghamii splendidens' (Name not confirmed). (Cook 1965)

+ 'Cynthia' (catawbiense x griffithianum). Cabin Park, (PFL).


+ 'Dalhousiae Victorianum' Hill1947, (RH47).

+ 'Damas' (campyllocarpum x 'Dr Stocker'). (Cook 1965). Hill1963, (RH56).

+ 'Daphne Millais' (griffithianum hyd). (Cook 1965)


Appendix 3: Catalogue of the previous collection

'Dawns Delight' (griffithianum hyd). (Cook 1965)

'Discoolor Slocock' (Name not confirmed). (Cook 1965)
'Diva' (griersonianum x 'Ladybird'). 1964, (RR1958).

'Dr J.M. Aikman' (Name not confirmed). Cabin Park, (PPL).
'Dr Stocker' (caucasicum x griffithianum). (Cook 1965). D1945, (RY38).
'Dr W.F. Wery' ('Queen Wilhelmina' x 'Stanley Davis'). (Cook 1965)
'Duchess of Portland' (barbatum x 'Handsworth Early White'). G1943, (RY29).

'Earl of Athlone' ('Queen Wilhelmina' x 'Stanley Davis'). H1942, (RY29).
'Edgar Stead' ('Ilam Alani' x 'Shilsonii'). (Cook 1965)
'Edith Carey' (Name not confirmed). G1943, (RY29).
'Edith Mackworth Praed' ('Doncaster' hyd). (Cook 1965)

'Eileen' H1942, (RY29).
'Eleanor' (augustini x desquamatum). Hill1964, (RH56,RR58).
'Elizabeth' x 'Jenny' (Cook 1965)
'Elizabeth' x 'Helen Fox' (Cook 1965)


'Erebüs' x 'Tally Ho' (Cook 1965)

'Ernest Gill' (arboreum x fornutii). D&D1945, (RY38).
'Essex Scarlet' Cabin Park, (PPL).
'Exbury Naomi' ('Aurora' x fornutii). (Cook 1965)

'Fabia Tangerine' (dichroanthum x griersonianum). Bodl1963, (RR58).


'+ Fastuosum Flore Plena' (catawbiense x ponticum). Cabin Park, (PPL).
'F.C. Puddle' (griersonianum x neriiflorum). (Cook 1965)

'+ Florence' Douglas Park, (PPL).
'Francis Hanger' (dichroanthum x 'Isabella'). Harrison 1962, (RR1958)
'Francis B. Hayes' (Cook 1965)

Appendix 3: Catalogue of the previous collection

‘G.A. Sims’ (Cook 1965)
‘Gauntlettii’ (griffithianum hyd). (Cook 1965)
‘G.B. Simpson’ (Cook 1965)
‘Gertrud Schale’ (forrestii var. repens x ‘Prometheus’). M1964, (RR58).
‘Gills Gloriosa’ (griffithianum x ‘Pink Pearl’). (Cook 1965)
‘Gills Triumph’ (arboreum x griffithianum). (Cook 1965)
‘Gloria’ (Name not confirmed). (Cook 1965)
‘Glory of Leonardslee’ (griffithianum hyd). (Cook 1965)
‘Golden Horn’ (dichroanthum x elliotii). Gardens (PPL).
‘Goldsworth Crimson’ (griffithianum x hardy hyd). (Cook 1965)
‘Goldsworth Yellow’ (campylocarpum x caucasicum). (Cook 1965). D1945, (RY38).
‘Grenadine’ (grenadine x ‘Pauline’). M1965, (RH64).
‘Halcyon’ Gardens, (PPL).
‘Halopeanum’ (griffithianum x maximum). (Cook 1965)
‘Harrisii’ (arboreum x thomsonii). (Cook 1965).
‘Helen Fox’ (Cook 1965)
‘Helen Waterer’ (Cook 1965)
‘Ightham’ (Bodnant form of augustinii x fastigiatum). Bod1963, (RR58).
‘Illam Apricot’ (dichroanthum hyd x (‘Pink Pearl’ x zeylanicum)). (Cook 1965)
‘Illam Cornubia’ (‘Shilsonii’ x zeylanicum). (Cook 1965)
‘Illam Red Glow’ (Cook 1965)
‘Impi’ (didymum x ‘Mosses Maroon’). M1965, (RH64).
‘Ingramii’ Cabin Park, (PPL).
‘Irene Stead’ (Name not confirmed). (Cook 1965)
‘Isabella’ (auriculatum x griffithianum). (Cook 1965)
‘Ivanhoe’ (‘Chanticleer’ x griersonianum). (Cook 1965)
Appendix 3: Catalogue of the previous collection

‘Jalisco Exbury’ (‘Dido’ x ‘Lady Bessborough’). (Cook 1965)
‘John Walter’ (arboreum x catawbiense). (Cook 1965)
‘Karkov’ (griersonianum x ‘Red Admiral’). (Cook 1965)
‘Kate Waterer’ Horton 1918, (PFL).
‘Kewense’ (Name not conﬁrmed) 1935, (Bean II lib)
‘Lady Bessborough Roberte’ (Cook 1965)
+ ‘Lady Chamberlain’ (connabarimum var. roylei x ‘Royal Flush’).
‘Lady Clementina Mitford’ (maximum hyd). (Cook 1965)
‘Lady de Rothschild’ (griﬃthianum x ‘Sappho’). (Cook 1965)
+ ‘Lady Galway’ D1945, (RY38).
+ ‘Lodauric’ (auriculatum x ‘Loderi’). Hill1964, (RH56).
‘Loderi Patience’ (fortunei x griffithianum). (Cook 1965)
+ ‘Loders White’ (arboreum var. album x griffithianum). D1945, (RY38).
‘Loders White’ x ‘Tally Ho’ (Cook 1965)
‘Lord Roberts’ (Cook 1965)
+ ‘Louis Pasteur’ (‘Mrs Tritton’ x ‘Viscount Powerscourt’). H1942, (RY29).
Appendix 3: Catalogue of the previous collection

'Madame Cavalier' (Name not confirmed). (Cook 1965)
'Marcia' (campylocarpum x 'Gladys'). (Cook 1965)
+ 'Margaret Dunn' (discolor x 'Fabia'). Hill 1963, (RH56).
'Mariloo B.' (Cook 1965)
'Marquis of Lothian' (Name not confirmed). (Cook 1965)
'Marshall' (Name not confirmed). 1964, (RH56).
'Martin Hope Sutton' Horton 1918, (PPL).
+ 'Mary Blane' D&D, (RR1958,RR58).
'Master Dick' (griersonianum x 'The Don'). Hill 1964, (RR1958).
'Medusa' (griersonianum x scyphocalyx). (Cook 1965)
'Miss Jekyll' Horton 1918, (PPL).
+ 'Mohamet' (dichroanthum x 'Tally Ho'). Hill 1964, (RH56).
'Moonstone' (campylocarpum x williamsianum). (Cook 1965)
+ 'Mrs Charles E.Pearson' (catawbiense 'Grandiflorum' x 'Coombe Royal'). D&D 1945, (RY38).
+ 'Mrs Charles Irwin Evans' (Name not confirmed). G1944, (RY29).
+ 'Mrs C.B.van Nes' ('Florence Smith' x 'Princess Juliana'). D1947, (RY38).
'Mrs Compton McKenzie' (Name not confirmed). H1943, (RY29).
'Mrs George Paul' (griffithianum hyd). Cabin Park, (PPL).
+ 'Mrs G.W.Leak' ('Chevalier Felix de Sauvage' x 'Coombe Royal'). D&D 1938, H1942, (RY29).
'Mrs Frank Mangles' (Name not confirmed). Cabin Park, (PPL).
'Mrs Furnival' (caucasicum hyd x griffithianum hyd). (Cook 1965). D&D 1945, (RY38).
+ 'Mrs Henry Agnew' (arboreum var. album x grande). Cabin Park, (PPL).
'Mrs Henry Shilson' (arboreum hyd). Hill 1947, (RH47).
+ 'Mrs J.C.Williams' Hill 1963, (RH56).
'Mrs John Kelk' (Cook 1965)
'Mrs John Penn' Douglas Park, (PPL).
'Mrs John Waterer' Horton 1918, (PPL).
'Mrs J.P.Laide' (Name not confirmed). Cabin Park, (PPL).
'Mrs L.A. Dunnett' (hybrid of 'Mrs George Hardy'). (Cook 1965). H1942, (RY29).
'Mrs Lindsay Smith' ('Duchess of Edinburgh' x 'George Hardy'). Cabin Park, (PPL).
'Mrs Lionel de Rothschild' Hill 1947, (RH47).
'Mrs Mary Ashley' (campylocarpum hyd). (Cook 1965)
+ 'Mrs P.D.Williams' H1942, (RY29).
'Mrs Philip Martineau' H1942, (RY29).
'Mrs Tom Agnew' Hill 1947, (RH47).
'Mrs William Agnew' Hill 1947, (RH47).
Appendix 3: Catalogue of the previous collection

+ ‘Nannette’ H1942, (RY29).
+ ‘Old Port’ (catawbiense hyd). (Cook 1965)
+ ‘Peter Koster’ (‘Doncaster’ hyd x ‘George Hardy’). (Cook 1965)
+ ‘Pink Perfection’ (‘Duchess of Endinburgh’ x ‘Princess Alexandra’). (Cook 1965)
+ ‘Polar Bear’ (auriculatum x diaprepes). (Cook 1965)
+ ‘Prince Alice’ (ciliatum x edgeworthii). D1947, (RY38).
+ ‘Princess Elizabeth’ D&D1945, (RY38).
+ ‘Purpureum Elegans’ (catawbiense hyd). (Cook 1965)
+ ‘Purpureum Grandiflorum’ (catawbiense hyd). (Cook 1965)
+ ‘Raul’ (Name not confirmed). (Cook 1965)
+ ‘Raoul Millais’ (griffithianum hyd). (Cook 1965)
+ ‘Red Riding Hood’ (‘Tosanguineum’ x griffithianum). (Cook 1965)
+ ‘Romany Chai’ (griersonianum x ‘Mosers Maroon’). Russell 1947, (RH47).
+ ‘Royal Flush’ (‘cinnabarimum x maddeni’). M1965, (RH64).
+ ‘Rubina’ (didymum x ‘Tally Ho’). Hill1963, (RH56).
+ ‘Ruby Ruffles’ (Name not confirmed). Cabin Park, (PPL).
Appendix 3: Catalogue of the previous collection

+ ‘Sappho’ D1945, (RY38).
+ ‘Scarlet King Kaka’ (Name not confirmed). (Cook 1965)
+ ‘Sir Frederick Moore’ (discolor x ‘St Kevene’). Hill1963, (RH56).
+ ‘Sirius’ (crassum x cinnabarum var. roylei magnificum). M1965, (RH64).
+ ‘Solent Queen’ (discolor x griffithianum). (Cook 1965)
+ ‘Suave’ (Name not confirmed). D1947, (RY38).
+ ‘Tali Queen’ (Name not confirmed). Douglas Park, (PPL).
+ ‘Tally Ho’ x griersonianum (Cook 1965)
+ ‘Titian’ Horton 1918, (PPL).
+ ‘Townhill Albatross’ (discolor x ‘Loderi King George’). Hill1964, (RH56).
+ ‘Townhill Orange’ (Name not confirmed). (Cook 1965)
+ ‘Trewthen Orange’ (concatenans x ‘Full House’). (Cook 1965)
+ ‘Tupare’ (Name not confirmed). (Cook 1965)
+ ‘Unknown Warrior’ (‘Queen Wilhelmina’ x ‘Stanley Davis’). H1943, (RY29).
+ ‘Van Dyck’ (Cook 1965)
+ ‘Viscountess Elveden’ (Cook 1965)
+ ‘White Pearl’ D&D1945, (RY38).
+ ‘William Downing’ (Cook 1965)
+ ‘William Shilson’ (Name not confirmed). (Cook 1965)
+ ‘Winsome’ (griersonianum x ‘Humming Bird’). Massey1965, (RR1958, RH64).
Azalea

Azalea listings have been derived from Douglas Cook's catalogue of 1965, plus his notebooks on the collection. The azalea list generated from these sources is corroborated by markings in his copy of the International Rhododendron Register 1958. Unfortunately said markings do not give sources of plant material.

Azalea (0+386)

'Ada' (Name not confirmed). (Cook 1965).
'Ada Brunieres' (Knap Hill). (Cook 1965).
'Adolphe de Haens' (Name not confirmed). (Cook 1965).
'Aida' (Rustica). (Cook 1965).
'Akebone' (Kurume) (Name not confirmed). (Cook 1965).
'Albert Elisabeth' (Indian). D&D1959, (RR1958)
'Alden' (Name not confirmed). (Cook 1965).
'Alice de Steurs' (Mollis). (Cook 1965).
'Alphonse Lavalle' (Mollis). (Cook 1965).
'Altaclarensis' (Ghent). (Cook 1965).
'Altair' (Glen Dale). (PPL).
'Ambush' (Name not confirmed). (PPL).
'Amoena' (Kurume). Glen Douglas 1960, (RR1958)
'Annabell' (Knap Hill). (PPL).
'Anthony Koster' (Mollis). (Cook 1965).
'Ariel' (Ghent). (Cook 1965).
'Artistic' (Name not confirmed). (Cook 1965).
'Asagi' (Wada). (Cook 1965).
'Asakanonare' (Wada). Hill 1960, (RR1958)
'Aurora' (Knap Hill). (Cook 1965).
'Aurora de Rooighem' (Ghent). (Cook 1965).
'Autumn Colour' (Name not confirmed). (Cook 1965).
'Babeuff' (Mollis) (Cook 1965).
'Baby White Ruffles' (Name not confirmed). (Cook 1965).
'Ballerina' (Knap Hill). (Cook 1965).
'Balzac' (Knap Hill). (Cook 1965).
'Barbara Jenkinson' (Knap Hill). (Cook 1965).
'Bazaar' (Knap Hill). (PPL).
'Beaute Celeste' (Ghent). (Cook 1965).
'Benigiri' (Kurume). (Cook 1965).
'Berryrose' (Knap Hill). (Cook 1965).
'Best White' (Name not confirmed). (Cook 1965).
Appendix 3: Catalogue of the previous collection

‘Betsy de Bruin’ (Mollis). (Cook 1965).

‘Betty Kelly’ (Name not confirmed). (PPL).

‘Betty Law’ (Name not confirmed). (Cook 1965).

‘Bijou de Gentbrugge’ (Ghent). (Cook 1965).

‘Bill’ (Name not confirmed). (Cook 1965).

‘Blauws Pink’ (Kurume). D&D1959, (RR1958)

‘Bouq uet de Flore’ (Ghent). (Cook 1965).

‘Brazil’ (Knap Hill). (Cook 1965).

‘Brides Bouquet’ (Name not confirmed). (PPL)

‘Bright Forecast’ (Knap Hill). (Cook 1965).

‘Bright Straw’ (Knap Hill). (Cook 1965).

‘Brilliant’ (Indian). (PPL).

‘Brimstone’ (Knap Hill). (Cook 1965).

‘Broughtonii Aureum’ (Azaleodendron; A. maximum x R. ponticum). (Cook 1965)

‘Buccaneer’ (Glen Dale). D&D1939, (RR1958)

‘Bullfinch’ (Knap Hill). D&D, (RR1958)

‘Bungo-nishiki’ (Wada). (Cook 1965).

‘Buzzard’ (Knap Hill). (Cook 1965).

‘Canasta’ (Knap Hill). (PPL).


‘C.B.van Nes’ (Mollis). (Cook 1965).

‘Cecile’ (Knap Hill). (Cook 1965).

‘Chaffinch’ (Knap Hill). (Cook 1965).

‘Charles de Buck’ (Indian). (Cook 1965).

‘Charles Rogier’ (Ghent). (Cook 1965).

‘Cheka’ (Name not confirmed). (PPL).

‘Chevalier de Reali’ (Mollis). (PPL).

‘Chicago’ (Mollis). (Cook 1965).

‘Chichibu’ (Wada). (Cook 1965).

‘Christopher Wren’ (‘Goldball’) (Endtz). (Cook 1965).

‘Chromatella’ (Ghent) (PPL).

‘Clara Butt’ (Mollis). (Cook 1965).

‘Clarice’ (Name not confirmed). (Cook 1965).

‘Clive’ (Name not confirmed). (Cook 1965).

‘Cocarde Orange’ (Indian). (Cook 1965).

‘Coccinea Speciosa’ (Ghent). (Cook 1965).

‘Comte de Gomer’ (Mollis). (Cook 1965).

‘Comte de Papadopoli’ (Mollis). (Cook 1965).

‘Constance’ (Rutherford). H1959, (RR1958)

‘Consul Pecher’ (Mollis) (PPL).

‘Corneille’ (Ghent). (PPL).

‘Corringe’ (Knap Hill). (Cook 1965).

‘Czepello’ (Name not confirmed). (PPL).

‘Daphne’ (Indian). (Cook 1965).

‘Daviesi’ (Ghent). (Cook 1965)
‘Debutante’ (could be either Kurume or Knap Hill). (PPL).
‘Desert Pink’ (Knap Hill). (PPL).
‘Diabolo’ (Knap Hill). (PPL).
‘Dick’ (Name not confirmed). (Cook 1965).
‘Directeur Moerlands’ (Mollis). (Cook 1965).
‘Dr. Chas Baumann’ (Ghent). (Cook 1965).
‘Dr M.Oosthoek’ (Mollis). (Cook 1965).
‘Dr Reichenbach’ (Mollis). (Cook 1965).
‘Dr Streiter’ (Ghent). (PPL).
‘Duc de Nassau’ (Indian). (Cook 1965).
‘Eleanor Thelman’ (Name not confirmed). (PPL).
‘Electa’ (Ghent). (Cook 1965).
‘Elisabeth’ (Mollis). (Cook 1965).
‘Emile Liebig’ (Mollis). (PPL).
‘Eri’ (‘Eric Schaeme’) (Indian). (Cook 1965).
‘Eva Goude’ (Knap Hill). (Cook 1965).
‘Excelsior’ (Indian). (Cook 1965).
‘Fancy Free’ (Knap Hill). (Cook 1965).
‘Fanny’ (‘Pucella’) (Ghent). (Cook 1965).
‘Favor Major’ (Knap Hill). (Cook 1965).
‘Fawley’ (Knap Hill). (Cook 1965).
‘Fenelon’ (Glen Dale). (PPL).
‘Fielders White’ (macronatum form). (Cook 1965).
‘Fireball’ (Knap Hill). (Cook 1965).
‘Firebird’ (Kurume). (Cook 1965).
‘Firecrest’ (Knap Hill). (Cook 1965).
‘Firefly’ (Knap Hill). (Cook 1965).
‘Flame’ (could be either Indian or Kurume). (PPL).
‘Flaming June’ (Knap Hill). (Cook 1965).
‘Flarpath’ (Name not confirmed). (Cook 1965).
‘Floradora’ (Mollis). (Cook 1965).
‘Florence Pilkington’ (Knap Hill). (Cook 1965).
‘Frans van der Bom’ (Mollis). (PPL).
‘Frills’ (Knap Hill). (Cook 1965).
‘Fude-tsuka’ (Kurume). (PPL).
‘Fujimanyo’ (macronatum). (PPL).
‘Gallipoli’ (Knap Hill). (Cook 1965).
‘Gannet’ (Knap Hill). (Cook 1965).
'Geant des Batailles' (Ghent). (Cook 1965).
'General Goffinet' (Mollis). (Cook 1965).
'General Trauff' (Ghent). (Cook 1965).
'General Wavell' (macranthum). (Cook 1965).
'George Reynolds' (Knap Hill). (Cook 1965).
'Gibraltart' (Knap Hill). (Cook 1965).
'Ginger' (Knap Hill). (Cook 1965).
'Gloria Mundi' (Ghent). (Cook 1965).
'Gloire de Belzique' (NNe) (PPL).
'Glory of Boskoop' (Mollis). (Cook 1965).
'Glory of Sunninghill' (Indian). (Cook 1965).
'Goldcrest' (Knap Hill). (Cook 1965).
'Gold Dust' (Knap Hill). (Cook 1965).
'Goldfinch' (Knap Hill). (Cook 1965).
'Golden Dream' (Knap Hill). (Cook 1965).
'Golden Eye' (Knap Hill). (Cook 1965).
'Golden Girl' (Knap Hill). (Cook 1965).
'Golden Glory' (Ghent). (PPL).
'Golden Oriole' (Knap Hill). (Cook 1965).
'Golden Yellow' (Name not confirmed). (PPL).
'Goodsons Brick' (Name not confirmed). (Cook 1965).
'Goodsons Red' (Name not confirmed). (Cook 1965).
'Graciosa' (Ghent). (Cook 1965).
'Graham' (Name not confirmed). (Cook 1965).
'Gumpo Salmon' (Name not confirmed) D&D1959, (RR1958).
'Gumpo Pale Pink' (Name not confirmed). D&D1959, (RR1958).
'Gwyneth' (Knap Hill). (Cook 1965).
'Gwynnid Lloyd' (Knap Hill). (PPL).
'Harrisons special' (Name not confirmed). (PPL).
'Harvest Moon' (Knap Hill). (Cook 1965).
'Hatsugiri' (Kurume). (Cook 1965).
'Henri Conscience' (Mollis). (Cook 1965).
'Hiawatha' (Knap Hill). (Cook 1965).
'Hiewa' (Name not confirmed). (PPL).
'Hinodesgi' (Kurume). (Cook 1965).
'Hino-tsukasa' (Satsuki) (PPL).
'Homebush' (Knap Hill). (Cook 1965).
'Honeysuckle' (Knap Hill). (Cook 1965).
'Hoo' (Kurume) 1959, (RR1958).
'Hortulanus H.Witte' (Mollis). (Cook 1965).
‘Hotspur’ (Knap Hill). (Cook 1965).
‘Hotspur Red’ (Knap Hill). (Cook 1965).
‘Hotspur Yellow’ (Knap Hill). (Cook 1965).
‘Hugho Koster’ (Mollis). (Cook 1965).
‘Ignnea Nova’ (Ghent). (Cook 1965).
‘Il Tasso’ (Rustica). (Cook 1965).
‘Imperatrix’ (Ghent). (PPL).
‘Indivisa Daphine’ (Name not confirmed) (PPL).
‘Irene Koster’ (Ghent) (Cook 1965).
‘Jannet’ (Name not confirmed). (Cook 1965).
‘J.C.van Tol’ (Mollis). (Cook 1965).
‘Jenksii’ (Name not confirmed). Cabin Park, (PPL).
‘Jessie’ (Knap Hill?) (Cook 1965).
‘J.Jennings’ (Knap Hill). (Cook 1965).
‘Jock Coutts’ (Knap Hill). (Cook 1965).
‘Joseph Baumann’ (Ghent). (Cook 1965).
‘Josephine Klinger’ (Ghent). (Cook 1965).
‘Jubilee’ (Indian). (Cook 1965).
‘Kalmia’ (Name not confirmed). (Cook 1965).
‘Kate’ (Name not confirmed). (Cook 1965).
‘Kersbergen hybrid’ (Name not confirmed). (Cook 1965).
‘Kestrel’ (Knap Hill). (Cook 1965).
‘Kipps’ (Knap Hill). (PPL).
‘Knap Hill Apricot’ (Knap Hill). (Cook 1965).
‘Knap Hill Cream’ (Name not confirmed). (Cook 1965).
‘Knap Hill Orange’ (Knap Hill). (Cook 1965).
‘Knap Hill Red’ (Knap Hill). (Cook 1965).
‘Knap Hill White’ (Knap Hill). (Cook 1965).
‘Knap Hill Yellow’ (Knap Hill). (Cook 1965).
‘Knighthood’ (Knap Hill). (Cook 1965).
‘Kokin-shita’ (macrantha). (Cook 1965).
‘Koningin Sophia’ (Mollis). (Cook 1965).
‘Korin-yuki’ (Kurume). (Cook 1965).
‘Koster Brilliant Red’ (Mollis). (Cook 1965).
‘Krakatoa’ (Knap Hill). (Cook 1965).
‘Kurume Pink’ see ‘Esmeralda’
‘Lady Rosebery’ (Knap Hill). (Cook 1965).
‘Lapwing’ (Knap Hill). (Cook 1965).
‘Lemonara’ (Mollis). (Cook 1965).
Appendix 3: Catalogue of the previous collection

‘Leopold I’ (Indian). (Cook 1965).
‘Liberty’ (Mollis). (Cook 1965).
‘Linnet’ (Knap Hill). (Cook 1965).
‘Madame Arthur de Warelles’ (Mollis). (PPL).
‘Madame de Hahn’ (Name not confirmed). (PPL).
‘Madeline’ (Knap Hill). (Cook 1965).
‘Man-yoki’ (Kurume). (Cook 1965).
‘Margaret Magnet’ (Name not confirmed). (Cook 1965).
‘Marie Verschaffelt’ (Ghent). (Cook 1965).
‘Marina’ (Knap Hill). (Cook 1965).
‘Marion Merriman’ (Knap Hill). (PPL).
‘Marmion’ (Mollis). (Cook 1965).
‘Mary Claire’ (Knap Hill). (Cook 1965).
‘Mazurka’ (Knap Hill). (Cook 1965).
‘Mephistopheles’ (Indian). (Cook 1965).
‘Merlin’ (Knap Hill). (Cook 1965).
‘Middle East’ (Knap Hill). (PPL).
‘Mignon’ (Ghent). (Cook 1965).
‘Mikawa-murasaki’ (Kurume). (Cook 1965).
‘Miss Moffet’ (Name not confirmed) (Cook 1965).
‘Missimo’ (Name not confirmed). (Cook 1965).
‘M.Koster’ (Mollis). (Cook 1965).
‘Moscow’ (Ingram). (Cook 1965).
‘Mrs A.E. Endtz.’ (Mollis). (Cook 1965).
‘Mrs Anthony Waterer’ (Knap Hill). (Cook 1965).
‘Mrs C.C. Page’ (Mollis). (Cook 1965).
‘Mrs G. Page’ (Name not confirmed). (Cook 1965).
‘Mrs Gomer Waterer’ (Knap Hill). (Cook 1965).
‘Mrs Wright’ (Indian). D&D1959, (RR1958).
‘Multiflora’ (could be either Mollis or Indian). (PPL).
‘Multituli’ (Name not confirmed). (Cook 1965).
‘Muriel Watson Jones’ (Knap Hill). (Cook 1965).
‘Murray’ (Name not confirmed). (Cook 1965).
‘Myagino’ (Name not confirmed). (Cook 1965).
‘Nancy Buchanan’ (Knap Hill). (Cook 1965).
‘Nancy Waterer’ (Ghent). (Cook 1965).
‘Narcissiflora’ (Ghent). (Cook 1965).
‘Nicholaas Beets’ (Mollis) (Cook 1965).
‘Nicholas Schaurow’ (Indian). (Cook 1965).
Appendix 3: Catalogue of the previous collection

‘Night Light’ (Knap Hill) (Cook 1965).
‘Norma’ (double Ghent according to Cook). (Cook 1965).
‘Norma’ (Rustica) (PPL).
‘Oberst von Kutzinsky’ (Indian) (Cook 1965).
‘Okatsuki’ (Name not confirmed) (Cook 1965).
‘Old Gold’ (Knap Hill). (Cook 1965).
‘Oranea’ (Mollis). (Cook 1965).
‘Orangeade’ (Cook 1965).
‘Orient’ (Knap Hill). (Cook 1965).
‘Oxydol’ (Knap Hill). (Cook 1965).
‘Palest Primrose’ (Name not confirmed). (Cook 1965).
‘Pallas’ (Ghent). (Cook 1965).
‘Pavane’ (Knap Hill). (Cook 1965).
‘Penguin’ (Knap Hill). (Cook 1965).
‘Peregrine’ (Knap Hill). (Cook 1965).
‘Peter Proctor’ (Name not confirmed). (Cook 1965).
‘Phebe’ (Rustica). (Cook 1965).
‘Phidias’ (Rustica). (Cook 1965).
‘Pink Beauty’ (could be either Kurume, Mollis or Knap Hill). (PPL).
‘Poem’ (Name not confirmed). (Cook 1965).
‘Pompador’ (Name not confirmed). (Cook 1965).
‘Praxitele’ (Rustica). (Cook 1965).
‘President’ (Indian). (Cook 1965).
‘President Comte Oswald de Kerckhove’ (Indian). (Cook 1965).
‘Prince Henri de Pays-Bas’ (Ghent). (Cook 1965).
‘Princess Royal’ (Knap Hill). (Cook 1965).
‘Pucella’ see ‘Fanny’
‘Purple Splendour’ (Gable) (Cook 1965).
‘Queen of England’ (Ghent). (Cook 1965).
‘Queen Wilhelmina’ (Mollis). (Cook 1965).
‘Raphael de Smet’ (Ghent) (Cook 1965).
‘Rasho-mon’ (Kurume). (Cook 1965).
‘Red Delight’ (Name not confirmed). (PPL).

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‘Red Indian’ (Knap Hill) (Cook 1965).
‘Redshank’ (Knap Hill) (Cook 1965).
‘Reini’ (Indian). (Cook 1965).
‘Rogue’ (Glen Dale). (Cook 1965).
‘Roi de Holland’ (Indian). (PPL).
‘Rosabella’ (Kurume). (Cook 1965).
‘Rose de Hollande’ (Ghent). (Cook 1965).
‘Rosebud’ (Gable). D&D, (RR 1958).
‘Rosella’ (Knap Hill). (Cook 1965).
‘Royal Lodge’ (Knap Hill). (Cook 1965).
‘Rubis de Herrell’ (Name not confirmed). (PPL).
‘Ruddy Duck’ (Knap Hill). (Cook 1965).
‘Rumba’ (Knap Hill). (Cook 1965).
‘Ruth Davis’ (Knap Hill). (Cook 1965).
‘Sahara’ (Name not confirmed). (PPL).
‘Salmon’ (Indian). (PPL).
‘Salmon Orange’ (Knap Hill). (Cook 1965).
‘Salmon Prince’ (Kurume). (Cook 1965).
‘Salmon Queen’ (Mollis). (Cook 1965).
‘Salmon Red’ (Name not confirmed). (Cook 1965).
‘Sand Dune’ (Knap Hill). (Cook 1965).
‘Sandpiper’ (Knap Hill). (Cook 1965).
‘Saskia’ (Name not confirmed). (PPL).
‘Satan’ (Knap Hill). (Cook 1965).
‘Satsuki No. 77087’ (macrantha) (RR 58).
‘Scarlet O’Hara’ (Knap Hill). (PPL).
‘Scarlet Pimpernel’ (Knap Hill). (Cook 1965).
‘Scarlet Prince’ (Kurume). (Cook 1965).
‘Sculptor’ (Name not confirmed). (Cook 1965).
‘Sebastopol’ (Mollis). (Cook 1965).
‘Sensation’ (azalea?). (Cook 1965).
‘Shiro-manyo-tsutsuji’ (macronatum; narcissiflorum). (PPL, RR 58).
‘Sir Charles Napier’ (Indian). (Cook 1965).
‘Snowdrift’ (Mollis). (Cook 1965).
‘Soft Lips’ (Knap Hill). (Cook 1965).
‘Sonia’ (Knap Hill). (Cook 1965).
‘Southgate Wonder’ (Mollis). (Cook 1965).
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'Souvenir de Gentbrugge' (Name not confirmed) (Cook 1965).
'Souvenir du Prince Albert' (Indian) (Cook 1965).
'Spoonbill' (Knap Hill) (Cook 1965).
'Strawberry Ice' (Knap Hill) (Cook 1965).
'Sugared Almond' (Knap Hill) (Cook 1965).
'Sunset Boulevarde' (Knap Hill) (PPL).
'Sunset Pink' (Knap Hill) (PPL)
'Sylphides' (Knap Hill) (Cook 1965).
'Tangiers' (Knap Hill) (Cook 1965).
'Tebotan' (pulchrum form) (Cook 1965).
'Tessa' (Knap Hill) (Cook 1965).
'Toucan' (Knap Hill) (Cook 1965).
'Touchstone' (Glen Dale azalea) Hill 1964, (RR1958, RH56).
'Townhill Orange' (Name not confirmed) (Cook 1965).
'Triomphe de Grande' (NNC) CaP (PPL).
'Triomphe de l'Exposition' (Indian) (PPL).
'Tropic Glare' (Name not confirmed) (Cook 1965).
'Troupial' (Knap Hill) (Cook 1965).
'Tunis' (Knap Hill) (Cook 1965).
'Unique' (Ghent) (Cook 1965).
'Vera' (Name not confirmed) (Cook 1965).
'Vervaeniana' (Indian) (Cook 1965).
'Violacea Multiflora' (Indian) (Cook 1965).
'Violet Gordon' (Knap Hill) (Cook 1965).
'Virginalis' (Indian) CaP, (PPL).
'W.Edgar' (Name not confirmed) (PPL).
'W.E.Gumbleton' (Mollis) (Cook 1965).
'White Ruffles' (Name not confirmed) (Cook 1965).
'Whitethroat' (Knap Hill) (Cook 1965).
'Willem III' (Ghent) (Cook 1965).
'Wryneck' (Knap Hill) (Cook 1965).
'Yaegiri' (Kurume) (Cook 1965).

**Rhodothamnus: Ericaceae (1+0)**

*chamaecistus* The Alps. H&S 1947, (Bean II lib)

**Rhodotypos: Rosaceae**


**Rhus: Anacardiaceae (3+1)**

+candensis (aromatica)* N.America. H&S 1946, (Bean II lib)

+ cotinoides see *Cotinus obovatus* N.America. H&S 1937, S 1938,39, (Bean II lib)

+ *cotinus* see *Cotinus coggygria* Europe, Himalaya, China. D 1934, 35, (Bean II lib)

+ glabra 'Laciniata' Hill 1958, (RHS4).
Appendix 3: Catalogue of the previous collection

<table>
<thead>
<tr>
<th>Plant Family</th>
<th>Species</th>
<th>Origin</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saxifragaceae</td>
<td>lancea</td>
<td>S. Africa.</td>
<td>(RHS 4,EWH)</td>
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<td></td>
<td>osbeckii (chinensis)</td>
<td>China.</td>
<td>H&amp;S 1937, (Bean II lib)</td>
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<td></td>
<td>succedanea</td>
<td>China. frost killed, H1925, Wilson 1939, (Bean S lib)</td>
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<td>trichocarpa</td>
<td>Japan, china.</td>
<td>H&amp;S 1947, GD lookout, (Bean II lib)</td>
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<tr>
<td></td>
<td>typhina 'Laciniata'</td>
<td>N. America.</td>
<td>(Bean II lib)</td>
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<tr>
<td>Ribes: Saxifragaceae</td>
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<td>americanum</td>
<td>N. America.</td>
<td>H&amp;S 1947, (Bean II lib)</td>
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<td>aureum</td>
<td>N. America, Mexico.</td>
<td>D1947, (Bean II lib)</td>
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<td>farreri</td>
<td>(Name not confirmed)</td>
<td>W1937, (Bean II lib)</td>
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<td>fasciculatum</td>
<td>Japan, Korea.</td>
<td>H&amp;S 1947, (Bean II lib)</td>
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<td>x gordonianum (odoratum x sanguineum).</td>
<td>Hort. D1930, (Bean II lib)</td>
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<td>laureolum</td>
<td>China.</td>
<td>(Bean, EWH)</td>
</tr>
<tr>
<td></td>
<td>rubrum (spicatum)</td>
<td>Europe.</td>
<td>(RHS 4,EWH)</td>
</tr>
<tr>
<td></td>
<td>sanguineum 'King Edward VII'</td>
<td>N. America.</td>
<td>(Cook 1965)</td>
</tr>
<tr>
<td></td>
<td>speciosum</td>
<td>California.</td>
<td>S1935, W1935, S1937, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>vicari</td>
<td>(Name not confirmed)</td>
<td>H&amp;S 1948, (Bean II lib)</td>
</tr>
<tr>
<td>Robinia: Fabaceae - Papilionaceae</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>hispida</td>
<td>N. America.</td>
<td>W1935, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>kelseyi</td>
<td>N. America.</td>
<td>W1935, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>luxurians</td>
<td>N. America.</td>
<td>H&amp;S 1947, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>zanthina</td>
<td>(Name not confirmed)</td>
<td>H&amp;S 1950, (Bean II lib)</td>
</tr>
<tr>
<td>Rondeletia: Rubiaceae</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>amoena</td>
<td>Mexico, Guatemala.</td>
<td>(Cook 1965)</td>
</tr>
<tr>
<td></td>
<td>strigosa</td>
<td>Guatemala.</td>
<td>HZ1949, (Bean II lib)</td>
</tr>
<tr>
<td>Rosa: Rosaceae</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>banksiae</td>
<td>China.</td>
<td>D1942, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>caudata</td>
<td>China.</td>
<td>S1939, (Bean S lib)</td>
</tr>
<tr>
<td></td>
<td>cinnamomea (majalis)</td>
<td>Europe, Asia.</td>
<td>S1938, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>davidii</td>
<td>China.</td>
<td>S1939, (Bean S lib)</td>
</tr>
<tr>
<td></td>
<td>helearea</td>
<td>China.</td>
<td>H&amp;S 1948, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>'Hightowndensis'</td>
<td>Hort.</td>
<td>S1937, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>macrophylla 'Flore Plena'</td>
<td>(Cultivar not confirmed) Himalaya.</td>
<td>S1940, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>microphylla 'Flore Plena' (roxburghii 'Flore Plena')</td>
<td>China.</td>
<td>S1939, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>moschata</td>
<td>Asia.</td>
<td>S1937, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>multibracteata</td>
<td>China.</td>
<td>IS1941, (Bean S lib)</td>
</tr>
<tr>
<td></td>
<td>pomifera (villosa)</td>
<td>Europe.</td>
<td>S1940, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>rubrifolia (glauc)</td>
<td>Pyrenees, Yugoslavia.</td>
<td>S1935, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>sweginzowii</td>
<td>China.</td>
<td>IS1937, (Bean S lib)</td>
</tr>
<tr>
<td></td>
<td>Webbiana</td>
<td>Himalaya, Turkestan.</td>
<td>S1938, (Bean II lib)</td>
</tr>
<tr>
<td></td>
<td>xanthina</td>
<td>China, Korea.</td>
<td>S1937, (Bean S lib)</td>
</tr>
<tr>
<td>Rosmarinus: Lamiaceae</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>officinalis</td>
<td>Asia minor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Albiflorus'</td>
<td>(RHS 4,EWH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Benenden Blue'</td>
<td>(Cook 1965).</td>
<td>1962, (Bean EWH)</td>
</tr>
<tr>
<td></td>
<td>'Corsican Blue'</td>
<td>H&amp;S 1950, (Bean II lib)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Fastigiatus' ('Miss Jessups Upright')</td>
<td>(Cook 1965).</td>
<td>Hilli46, (Bean II lib)</td>
</tr>
</tbody>
</table>
Appendix 3: Catalogue of the previous collection

‘Humilis’ (‘Prostratus’) (Cook 1965)
‘Prostratus’ D&D1928, (Bean II lib)
‘Severn Sea’ (Cook 1965). 1962, (Bean EWH)
‘Tuscan Blue’ H&S1950, (Bean II lib)
‘White Albus’ (Name not confirmed) (Cook 1965)

Royena: Ebenaceae (1+0)
  lucida S.Africa. (RHS 4, EWH)

Rubus: Rosaceae (3+0)
  deliciosus N.America, S1935, (Bean II lib)
  lasiostylus China. H&S1947, (Bean II lib)
  trilobus Mexico. H&S1950, (Bean II lib)

Russelia: Scrophulariaceae (2+0)
  sarmentosa Cuba, Mexico, Columbia. HZ1949, (Bean II lib)
  juncea (equisitiformis) Mexico. (Bean II lib)

Salix: Salicaceae (28+5)
  acutifolia Russia to E.Asia. H&S1950, (Bean II lib)
  alba ‘Argentea’ (alba f.sericea) Europe, Asia. H&S1947, (Bean II lib)
  alba ‘Britzensis’ (Cook 1965)
  alba ‘Chrysostela’ (Cook 1965)
  bactrina (Name not confirmed) H&S1948, (Bean II lib)
  balsamifera (pyrifolia) N.America. (Cook 1965). Berry1960, (Bean EWH)
  daphnoides Europe, Himalaya. Slocock 1938, (Bean II lib)
  daphnoides ‘Aglalai’ H&S1947, (Bean II lib)
  expandra (Name not confirmed) Slocock 1938, (Bean II lib)
  fargesii China. H&S1946, (Bean S lib)
  fragilis Europe, Orient. S1947, (Bean II lib)
  gatungensis (Name not confirmed) H&S1948, (Bean II lib)
  gigantea (Name not confirmed) G1947, (Bean II lib)
  x grahamii (aurita x herbaacea x repens). Scotland. H&S1946, (Bean S lib)
  hexandra (x ehrhartiana) (alba x pentandra). Europe. H&S1948, (Bean II lib)
  hypoleuca China. H&S1948, (Bean II lib)
  irrorata N.America. H&S1947, (Bean II lib)
  lanata Arctic and subartic Europe and Asia. H&S1948, (Bean II lib)
  magnifica China. S1937, (Bean II lib)

+ matsudana ‘Tortuosa’ China. Goodwin 1946, (Bean S lib)
  medemii (aegyptiaca) Armenia, Iran. H&S1947, (Bean II lib)
  x meyeriana (fragilis x pentandra). Europe. H&S1947, (Bean II lib)
  nigra N.America. Slocock1938, (Bean II lib)
  nigricans (myrsinifolia) Europe, Asia minor, Siberia. Berry 1960, (Bean EWH)
  nigricans fosteriana (Name not confirmed) Berry 1960, (Bean EWH)
Appendix 3: Catalogue of the previous collection

Salvia: Lamiaceae (3+0)

- opaca (sachalinensis) Japan. Berry 1960, (Bean EWH)
- paptederana (Name not confirmed) (Cook 1965)
- purpurea (Name not confirmed) (Cook 1965)
- ptheri (Name not confirmed) (Cook 1965)
- piperi N. America. Berry 1960, (Bean EWH)
- purpurea ‘Nana’ Europe, N.Africa. (Bean II lib)
- rosmarinifolia (repens var. rosmarinifolia) Europe. Slocock 1938, (Bean II lib)
- x salamonii (x sepulcralis ‘Salamonii’) France. Slocock 1938, G1947, (Bean II lib)
- silesiaca Carpathian and Balkan mtns. (Cook 1965). Berry 1960, (Bean EWH)
- sitchensis N. America, Alaska. (Cook 1965)
- viminalis Asia, Himalaya. G1947, (Bean II lib)

Salvia: Lamiaceae (3+0)

- grahamii (microphylla) Mexico. H1946, (Bean S lib)
- rutilans Mexico. H&S1947, (Bean II lib)
- x superba Hort. RHS1962, (RHS 4,EWH)
- violacea (Name not confirmed) D1946, (Bean II lib)

Sambucus: Caprifoliaceae (0+4)

- canadensis ‘Aurea Variegata’
  - ‘Aurea’ Goodwin 1946, (Bean II lib)
  - ‘Aurea Variegata’ (‘Luteovariagata’) H&S1937, (Bean II lib)
  H&S1937, (Bean II lib)

Sapium: Euphorbiaceae

- japonicum China, Japan, Korea. H&S1947, circus, (Bean II lib)
- sebiferum China. H&S1948, (Bean II lib)

Sarcococca: Buxaceae (1+0)

- chinensis (ruscifolia var. chinensis) China. 939-42, (Bean II lib)

Sassafras: Lauraceae

- officinale (albidum) N.America. S1938,40,41, (Bean II lib)

Saxegotheca: Podocarpaceae (1+0)

- conspicua Chile. H&S1947, (Bean II lib)

Schima: Theaceae (3+0)

- argentea China. H&S1946, (Bean S lib)
+ khasiana Assam, Burma, Yunnan. H1947, (Bean S lib)
- noronhae Java, S.E. Asia. H&S1948, (Bean S lib)
- pinnatifolia (Name not confirmed) (Cook 1965)
+ wallichii (superba) India to Taiwan. (RHS 4,EWH)

Schinus: Anacardiaceae (2+0)

- chinensis (Name not confirmed) S1939, (Bean II lib)
- dependens (polygamus) S. America. (RHS 4,EWH)
+ molle S. America. Horton 1918, Gisborne 1947, (Bean II lib)
+ terebinthifolius Chile. Wilson1939, HZ1949, (Bean II lib)

Schisandra: Schisandraceae (1+0)

- chinensis rubra (Name not confirmed) S1939, (Bean II lib)
+ chinensis var. rubriflora (rubrifolia, grandiflora var. rubrifolia) China. H&S1937,47, (Bean S lib)
Schizophragma: Saxifragaceae (1+0)
  hydrangeoides  Japan, Korea. S, (Bean II lib)
  integrifolium  China. H&S 1947, (Bean II lib)

Schotia: Fabaceae - Caesalpinaceae (2+0)
  brachypetala  S. Africa. 1962, (RHS 4,EWH)
  speciosa  S. Africa. seed 1963, (RHS 4).

Sciadopitys: Taxodiaceae
  verticillata  Japan. D1945,46, Wilson 1947, (Bean II lib)

Scolopia: Flacourtiaceae (1+0)
  brownii  Australia. HZ 1949, (Bean II lib)

Sequoia: Taxodiaceae (0+1)
  sempervirens ‘Albo-spica’ (sempervirens ‘Adpressa’)  N. America. H&S 1948, (Bean II lib)

Sequoiadendron: Taxodiaceae (0+1)
  giganteum ‘ Pendula ’  N. America. H&S 1950, (Bean II lib)

Shortia: Diapensiaceae (0+1)
  uniflora ‘ Grandiflora ’  Japan. Hill 1948, (Bean II lib)

Sinofranchetia: Lardizabalaceae (1+0)
  chinensis  China. H&S 1948, (Bean II lib)

Sinowilsonia: Hamamelidaceae (1+0)
  henry  China. H&S 1948, (Bean II lib)

Skimmia: Rutaceae (1+1)
  japonica  Japan. (Cook 1965)
    ‘ Variegata ’ (revesiana ‘ Variegata ’) (Cook 1965)

Smedingium: Anacardiaceae (1+0)
  argutum  S. Africa. (Cook 1965)

Solanum: Solanaceae (4+1)
  crispm  Chile. H&S 1957, (Bean II lib)
  crispm ‘ Autumnale ’ (‘Glasnevin’)  H&S 1937, (Bean II lib)
  jasminoide  Brazil. (Cook 1965)
  rantonnetii  Argentina. D1941, (Bean II lib)
  valdiense  Chile. H&S 1959, (Bean EWH)
  wendlandii  Costa Rica. (Cook 1965)

Sollya: Pittosporaceae
  heterophylla ( fusiformis )  Australia. D1947, (Bean S lib)

Sophora: Fabaceae - Papilionaceae (2+2)
  davidii  China. S1940, cabin car shed, (Bean II lib)
  japonica  China. Korea. D1945, (RHS, EWH)
  secundiflora  N. America. H&S 1947, (Bean II lib)
  tetraperta ‘ Grandiflora ’  New Zealand. H1939, (Bean II lib)
  tetraperta ‘ Pendula ’ (Cultivar not confirmed) 1934, (Bean II lib)
  treadwellii ( microphylla var. longicarnata )  New Zealand. (Cook 1965)
  viciifolia ( davidii )  D1935,37, H&S 1937, (Bean II lib)

Sorbaria: Rosaceae (1+0)
  arborea ( Spiraea arborea )  China.

X Sorbaronia: Rosaceae (2+0)
  alpina  Hort. H&S 1948, (Bean II lib)
Appendix 3: Catalogue of the previous collection

*Sorbus*: Rosaceae (20+4)

**Sorbus americana** N. America. H&S 1947, (Bean II lib)

‘Pendula’ (Name not confirmed) (Cook 1965)

+ **Sorbus arbutoifolia** (*Aronia arbutoifolia*) N. America. H1934, HZ1949 (Bean II lib)

‘Erecta’ H&S 1947, (Bean II lib)

+ **Sorbus aria** Europe. D1942, (Bean II lib)

+ ‘Chrysophylla’ N1934, (Bean II lib)

+ ‘Majestica’ (*Decaisneana*) H&S1947, (Bean II lib)

**Sorbus arranensis** (*subarranensis*, *intermedia var. arranensis*) Britain. H&S 1948, (Bean II lib)

**Sorbus aucuparia** ‘Vilmorini’ (Name not confirmed) (PPL)

**Sorbus auricularis** (Name not confirmed) (Cook 1965)


**Sorbus chamaemespilus** Europe. H&S 1947, (Bean II lib)


+ ‘Sessilifolia’ Nepal. H&S 1947, (Bean II lib)

+ **Sorbus discolor** Hcdl. China. W1935, H1938, (Bean S lib)

+ **Sorbus discolor** Hort. see *commixta*

+ **Sorbus domestica** Europe, Asia minor, Africa. H&S 1948, (Bean S lib)

+ **Sorbus epidendron** China, Burnna. H&S 1948, (Bean II lib)

+ **Sorbus esserteauiana** China. H&S 1948, (Bean S lib). H1957, (RHS4).

+ foliolosa see *Pyrus foliolosa* (Cook 1965)

+ **Sorbus glabrata** (*aucuparia var. glabrata*) Scandinavia, Baltic. H&S 1948, (Bean II lib)

+ **Sorbus gracilis** Japan. H&S 1948, (Bean II lib)

+ **Sorbus harrowiana** China. H&S 1948, (Bean S lib)

+ **Sorbus hostii** (*chamaemespilus x mougeotii*). Austria. H1957, (RHS4).

+ **Sorbus hupehensis** China. S1937,39, H&S 1937, (Bean S lib)

+ ‘Fructo Alba’ (Cultivar not confirmed) H&S 1948, (Bean S lib)

+ ‘Rosea’ H&S 1950, (Bean S lib)


+ **Sorbus intermedia var. minima** (minima) Britain. H&S 1948, (Bean II lib). H&S 1948, (Bean S lib)

+ **Sorbus japonica var. calocarpa** Japan. (Cook 1965). H1957, (RHS4).

+ **Sorbus latifolia var. arranensis** (Name not confirmed) 1957, (Bean EWH)

+ **Sorbus matsumurana** Japan. H&S 1948, (Bean S lib)

+ **Sorbus megalocarpa** China. H&S 1948, (Bean S lib)

+ megalophylla (Name not confirmed) Hill1948, (Bean S lib)

minima see *intermedia var. minima*

+ **Sorbus aff. Mollis.** (Name not confirmed) (Cook 1965). Hill1957, (Bean EWH)

+ **Sorbus mougeotii** France, Austria. H&S 1948, (Bean S lib)

+ **Sorbus moravaica lacinata** (Name not confirmed) H&S 1950, (Bean S lib)

+ **Sorbus pluripinnata** China. H1957, (RHS4).

+ **Sorbus pohuashanensis** China. H&S 1948, (Bean S lib)

+ **Sorbus pratii var. subarachnoidea** (prattii) China. H1957, (RHS4).

+ **Sorbus reducta** China, Burma. H1957, (RHS4).

+ **Sorbus rufoferruginea** (*commixta var. rufoferruginea*) Japan. H1957, (RHS4).
Appendix 3: Catalogue of the previous collection

+ **sargentiana** China. H&S 1937, (Bean S lib)
+ **torminalis** Asia minor, N.Africa. H&S 1947, (Bean II lib)
+ **umbellata var. retica (graeca)** Greece, Syria, Asia minor. planted GD1960. 1957, (RHS4).
+ **zahlbruckneri** China. H&S 1948, (Bean II lib)
+ **sp Rock 23657** (Cook 1965)

**Spaeele: Lamiaceae (1+0)**

- **chamaedryoides (campanulata)** Chile. Hill 1948, (Bean II lib)

**Spirae: Rosaceae (5+0)**

- **aitchisonii** see **Sorbaria aitchisonii** Afghanistan, Kashmir. H&S 1937, (Bean II lib)
- **arborea** see **Sorbaria arborea** China. S1937, (Bean S lib)
+ **x arguta** (multiflora x thunbergii). Hort. D1935, (Bean II lib)
- **canescens** Himalaya. seed 1948, (Bean II lib)
- **discolor** see **Holodiscus discolor** N.America. H&S 1948, (Bean II lib)
- **douglasii** N.America. W1935, (Bean II lib)
+ **x gieseleriana** (canax hypericifolia). Hort. Slocock 1938, (Bean II, lib)
- **japonica** Japan. (RHS 4, EWH)
- **lindleyana** see **Sorbaria tomentosa** Himalaya. D1935, (Bean II lib)
- **pubescens** China. (RHS 4, EWH)
- **trichocarpa** Korea. IS1938, (Bean S lib)
+ **veitchii** China. D1935, seed 1948, (Bean II lib)

**Stachyurus: Hamamelidaceae**

+ **chinensis** China. H&S 1937, (Bean II lib)
+ **himalaicus** China. H&S 1948, (Bean II lib)

**Staphylea: Staphyleaceae**

+ **bunalda** Japan. Goodwin 1948, Massey 1948 (Bean II lib)
+ **colchica** Caucasus. S1937, (Bean II lib)
+ **holocarpa var. rosea** China. S1957, (Bean II lib)

**Stauntonia: Lardizabalaceae**

+ **hexaphylla** Japan, Korea. D1945, (Bean II lib)

**Stenocarpus: Proteaceae (1+0)**

- **sinuatus** Australia. HZ1949, (Bean II lib)

**Stephanandra: Rosaceae (1+0)**

+ **tanakae** Japan. H&S 1947, (Bean II lib)

**Stephanotis: Asclepiadaceae (1+0)**

- **floribunda** Madagascar. HZ1949, (Bean II lib)

**Sterculia: Sterculiaceae**

- **acerifolia** see **Brachychiton acerifolia** Australia. Wilson 1947 D1946 (Bean II lib)
- **diersisifolia** see **Brachychiton diversisifolia** Australia. D1946, (Bean II lib)
- **platanifolia** see **Firmiana platanifolia** Japan. (RHS 4, EWH)

**Stewartia: Theaceae (1+0)**

+ **koreana (pseudocamellia var. koreana)** Korea. H&S 1937,47, S1937,38, (Bean S lib)
+ **malacodendron** N.America. H&S 1947, (Bean II lib)
Appendix 3: Catalogue of the previous collection

+ **monadelpha** Japan. H1937, (Bean S lib)
+ **ovata (pentagyra)** N.America. (Bean, EWH). 1933, (Bean II lib)
+ **pseudocamellia** Japan. S1937,38,39, (Bean II lib)
+ **serrata** Japan. H1937&46, (Bean S lib)
+ **sinosensis (gemma)** China. D1937,39,46, H1934,37, (Bean II lib). H1962, (RHS 4,EWH)

**Stranvaesia: Rosaceae (0+1)**

+ **davidiana** China. 1935, (Bean S lib)
  + ‘Fructo Lutea’ RHS seed1944, (Bean S lib)

**Styrax: Styracaceae (6+0)**

+ **americana** N.America. D1935,37, (Bean II lib)
+ **hookeri** (Name not confirmed) H&S1948, (Bean II lib)
+ **japonica** China, Japan. S1937, D1937,41, (Bean II lib)
+ **obassia** Japan. D1935, S1938,39,41, (Bean II lib)
+ **officinalis** N.America. S1941, (Bean II lib)
+ **salvescens** (Name not confirmed) 1957, (Hortus 2)
+ **shiraiana** Japan. H&S1950, (Bean S lib)
+ **wilsonii** China. H&S1937, S1940, (Bean II lib)

**Swainsonia: Fabaceae - Papilionaceae (1+0)**

+ **splendens** (Name not confirmed) Wilson1946, (Bean S lib)

**Symphoricarpos: Carpifoliaceae (2+0)**

+ **albus** N.America. (PPL)
+ **orbiculatus** N.America. (Cook 1965)

**Symlocos: Symlocaceae**

+ **crataegoides (paniculata)** Japan, China. H&S1947, (Bean II lib)
+ **theifera (theifolia ?)** Himalaya, H, (RHS 4,EWH)

**Syncarpia: Myrtaceae (1+0)**

+ **laurifolia (glomulifera)** Australia. HZ1949, (Bean II lib)

**Syringa: Oleaceae (17+46)**

+ **amurensis (reticulata var. mandshurica)** N.China. Massey1948, (Bean II lib)
+ **chinensis** (lacinata x vulgaris). Hort. H&S1964, (Bean EWH)
  + ‘Metens’ Hill1964, (Bean EWH)
  + **var. rubra** (‘Saugeana’). Hill1964, (Bean EWH)
+ **cuminifera** (Name not confirmed) planted GD, (Bean EWH)
+ **dilatata (oblatavar. dilatata)** Korea. H1939, (Bean II lib)
+ **emodi** Himalaya. H&S1948, (Bean II lib)
+ **hyancinthiflora** (oblatavar. vulgaris). Hort. Webb 1935, (Bean II lib)
  + ‘Buffon’ D1938, (Bean II lib)
  + ‘Catinat’ Webb1935, (Bean II lib)
  + ‘Clarks Giant’ (PPL)
  + ‘Claud Bernard’ Webb 1935, (Bean II lib)
  + ‘Lamartine’ Webb 1935, D1938, (Bean II lib)
+ **josiflexa** ‘Bellicent’ Hort. (PPL)
+ **josikae** Hungary. Slocock1938, (Bean II lib)
+ **julianae** China. H&S1964, (Bean EWH)
+ **luminifera** (Name not confirmed) H&S1958, (Bean EWH)
+ **komarovii (sargentiana)** China. S1937, (Bean S lib). D1938, (Bean S lib)
Appendix 3: Catalogue of the previous collection

+ microphylla China. S1937, (Bean S lib)
  oblata China. H&S1950, (Bean II lib)
  oblata var. dilatata (dilatata)
  palibiniana (meyeri ‘Palabin’, velutina) China, Korea. H&S1950, (Bean S lib)
  x persica (lacinata x vulgaris). Hort. Garden, (Bean EWH)
    ‘Alba’ (Cook 1965)

+ pinnatifolia China. (Bean II lib)
  x prestoniae (relexa x villosa). Hort.
    ‘Isabella’ (PPL)
  reflexa China. IS1939, (Bean S lib)
  sargentiana (komarowii)
  sweginzowii China. IS1939, (Bean S lib)
  tomentella (wilsonii) China. S1935, (Bean S lib)
  velutina (palibiniana) China. S1937, (Bean S lib)

+ villosa China. S1937, (Bean II lib)
  ‘Alba’ H&S1948, (Bean II lib)

+ vulgaris Europe.
  ‘Alba Grandiflora’ (Name not confirmed) Webb 1935, (Bean II lib)
  ‘Alphonse Lavalle’ Webb1935, D1938, (Bean II lib)
  ‘Arthur William Paul’ (Name not confirmed) Webb 1935, (Bean II lib)
  ‘Baron de Rothschild’ (Name not confirmed) (PPL)
  ‘Belle de Nancy’ D1938, (Bean II lib)
  ‘Bertha Damon’ (Name not confirmed) D1938, (Bean II lib)
  ‘Congo’ Webb1935, (Bean II lib)
  ‘Charles Joly’ Webb1935, (Bean II lib)
  ‘Charles Sargent’ (Name not confirmed) Webb 1935, D1938, (Bean II lib)
  ‘Charles X’ D1938, (Bean II lib)
  ‘Condoret’ Webb 1935, D1938, (Bean II lib)
  ‘Fertile du Poitou’ (Name not confirmed) D1938, (Bean II lib)
  ‘Firmament’ (PPL)
  ‘George Bellair’ (Name not confirmed) Webb 1935, D1938, (Bean II lib)
  ‘Henri Floreal’ (Name not confirmed) (PPL)
  ‘Jan van Tol’ D1938, (Bean II lib)
  ‘Jacques Callott’ Webb 1935, (Bean II lib)
  ‘Kate’ (Name not confirmed) (PPL)
  ‘Leon Gambetta’ Webb 1935, (Bean II lib)
  ‘Madame Antoine Buchner’ Webb 1935, (Bean II lib)
  ‘Madame E Balted’ (Name not confirmed) Webb1935, (Bean II lib)
  ‘M D Dombaise’ (Name not confirmed) Webb1935, (Bean II lib)
  ‘Michael Buchner’ Webb 1935, D1938, (Bean II lib)
  ‘Michael Cannes’ (Name not confirmed) D1938, (Bean II lib)
  ‘Miss Ellen Willmott’ Webb 1935, D1938, (Bean II lib)
  ‘Monument Carnot’ (Name not confirmed) D1938, (Bean II lib)
  ‘Negro’ (Name not confirmed) D1938, (Bean II lib)
Appendix 3: Catalogue of the previous collection

‘Oliver de Serres’ D1938, (Bean II lib)
‘President Fallieres’ Webb 1935, (Bean II lib)
‘President Grevy’ Webb1935, (Bean II lib)
‘President Poincaire’ Webb1935, (Bean II lib)
‘Sargent’ (Name not confirmed) D1938, (Bean II lib)
‘Sciepon Cochet’ (Name not confirmed) D1938, (Bean II lib)
‘Souvenir de C.Toussaint’ (Name not confirmed) Webb1935, (Bean II lib)
‘Souvenir de Louis Spahi’ D1938, (Bean II lib)
‘Toussaint L’Ouverture’ Webb 1935, (Bean II lib)
‘Tousso’ (Name not confirmed) D1938, (Bean II lib)
‘Victor Lemoine’ D1938, (Bean II lib)
‘Volcan’ D1938, (Bean II lib)
‘White Hyacinth’ (PPL)
‘W Robinson’ (Name not confirmed) Webb 1935, (Bean II lib)

wolfii Korea, Manchuria. IS 1939, (Bean S lib)
wilsonii (tomentella) China. W1939, (Bean S lib)

Taiwania: Taxodiaceae (1+0)
flousiana China. not found 13

Tamarix: Tamaricaceae (2+1)
gallica Mediterraneanean. D1935, (Bean II lib)
juniperina ‘Plumosa’ (chinensis ‘Plumosa’) China. (Cook 1965)
pentandra Europe, Asia. D1935, (Bean II lib)

Taxodium: Taxodiaceae (3+0)
ascendens N.America. (Cook 1965)
distichum var. pendulum (ascendens f.nutans) N.America. GD1960, (Bean EWH)
macronatum Mexico. (Cook 1965)

Taxus: Taxaceae (1+2)
+ baccata Europe, Asia minor. D1937,45,47, (Bean II lib)
+ ‘Erecta’ D1935,37, (Bean II lib)
+ ‘Erecta Aurea’ D1945, (Bean II lib)
+ ‘Fastigiata’ D1937,46,47, (Bean II lib)
+ ‘Fastigiata Aurea’ D1937,45, (Bean II lib)
‘Semperaurea’ Hill1948, (Bean II lib)
‘Variegata’ (‘Argentea’) H&S1948, (Bean II lib)
+ cuspidata Japan. D1937,45,47, (Bean II lib)
+ x media ‘Hicksii’ (cuspidata x baccata) Hort. H&S1948, (Bean II lib)
overeyndon (Name not confirmed) D&D1945, (Bean II lib)

Tecoma: Bignoniaceae
+ grandiflora (Campsis grandiflora) China. Horton 1918, (Bean II lib)

Telopea: Proteaceae (3+0)
oreades Australia. H1937, S1937, D1937,46,47,48, (Bean S lib)
speciosissima Australia. H1937, S1937, D1941,42,43,45, (Bean S lib)
truncata Australia. H1937, S1937, (Bean S lib)

Ternstroemia: Theaceae
+ japonica (gymnanthera) India, Japan. H1946, (Bean II lib)
Appendix 3: Catalogue of the previous collection

Tetracentron: Tetracentraceae
+ *sinense* China. H&S 1947, (Bean II lib)

Tetraclinus: Cupressaceae

*articulata* (*Callitris quadrivalvis*) Spain, N.Africa. H&S 1947, (Bean II lib)

Teucrium: Lamiaceae (2+0)
+ *chamaedrys* Europe. RHS 1962, (RHS4), not found
+ *fruticans* Europe, Africa. (Catalogue 1980)
+ *pyrenaicum* Pyrenees. H&S 1948, (Bean S lib)

Thryptomene: Myrtaceae (1+0)
+ *saxicola* Australia. RAD 1959, (RHS4).

Thuja: Cupressaceae (0+10)
+ *occidentalis* N. America.
  
  ‘Ericoides’ D1943,45 (Bean II lib)
  ‘Hovey’ D1937 (Bean II lib)
+ ‘Little Gem’ D1945 (Bean II lib)
  ‘Lutea’ D1937 (Bean II lib)
  ‘Pendula’ H&S 1948 (Bean II lib)
+ ‘Rheingold’ D1937,45,46 (Bean II lib)
  ‘Spaethii’ D1937 (Bean II lib)

*orientalis* China, Japan.
  ‘Elegantissima’ D1932 (Bean II lib)
  ‘Ericoides’ (*occidentalis* cvT ?) D1945,46 (Bean II lib)
  ‘Globosa’ (Name not confirmed) (Cook 1965)
  ‘Hillieri’ D1937 (Bean II lib)
  ‘Meldensis’ H&S 1948 (Bean II lib)
+ *plicata* N.America. D1935,45, (Bean II lib)
  ‘Pyramidalis’ (*Fastigiata* ?) H1945, H&S 1947, (Bean II lib)
+ ‘Zebrina’ H&S 1948, (Bean II lib)

Thujopsis: Cupressaceae
+ *dolabrata* Japan. D1937, (Bean II lib)
+ ‘Nana’ D1945, (Bean II lib)
+ ‘Variegata’ D1937, (Bean II lib)

Thunbergia: Acanthaceae (5+0)

*alba* (Name not confirmed) HZ1949, (Bean II lib)
  *coccinea* India, Burma. (Cook 1965)
  *grandiflora* India. HZ1949, (Bean II lib)
  *gregorii* Tropical Africa. (Cook 1965)
  *laurifolia* India. HZ1949, (Bean II lib)

Tibouchina: Melastomataceae (3+1)

*microphylla* S.America. HZ1949, (Bean II lib)
  *rosea* Indonesia. HZ1949, (Bean II lib)
  *scandens* S.America. D1949, (Bean II lib)
+ *semidecandra* ‘Edwardsii’ (Cultivar not confirmed) S.America. D1934, (Bean II lib)
  *urvilleana* (*semidecandra* Hort, not DC.) Brazil.
  ‘Grandiflora’ D1934, (Bean II lib)
Appendix 3: Catalogue of the previous collection

**Tilia: Tiliaceae (5+2)**

- *americana* 'Fastigiata'  
  N.America. circus 1957, (Bean, EWH)

- *chinensis*  
  China. (RHS 4,EWH)

- *chinensis Rock15042*  
  1957, GD, (RHS 4,EWH), (Bean, EWH)

- *cordata*  
  Europe. D1935, (Bean II lib)

- *hers sp 1183*  
  1957, GD, (RHS 4,EWH), (Bean, EWH)

- *mandshurica*  
  Asia. H&S1955 dead P3

- *miqueliana*  
  China. H&S1950, (Bean II lib)

- *x mokkei* (americana x petiolaris). Hort. H&S1950, (Bean II lib)

- *neglecta*  
  N.America. H&S1948, (Bean II lib)

- *petiolaris (americana 'Pendula')*  
  Europe. H&S1947, (Bean II lib)

- *platyphyllos*  
  Europe. D1935,46, (Bean II lib)

- *Asplenifolia* ('Laciniata') (Bean, EWH)

- *tomentosa*  
  Europe. D1935, Slocock, (Bean II lib)

- *tuan*  
  China. H&S1950, (Bean II lib)

**Tricuspidaria: Tiliaceae**

- *dependens (Crinodendron d.)* Chile. Slocock1938, (Bean II lib)

- *lanceolata (Crinodendron L)* Chile. Slocock1938, Ford 1946, S1935, all died (Bean II lib)

**Tripterygium: Celastraceae**

- *forrestii (wilfordii) Hook.f.* Yunnan, H&S1947, (Bean S lib)

- *regelli (wilfordii) Reg., not Hook.*) Japan, Korea. H&S1948, (Bean II lib)

**Tristania: Myrtaceae (1+0)**

- *conferta*  
  Australia. HZ1949, (Bean II lib)

- *laurina*  
  Australia. HZ1949, (Bean II lib)

**Trochodendron: Trochodendraceae**

- *aralioides*  
  Korea. H&S1947, (Bean II lib)

**Tropaeolum: Tropaeolaceae (1+0)**

- *speciosum*  
  (Catalogue 1980), not found 18

**Tsuga: Pinaceae (6+0)**

- *albertiana (heterophylla)*  
  N.America. H&S1947, (Bean II lib)

- *brunoniana (dumosa)*  
  Himalaya. H&S1948, (Bean II lib)

- *canadensis*  
  N.America. H&S1947, ride, (Bean II lib)

- *caroliniana*  
  N.America. H&S1948, (Bean II lib)

- *chinensis*  
  China. H&S1947,48, (Bean II lib)

- *diversifolia*  
  Japan. H&S1948, circus, (Bean II lib)

- *formosana*  
  Taiwan. H&S1948, circus, (Bean II lib)

- *pattoniana (mertensiana)*  
  N.America. H&S1947, (Bean II lib)

- *sieboldii*  
  Japan. H&S1948, circus, (Bean II lib)

- *yunnanensis*  
  China. H&S1946, (Bean S lib)

**Ulex: Fabaceae - Papilionaceae (0+1)**

- *europaeus 'Flore Plena'*  
  Europe. HZ1949, (Bean II lib)

**Ulmus: Ulmaceae (0+4)**

- *carpinifolia 'Pendula' (nitens 'Pendula')*  
  Europe. (Cook 1965)

- 'Louis van Houtte'  
  H1937, (Bean II lib)

- *nitens 'Pendula' (carpinifolia 'Pendula')*  
  H&S1947,50, (Bean II lib)

- *stricta 'Wheatleyi'* (Name not confirmed) H&S1937, (Bean II lib)
Appendix 3: Catalogue of the previous collection

stricta 'Aurea' (Name not confirmed) Slocock 1938, (Bean II lib)
vegeta (x hollandica 'Vegeta') Horton 1918, (Bean II lib)

Ungandia: Hippocastanaceae (1+0)
speciosa Texas. PS (seed 1700m W Texas), not found H8

Vaccinium: Ericaceae (9+4)
  arctostaphylos Caucasus. H&S 1946, (Bean II lib)
  corymbosum N. America. S 1935, 37, 39, (Bean II lib)
  'Jersey' H&S 1948, (Bean II lib)
  'Pioneer' (Name not confirmed) H&S 1948, (Bean II lib)
  'Pallidum' (Name not confirmed) H&S, (Bean EWH)
  'Rubel' H&S, (Bean EWH)
  delavayi China. H&S 1946, (Bean S lib)
  glauco-album Himalaya. H&S 1947, (Bean II lib)
  ovalifolium Canada. H&S 1946, (Bean S lib)
  ovatum N. America. H&S 1939, 47, (Bean II lib)
  padifolium Madeira. H&S 1947, (Bean II lib)
  pallidum N. America. H&S 1948, (Bean II lib)
  pensylvanicum (angustifolium var. laevifolium) N. America. H&S 1947, (Bean II lib)
  virgatum N. America. H&S 1948, (Bean II lib)

Verbena: Verbenaceae (1+0)
  tridens Patagonia. H&S 1946, (Bean S lib)

Veronica (Hebe): Scrophulariaceae
see Hebe

Viburnum: Caprifoliaceae (20+6)
  alnifolium N. America. H&S 1946, (Bean II lib)
  atrosanguinea (Name not confirmed) H&S 1948, (Bean II lib)
  betulifolium China. S 1938, (Bean II lib)
  bodnantense (fragrans x grandiflorum). Hort. H&S 1948, (Bean II lib)
  budleiafolium China. H 1934, (Bean II lib)
  burkwoodii (xales x carlesii) Hort. 1933, 1937, D 1939, (Bean S lib)
    'Park Farm Hybrid' H&S 1948, (Bean II lib)
  carcephalum (carlesii x macrocephalum 'keteleeri'). Hort. H&S 1947, (Bean II lib)
  carlesii Korea. S 1937, D 1946, (Bean II lib)
  cassinoides N. America. S 1935, (Bean II lib)
  chenaultii (x burkwoodii 'Chenaultii') Hort. (Cook 1965)
  davidii China. H 1934, (Bean II lib)
  dentatum (pubescens var. canbyi) N. America. 1933, (Bean II lib)
  dilatum Japan. (Cook 1965)
  erubescens var. gracilipes China. H&S 1948, (Bean II lib)
  foetens Asia. H&S 1948, (Bean S lib)
  fragrans 'Compactum' ('Nanum') China. S 1937, (Bean S lib)
  furcatum Japan. H&S 1946, (Bean S lib)
  grandiflorum Himalaya. H&S 1946, 48, (Bean S lib)
  henryi China. H&S 1947, (Bean II lib)
  hupehense China. S 1940, H&S 1947, (Bean II lib)
  ichangense China. H&S 1948, (Bean II lib)
Appendix 3: Catalogue of the previous collection

x juddii (carlesi x birchuenese). Hort. H&S 1947, (Bean II lib)

+ lobophyllum China. S1940, Massey 1948, H&S 1950, (Bean II lib)

nudum N. America. 1933, (Bean II lib)

donatissimum India to Japan. 1933, (Bean II lib)
opulus ‘Sterile’ Europe. Wilson 1946, (Bean II lib)

+ plicatum f. tomentosum Asia. new drive, (Bean II lib)
plicatum grandiforum (clone of plicatum f. plicatum) D1937, (Bean II lib)

+ plicatum ‘Mariesii’ D1937, (Bean II lib)

+ propinquum Asia. 1933, 1950, (Bean II lib)

rhytidiophyllum ‘Aldenhamensis’ China. S1939, (Bean II lib)

+ rhytidiophyllum ‘Rosea’ H&S 1948, (Bean II lib)
rhytidiophyllum ‘Wakehurst Form’ (Cultivar not confirmed) (Cook 1965)

schneiderianum (calvum) China. H&S 1948, (Bean II lib)

+ sieboldii China. H1964, (Bean, EWH)
suspensum Japan. 1925,33, (Bean S lib)

theiferum (setigerum) China. Siocock 1938, (Bean II lib)

Villaresia: Icacinaceae (1+0)
mucronata Chile. H&S 1947, (Bean S lib), (RHS, EWH)

Vuninaria: Fabaceae - Papilionaceae (1+0)
denudata Australia. D1937, (Bean S lib)

Vinca: Apocynaceae (1+4)

major Europe, N.Africa. (Cook 1965)

‘Variegata’ (Cook 1965)

minor Europe, W.Asia.

‘Alba’ (Cook 1965)

‘Atropurpurea’ (Cook 1965)

‘Azurea’ (‘Azurea Flore Plena’ ?, Name not confirmed) (Cook 1965)

Virgilia: Fabaceae - Papilionaceae (1+0)

+ capensis S.Africa. D1945, (Bean S lib)
oroboides S.Africa. (Cook 1965). D&D 1946,47, (Bean S lib)

Väx: Verbenaceae (1+0)

+ aegus-castus Europe, Asia minor. H&S 1947, HZ1949, (Bean II lib)

incisa (negundo ‘Heterophylla’) China. H&S 1947, (Bean II lib)

Vitis: Vitaceae (2+2)
aconitifolia see Ampelopsis aconitifolia.

+ amurensis Korea, China, Japan. H&S 1947 netting, top of orch road. (Bean II lib)

armata (davidii) China. H&S 1948, (Bean II lib)

brevipedunculata see Ampelopsis b.

+ coignetiae Japan, Korea. D1945, (Bean II lib)
cordifolia davidii (Name not confirmed) (Bean II lib)
davidii see armata

flexuosa ‘Wilsonii’ (flexuosa var. parviflora) Himalaya, China. H&S 1947, (Bean II lib)

heterophylla see Ampelopsis brevipedunculata

himalayana (Parthenocissus himalayana) Himalaya. H&S 1947, (Bean II lib)

megalophylla see Ampelopsis megalophylla.

orientalis see Ampelopsis orientalis.
Appendix 3: Catalogue of the previous collection

+ ‘Pulchra’ Hort. H&S1946, near deodar on orchard fence, (Bean S lib)
+ striata (Cissus striata,) Chile, Brazil. H&S1948, (Bean II lib)
vinifera ‘Purpurea’ Caucasus. S1939, (Bean II lib)

Weigelia: Caprifoliaceae (3+6)
coraeensis (grandiflora) Japan. Circus. (Bean, EWH).
‘Feerie’ Hort. S1937, (Bean I lib).
+ florida Japan, Korea, China, Manchuria. H&S1955, (Bean I lib).
  ‘Candida’ H1940, (Bean I lib).
  ‘Grandiflora’ H1940.
+ ‘Variegata’ D1936, H&S1955, (Bean I lib).
  ‘Venusta’ H&S1947, (Bean I lib).
hortensis Japan. H&S1955, (Bean I lib).
  ‘Ideal’ Hort. S1937, (Bean I lib).
middendorfiana China, Japan. H&S1955, (Bean I lib).
+ ‘Styriaca’ Hort. H&S1946,55, (Bean I lib).

Weinmannia: Cupramaceae (3+0)
purpurea (Name not confirmed) D&D1946, (Bean S lib)
Stewart Island form (Name not confirmed) New Zealand. D&D1949, (Bean S lib)
trichosperma Chile. Hill1946 (Bean S lib)

Widdringtonia: Cupressaceae (1+0)
schwarzii S.Africa. (Cook 1965)

Wisteria: Fabaceae - Papilionaceae (0+3)
  + chinensis (sinensis) China. D1941, (Bean II lib)
  chinensis Pink (Cultivar not confirmed) D1939, (Bean II lib)
  floribunda ‘Kyushaku’ D1940, (Bean II lib)
+ floribunda ‘Rosea’ Japan. (Cook 1965)
  floribunda ‘Violacea Plena’ (Cook 1965)

Xanthocerus: Sapindaceae (1+0)
sorbifolium China. S1937,41, (Bean II lib)

Xylosma: Flacourtiaceae (1+0)
racemosa var. pubescens (japonica var. pubescens)
Japan, China, Taiwan. H&S1947, (Bean II lib)

Zanthoxylum: Rutaceae (1+0)
  + americanum N.America. H&S1950, (Bean II lib)
  bungei (simulans) China. H&S1948,50, (Bean II lib)
  piperratum China, Japan, Korea. H&S1937, (Bean S lib)
+ planispinum Japan, Korea, Taiwan, China. H&S1948, (Bean II lib)

Zelkova: Ulmaceae (1+0)
  + acuminata (serrata) Japan. D1940, H&S1955, (Bean II lib)
  sinica China. H1937, H&S1955, (Bean S lib)

Zenobia: Ericaceae (2+0)
  speciosa N.America. S1937, (Bean II lib)
  pulverulenta N.America. D1948, (Bean II lib)

Ziziphus: Rhamnaceae (1+0)
sativa (jujuba) Italy, (Bean EWH)
Appendix 3: Catalogue of the previous collection

Sources of information on the ‘previous’ collection

(Bean I & II lib)

(Bean S lib)

(Bean EWH)

(Catalogue 1980)

(Cook 1965)

(PPL).
Plants previous lists.

For Pear Park

For Orchard Hill and Basinhead.

For Cabin Park.
Cabin Park archive. A collation of Douglas Cook's notes on the planting in the area.

For Glen Douglas, Cook's Corner, Douglas Park, Circus, Corner Park.
Glen Douglas archive, Cook's corner archive, Douglas Park archive, Circus archive, Corner Park archive. Each archive a summation by MacKay of Douglas Cook's notes on the plantings in each area.

RHS 1-4

RH47
Appendix 3: Catalogue of the previous collection

RH56

RH56

RH63

RH64

RR1958
Fletcher, H.R. 1958. The International Rhododendron Register. The Royal Horticultural Society. Staples Printers, Kent. (The copy without Cook's name in it.) Containing notes by W.D.Cook.

RR58
Fletcher, H.R. 1958. The International Rhododendron Register. The Royal Horticultural Society. Staples Printers, Kent. (Another copy with Cook's name in it.) Containing notes by W.D.Cook.

RY38

RY29

References used to verify plant names
Appendix 3: Catalogue of the previous collection

Appendix 4

Genus distribution maps

Acer palmatum seedling, Cabin Park, April 1993.
Appendix 4: Genus distribution maps

Abies

Acer

- species: negundo, pseudoplatanus, pseudoplantus
- others

Diagram showing distribution maps of Abies and Acer species.
Appendix 4: Genus distribution maps
Appendix 4: Genus distribution maps

Cedrus

Crataegus

Crataegus
Appendix 4: Genus distribution maps

Cupressus

Fagus

• F. sylvatica (species only)
• others
Appendix 4: Genus distribution maps

Fraxinus

Gleditsia
Appendix 4: Genus distribution maps

Ilex

Juniperus
Appendix 4: Genus distribution maps

Picea

Pinus
Appendix 4: Genus distribution maps

Platanus

Populus

Populus
Appendix 4: Genus distribution maps

Prunus

Quercus

- Q. palustris
- Q. robur
- Q. rubra
- others

other taxa
Appendix 4: Genus distribution maps

Sorbus

Syringa
Appendix 5

Report of the first workshop

REPORT OF THE FIRST EASTWOODHILL WORKSHOP

ASSESSMENT AND DEVELOPMENT OF THE COLLECTION

Eastwoodhill on 16, 17 June 1989

Eastwoodhill Publication No. 4

Published 1989

Marion MacKay
Massey University, Palmerston North
Appendix 5: Workshop One report

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Footnote: The workshop report in this thesis is slightly modified from the original. Format has been modified slightly for this thesis. Content has been modified, with the programme added as an extra appendix.
1.0 SUMMARY

The Eastwoodhill Arboretum is a unique resource in New Zealand. To ensure that the Arboretum realises its potential, management should emphasise, develop and maintain those things that project Eastwoodhill into the future as a collection of international merit.

As a first step in botanical planning for the Arboretum, the inaugural Eastwoodhill workshop considered the composition of Eastwoodhill by assessing the present collection and considering the future development of the collection.

Summary of recommendations

- That the future development of the Arboretum should be consistent with the roles outlined in section two.
- That a more detailed assessment of the collection should be carried out.
- That the future direction of the collection should be that of cool temperate and warm temperate flora, based on the key genera that have been highlighted.
- That the plant material acquired for the collection should have qualities such as botanical interest, rare and endangered, aesthetic interest, so as to provide a memorable experience for visitors.
- That the Trust Board should be proactive in the area of land management with trees.
- That planting of the unstable areas within the new 150 acres should be attended to with urgency.
- That appropriate South American flora be included in the collection.
- That the collection should include plant material that demonstrates the climatic advantage of the Arboretum, and species suitable for climate change conditions in New Zealand.
- That selected cultivars may be included in the collection.
- That the native area be included into the surrounding planting.
- That site selection is the first criterion for planting, other factors such as geographical association, aesthetic merit, seasonal features, should be secondary considerations.
- That the Arboretum should join the IUCN and establish other relevant international contacts.
- That the tree evaluation system should be continued as a mechanism to aid tree management decisions.
- That the workshop group should meet again in April 1990 to continue the consideration of the collection and its further development.
2.0 THE ROLE OF THE ARBORETUM

2.1 The role of the Arboretum

To maintain and further the collection of Douglas Cook:
- Eastwoodhill would not exist without the efforts of Douglas Cook. Therefore there is an obligation to continue the theme that he began, (see below, theme of the collection).
- The extension of this theme into some of the compatible warm temperate flora will make Eastwoodhill a more dynamic concept and help to put the Arboretum on the international map.
- Those plant groups that have done well should be filled out.

To encourage visitors of a scientific and public nature:
- Scientific visitors will enhance the international reputation.
- The 'public' however, will be the sustaining base of visitors.

To be an educational resource:
- For the general public, raising awareness of trees and the environment.
- For particular areas of education, e.g. local school children, university.
- As an educational focus at all levels.
- As a demonstration of the use of trees.

To conserve plant material:
- The New Zealand resource.
- As a repository for conserving endangered species, particularly the warmer climate (warm temperate) material that northern arboreta cannot grow.

To be proactive in the area of land management and soil conservation planting:
- Eastwoodhill represents an opportunity to be proactive in the area of soil conservation planting, land management, and landscape trees.

To act as an international liaison point for botanical matters in New Zealand:
- Eastwoodhill must be put on the international botanical map.
- A link with the IUCN (International Union for the Conservation of Nature and Natural Resources), particularly through the Botanic Gardens Secretariat at Kew should be established.
- As many overseas contacts must be made as possible. The Botanic Gardens Secretariat will be a key contact here as their newsletter is circulated to over 200 botanic gardens throughout the world.

2.2 Tourism versus scientific roles

The general public are the sustaining base of visitors to the Arboretum and therefore must always be catered for. However the unique character of the place as a special botanical collection must never be compromised. Therefore the level of intense tourism must be controlled.

Eastwoodhill is the opportunity for a unique recreational experience. The quality of the experience must be preserved, but the property still be accessible to the general public. Control of vehicular access is the easiest way to exert such control. Perhaps Eastwoodhill should be the regional park for Eastland.
Use by the public:
- Eastwoodhill is not user friendly.
- The 'centre' of the property is not easily identified.
- Autumn is the season that attracts most outside visitors. Spring is mostly locals, many of whom do not pay. It is very quiet over Christmas.
- To create a memorable experience for the public the Arboretum must include planned impact display areas. Plantings such as the Magnolias on Orchard Hill are the type of thing, but more of this is required. A range of different features at different times is desirable.
- The entrance is puny, it should be large and welcoming.
- Young people must be encouraged to Eastwoodhill.

2.3 Educational and Scientific roles
These types of visitors are governed by the types of plants that are here. To be very special and attract these visitors Eastwoodhill should pursue the existing theme of northern temperate material, including botanically interesting material, rare and endangered material, plus warmer temperate material that follows the already mentioned theme. This puts the Arboretum in a good international position with material that northern arboreta cannot grow, and material that the Botanic Gardens Secretariat is looking for sites for. Eastwoodhill should be promoted as special because of this combination of plant material.

Recommendation: That the future development of the Arboretum should be consistent with the roles outlined in section two.

3.0 PRESENT STATUS OF THE COLLECTION

3.1 Historical perspective
The Arboretum today is largely a collection of northern temperate flora, and as such represents the survivors of Cook's collecting efforts. It is important to note that apparently Cook collected anything he could obtain. This conjecture is supported by the data on the plants that he purchased, but which are no longer in the collection. This data can be seen in the 'Plants Purchased' list. {Thesis Appendix Three}

3.2 Key elements of the present collection.
The backbone of the present collection is identified by a core group of plant genera. These are:

*Acer, Aesculus, Alnus, Betula, Confers (all), Fagus, Ilex, Juniperus, Malus, Magnolia, Prunus, Pyrus, Quercus, Tilia.*

3.3 Arboretum theme
It was agreed that the theme of the Arboretum was that of temperate and warm temperate flora, focussing on the key plant groups that have already been identified. On the basis of the temperate theme it was decided that New Zealand plants did not rate as part of the character of the place. Geographically the collection is 77% northern hemisphere origin and 16% southern hemisphere origin, (7% horticultural origin).
3.4 Assessment of the collection
The initial assessment of the collection was done by ranking the collection by genus group. Each participant was asked to give two scores to each genus group. The first score was a botanical rating, which aimed to give an indication of the botanical interest of the genus in question. The second score was an aesthetic rating, which aimed to give an indication of the visual interest of the group in question. Thus plants that were considered botanically interesting but not interesting to look at, and vice versa, could be distinguished. The mean of scores from all participants would give an indication of the importance of each plant group. Each genus has a score out of ten for each attribute (botanical and aesthetic). Results of the initial assessment can be seen in the workshop documents. (Assessment results were included in the Background information booklet provided to the participants. Readers of this thesis will find the assessment results in thesis Appendix Eight.)

Assessment results
After consideration of the assessment results it was agreed that plants that had scored 6/10 or above should be kept in the collection, and that plants that had scored 8/10 or above were worth pursuing.

In terms of the criteria for the survey it was agreed that the botanical and aesthetic ratings were suitable. Mr Clapperton equated the botanical score to scientific interest and the aesthetic score to popular interest. However some sort of longevity index might be added to indicate those plants that would be long term subjects in the collection.

The survey should allow for space to include notes on additional families, genera and species that are not currently on the list.

The catalogue, for completeness, needs height measurements for the trees. This was agreed, but recognised as big job.

Continuation of the assessment
It was agreed that the Arboretum should be assessed in more detail by undertaking the survey of the whole catalogue, beginning with the key genera identified. This would provide information on which to base decisions on tree acquisition, tree removal, and propagation priorities.

Recommendation: That a more detailed assessment of the collection should be carried out.

4.0 DEVELOPMENT OF THE COLLECTION

4.1 Proposed Future Direction
The unanimous opinion of the workshop group was that the theme developed by Douglas Cook should be continued and extended. Eastwoodhill exists because of the vision of Douglas Cook and therefore there is an obligation to continue in the manner in which Cook started.

The theme developed by Cook has already been identified as temperate flora. His policy was to purchase anything that was available. It is logical to follow this pattern by taking the warmest and coolest ends of temperate flora that will grow here and filling in in-between, at the same time focussing on the theme genera of the collection.
Within this theme plants collected should be broad leaf and coniferous species that are appropriate to this area, i.e. those that grow well at Eastwoodhill. Plants from geographical ranges that would be suitable for Eastwoodhill but which are not well represented here could be filled in.

The collection of warm temperate species, within the context of the key genera, was seen as a main attraction to visitors. However the acquisition of these species must be selective, for example, it was seen as appropriate to collect *Magnolia* and *Manglietia* as these were already identified as a key group at the arboretum.

It was essential that the arboretum be unique as a collection. This would ensure its standing as a place worth visiting.

**Recommendation:** That the future direction of the collection should be that of temperate and warm temperate flora, based on the key genera that have been highlighted.

**Recommendation:** That the plant material acquired for the collection should have qualities such as botanical interest, rare and endangered, aesthetic interest, so as to provide a memorable experience for visitors.

### 4.2 The range of plants

While discussing the range of plant material that might be grown at Eastwoodhill it became apparent that there were three areas for discussion. These were: plants for conservation purposes, South American plants, climate change.

**Soil conservation**

In the Gisborne area soil erosion and soil conservation planting will continue to be an important aspect of land management.

Traditionally, soil conservation planting has concentrated on poplars and willows, because they work well. But this is not the sort of role that Eastwoodhill should take in soil conservation planting. The Arboretum must be proactive in the area of its greatest strength, i.e. the range of plant material that it holds. For example, *Abies religiosa* grows very rapidly, and some of the Mexican oaks are very resistant to wind, therein lies the opportunity to be a leader in the area of soil conservation planting development. Certainly the poplars and willows should still be used, but the long term strategy should be in new plant material.

The Arboretum has a potentially very important role as a botanical repository with an extension in land management using trees.

**Recommendation:** The Trust Board should aim to be proactive in the area of land management with trees.

**Recommendation:** The planting of unstable areas within the new 150 acres should be attended to with urgency.

**South American Plants**

The plants of Chile are in harmony with the Eastwoodhill concept. In fact Cook did collect South American material but a majority of it did not survive due to poor siting. There are not a large number, *Nothofagus* is
one of the biggest groups. The inclusion of the appropriate Chilean flora will provide an evergreen element, and be climatically suitable.

**Recommendation:** That appropriate South American flora be included in the collection.

**Climatic advantage**

The climatic situation of Eastwoodhill could be a significant drawcard to international visitors in that species can be grown here that cannot be seen in the northern hemisphere arboreta. For example, *Lithocarpus* and *Quercus* from southern China. The abundance of species that can be grown here should be a selling point.

In a similar vein there is likely to be an opportunity for Eastwoodhill to demonstrate a range of plant material suitable for dry areas under a situation of climate change and global warming. Species that may be suitable for New Zealand in that situation could be grown at Eastwoodhill, for example, species from xerophytic climates which fit the collection pattern.

**Recommendation:** That the collection should include plant material that demonstrates the climatic advantage of the Arboretum, and may demonstrate species suitable for climate change conditions in New Zealand.

**4.3 Cultivars**

After discussion it was concluded that a selected range of cultivars was acceptable. The suggested criteria were that the plant should have some impact, but not be too far from the type, and blend in for the majority of the season. Cultivars of species and first cross hybrids were preferable. Only the best should be chosen.

**Recommendation:** That selected cultivars may be included in the collection.

**4.4 New Zealand Native Plants**

The present native area is an incongruous element in the Arboretum. It was agreed that natives are best demonstrated in one of two ways: either endemic plants which are best portrayed as a remnant, or those plants used to demonstrate a range, e.g. representatives of *Nothofagus*. The latter should be incorporated into the collection and not left to stand as a separate grouping.

The native area at Eastwoodhill, in its present form, is neither of these ways of demonstrating native flora. Because of the planting pattern it will never demonstrate a typical plant association. There is no point in allowing a part of Eastwoodhill to naturally regenerate, there is an area of bush in the rear of the property that should be more suitable. Because of the pattern of mostly evergreen material in the native area it is not visually compatible with the rest of the Arboretum.

**Recommendation:** That the native area be incorporated into the surrounding planting. Its main role should be to show the comparison between New Zealand flora and the overseas flora in the same genera. Genera such as *Nothofagus*, *Podocarpus*, and *Libocedrus* are plants of this sort. The link to Chilean species can be well demonstrated here.
4.5 Planting criteria

The first criteria for planting an area should be the suitability of the plant for the site, then other criteria can be considered. It was agreed that planting in geographical groups was acceptable, but only if the plants suit the site.

**Recommendation:** That site selection is the first criteria for planting; other factors such as geographical association, aesthetic merit, and seasonal features should be secondary considerations.

4.6 Establishment of an international profile

The international reputation of the Arboretum is a critical issue in its future development. It was seen that the future standing of the Arboretum in scientific and botanical circles would be greatly enhanced if the uniqueness of the collection could be strengthened.

The Arboretum has two important advantages in establishing an international profile.

1. Northern temperate material is easier to grow in this climate which is more favourable than northern hemisphere sites. Similar plants can be grown though.
2. The more important advantage though is the ability to grow at Eastwoodhill plants of warm temperate origin. These cannot be grown in northern hemisphere sites, and the IUCN is looking for sites to preserve these types of plants.

Already a preliminary liaison with the IUCN has been established and the catalogue is being sent to be processed to identify rare and endangered plants.

**Recommendation:** That the Arboretum should join the IUCN and establish other relevant international contacts.

5.0 TREE MANAGEMENT STRATEGIES

5.1 Tree assessment method

One of the difficulties in tree management is developing a rational method of decision making. Usually there is no mechanism for quantifying tree quality or desirability, and therefore formulating a basis on which to make decisions.

For the purposes of this workshop a tree rating system was developed which would assist in targeting tree management decisions. First, participants were asked to give each tree in the area to be considered a botanical and aesthetic rating, as had been done in the assessment of the catalogue. These scores were averaged to give an opinion on each tree as to its merit.

At the problem site the trees were then ranked again to arrive at a score for the tree at that particular site. The information provided by the rankings would provide the basis from which to decide the action that should be taken with that particular specimen. For example, a tree that is botanically very desirable but which is in poor health on that site can be targeted for propagation. Conversely a botanically ordinary tree that is doing well on the same site could be sacrificed to provide better conditions for the more desirable tree.
5.2 Example problems

The Pear Park Problem

In this portion of Pear Park there are a number of unrelated trees that are too close together, most of which have high botanical ratings. After the site ranking were done and some discussion held the following suggestions were put forward:

Acer opalus
Acer pseudoplatanus
Acer platanoides ‘Reitenbachii’
Acer velutinum var vanvolxemi
Aesculus glabra
Aesculus hippocastanum ‘Pyramidalis’
Aesculus plantierensis
Crataegus x grigonensis
Crataegus mollis
Crataegomespilus dardarii
Crataemespilus grandiflora
Cunninghamia lanceolata
Cunninghamia konishii
Malus hupehensis
Platanus cantabrigensis
Platanus cuneata
Platanus occidentalis
Platanus orientalis
Populus nigra ‘Italica’
Quercus acutissima ssp. cheni
Quercus hodgekinsoni
Quercus x ludoviciana
Quercus marilandica
Quercus variabilis
Tilia petiolaris

propagate and remove.
remove.
check ID, propagate if special, otherwise repurchase and replant.
remove.
propagate and resite.
remain as is, propagate.
remain as is.
propagate, remove when established elsewhere.
propagate and site elsewhere.
urgent propagation, check.
remain as is, but propagate and resite nearby.
remove.
propagate, bring in new stock.
remove.
remain as is, propagate.
remain as is, propagate.
remain as is.
remain as is, propagate.
remain as is, propagate.
propagate and resite, propagation of this species is difficult.
leave the middle one, remove others.
remain as is, propagate.
remain as is, propagate (difficult).
remain as is for the moment, establish a group elsewhere then remove this group.
remain as is, plant elsewhere as well.

Given these decisions the restructured area would concentrate on the Plane trees and the oaks, with some hawthorn. (These plants can be found in grid squares D12 and E12 of plan 2 in thesis Appendix Two.)

This exercise highlighted the need to refine the site ranking procedure. The site ranking could clearly be divided into two portions, a health/survival factor, and a desirability in the composition factor. This was incorporated into the problem for the afternoon.
The Orchard Hill Problem

On Orchard Hill there are a number of related trees, many of which have a high botanical score, but which are too close together, and not always of good health. For this problem the site rating was divided into two portions: the survival factor, and the desirability factor.

The conclusions were as follows:

*Abies amabilis*  
Low scores. Try this species again on a better site that is moist but well drained, a shaded gully would be better. Remove this tree from this site once re-established elsewhere.

*Abies bracteata*  
This plant is from a hot dry place and is quite suitable for this site. Leave. In fact this is the best of the Abies here.

*Abies 632 (concolor)*  
Remove.

*Abies concolor*  
Retain for now, this species should be good for Eastwoodhill for gravely soils.

*Abies concolor ‘Candicans’*  
Retain and propagate from the fallen tree.

*Abies concolor ‘Glauca’*  
Retain.

*Abies firma*  
Retain.

*Abies georgiana*  
This is a poor specimen, reintroduce from Mr Gordon and then remove this tree.

*Abies 631*  
Retain.

*Abies 633*  
Remove.

*Abies holophylla*  
Retain.

*Abies numidica*  
Retain.

*Abies spectabilis var. brevifolia*  
Not a good specimen but worth trying here, re-introduce.

*Abies veitchii*  
Retain.

*Abies* should be planted at the base of the hills in a moisture band. *Use Betula as a nurse tree to get conifers started. Alnus is another useful one as it gives nitrogen as well. Ron Gordon has used lombardy poplar for the same purpose. Betula was thought to be a good ecological combination, good at low pH. The important Abies should be replanted at more suitable sites. Orchard Hill should be replanted with the dry climate ones, whilst still retaining the character of the Hill. (*Abies* can be found in grid squares K10 and L10 of plan 4 in thesis Appendix Two. *Picea* can be found in grid squares L11 and L12 of plan 5 in thesis Appendix Two.)

*Picea bicolor*  
Retain. The douglas fir above is a problem.

*Picea complanata f. latisquamea*  
Retain.

*Picea koyami*  
Retain. The pine nearby is a problem, but the pine is also important.

*Picea mormisonicola*  
This tree may be the only one in the country and therefore should be retained. The Douglas fir above must be removed.

*Picea obovata*  
A tiny plant squashed under others. A very poor tree but not available in NZ. Leave and propagated urgently.

*Picea orientalis*  
Retain.

*Picea brachytyla*  
Marginal, not thrifty, retain.

*Picea sitchensis*  
Remove the smaller one, retain the larger one.

*Picea spinulosa*  
Retain but remove the associated Douglas fir.
**Picea wilsoni**

Remove. This tree needs much more cold than it is getting here and will not do well here. Easily available so remove.

It was agreed that the method of tree evaluation and therefore decision making was a particularly worthwhile exercise and that this could be used throughout the arboretum. It will be a useful method to assist management of the existing trees in problem areas.

**Recommendation:** That the tree evaluation system should be continued as a mechanism to aid tree management decisions.

### 6.0 CONCLUSION

It was agreed that the workshop had been a worthwhile exercise and that useful recommendations had arisen from the discussion. Particularly the group wished to emphasis the value of planning and discussion for the development of the Arboretum. The participants felt that the level of consensus arrived at was gratifying and that the further consideration of the collection should be an ongoing thing.

**Recommendation:** That the workshop group should meet again in April 1990 to continue the consideration of the collection and its development.
7.0 APPENDICES

APPENDIX ONE - PROGRAMME

Workshop objective: A preliminary assessment of the Eastwoodhill collection, and the consideration of a system for decision making on tree management.

Saturday 17 June

9.00am Welcome and introduction
9.15-10.15am Assessment of the collection. Consideration of survey results
10.30-12.00 Assessment of the collection. Consideration of survey results
1.00-2.45pm Tree management - Pear Park
3.00-5.00pm Tree management - Orchard Hill
7.00pm Dinner and meeting with the Trust Board

Sunday 18 June

9.00-10.30 The function of an arboretum
10.45-12.00 Wider prospects, plants not present at Eastwoodhill
1.00pm Workshop summary
Appendix 6

Report of the second workshop

REPORT OF THE SECOND EASTWOODHILL ARBORETUM WORKSHOP

DEVELOPMENT OF THE COLLECTION

15-17 April 1990

Marion MacKay
Massey University, Palmerston North

Eastwoodhill Publication No. 5

Published 1990
Appendix 6: Workshop Two report

Contents

SECTION ONE: Issues
SECTION TWO: Key Genera
SECTION THREE: Development of the genus Magnolia at Eastwoodhill.
SECTION FOUR: Management plan for Pear Park
SECTION FIVE: Curator’s forum: Basinhead
SECTION SIX: Conclusions

APPENDIX ONE: Programme
APPENDIX TWO: Tables referred to in the text
APPENDIX THREE: Rating scales for field exercises
APPENDIX FOUR: List of participants

Footnote: The workshop report in this thesis has been slightly modified from the original. Format has been modified slightly for this thesis. Content has been modified with respect to the maps of Pear Park that were in the original report. In this version the maps are not included but the reader is referred to the maps of Pear Park in thesis Appendix Two. Content has also been modified to ensure that the reader of this thesis can access all of the information that was provided to the workshop participants. Thus, some information that was in the Background Information booklet for the participants (but not in the original report), has been placed in the report version in this thesis. The programme has been added as an extra appendix. Tables 2.6, 2.7, 3.4, 3.5, 5.1, 5.2, 5.3, 5.4 are additional to the original report but were in the Background Information Booklet.
Resume

In April 1990 the Eastwoodhill Plant Management Committee met for the second time to consider aspects of the management and development of the collection of plants at the Eastwoodhill Arboretum. These deliberations are consequent to the first workshop which completed a preliminary evaluation of the collection.

Further consideration of the key genera of the collection achieved a refinement of the list of plant genera identified as most important to the character of the Arboretum. A detailed analysis was given to the genus *Magnolia* which had been identified as one of the most important of these genera. A development plan for this genus at Eastwoodhill was formulated.

A third exercise tested a park evaluation and planning method, using Pear Park as the example. The current plantings in this park were considered in light of the character and objectives for the park. The park was examined in detail and trees assessed for a variety of factors which were then used as a basis for planning decisions. The result of this exercise is the development of a long term strategy for the park.

Two exercises were conducted to introduce the areas Basinhead, and the Bush area, which will be the subject of further development reviews in the future.

This workshop was conducted under the auspices of the Eastwoodhill Arboretum Trust Board.
SUMMARY OF RECOMMENDATIONS

Section One: Issues
That the Plant Management Committee should establish liaison with the Douglas Cook Centre for Education.

Section Two: Key Genera
That *Camellia*, *Crataegus*, *Fraxinus* and *Populus* (species only), be added to the list of key genera and *Cedrus*, *Cupressus*, *Juniperus* and *Pinus* be the key conifer group.

That the redefined key genera list (present) now includes: *Acer*, *Aesculus*, *Abies*, *Betula*, *Camellia*, *Cedrus*, *Crataegus*, *Cupressus*, *Fagus*, *Fraxinus*, *Ilex*, *Juniperus*, *Malus*, *Magnolia*, *Pirum*, *Populus* (species only), *Prunus*, *Pyrus*, *Quercus*, *Tilia*.

That *Celtis* (and Ulmaceae), *Theaceae*, *Magnoliaceae*, *Callitris*, *Keteleeria*, *Podocarpus*, *Taiwania*, and *Taxodiaceae* be considered as potential future key genera.

That the acquisition policy for key genera groups should, in the absence of a specific genus plan, be the acquisition of all species where possible. If a species does not succeed at Eastwoodhill then an herbarium sample should be held.

That the acquisition policy for non key genera groups should be that of selective acquisition based primarily on climatic suitability, followed by other selection factors.

Section Three: Magnolia at Eastwoodhill
That with respect to the Magnolia family trees examined in the field exercise, the actions as described in Table 3.13 be undertaken.

That the development plan for the genus *Magnolia* at Eastwoodhill, as outlined in section 3.5 of this document, be adopted.

Section Four: Development plan for Pear Park
That the theme of Pear Park, as outlined in section 4.3 of this document, be ratified.

That the management strategy for Pear Park, as recommended in section 4.5 of this document, be adopted.

Section Five: Curator's forum
That the ideas outlined in discussion section 5.3 be considered in the development of the Basinhead area.

That an assessment of the plant material in Basinhead be conducted and the results thereof be used in conjunction with section 5.3 to resolve development issues for the Basinhead area.

Section Six: Conclusions
That the third workshop be held in early 1991.

That the third workshop address topics such as outlined in section six of this document.
SECTION ONE: Issues

Aim
To discuss issues relevant to the Plant Management Committee and its operation.

Issues
1. The Douglas Cook Centre for Education. The new study centre development was outlined. It was felt that the plant management committee should liaise with the group running the study centre. At the next meeting it would be valuable to discuss the herbarium aspect of the centre.

2. Public interface. To inform arboretum users of the activities of the workshop it is proposed that the curator prepare items for the next newsletter of the Friends of Eastwoodhill.

Recommendation: That the Plant Management Committee should establish liaison with the Douglas Cook Centre for Education.
SECTION TWO: Key Genera

2.1 Aim
The aim of this section was to continue the development of the key genera of the collection with the ultimate aim of devising a development plan for each genus.

2.2 Background
Initially the background information to this discussion was reviewed (Appendix Tables 2.1, 2.2). The definition of key genera was reiterated:

Key genera - the major groups of plants that form the backbone of the collection. These are the plants that give Eastwoodhill its distinct character.

The key genera assigned at the first workshop were reviewed. These were:

* Abies, Acer, Aesculus, Alnus, Betula, Conifers (all), Fagus, Ilex, Juniperus*, Malus, Magnolia, Picea*, Pinus*, Prunus, Pyrus, Quercus, Tilia

* These conifer groups included individually as they are the largest groups. This was an arbitrary decision by the author when preparing the background notes, this matter has not yet been discussed by the workshop.

2.3 Discussion
The assessment results from the first workshop, and the associated ranking of genera was discussed (Appendix Tables 2.3-2.5). Assessment results for the genera at Eastwoodhill in terms of average score, number at Eastwoodhill, and weighted score were considered.

It was noted that all key genera, except Pyrus, achieved an average score of 8.0 or above and therefore are included in the table of ranking according to average score (Appendix Table 2.3). This table also demonstrated the relative importance of the single species and small genus groups in relation to the selected key genera. Of the top six ranks four are held by key genera, the other two are held by Magnolia group plants.

Genera were also ranked for number of species and cultivars at Eastwoodhill, in this case key genera held the top six places (Appendix Table 2.4). Genera that ranked highly in this table, but which are not key genera included, Sorbus, Syringa, Crataegus, Chamaecyparis, Fraxinus, and Populus.

Ranking for weighted score demonstrated a similar pattern to the above, with the top five placings being held by key genera (Appendix Table 2.5). Groups that appear in the top ranking but which are not key genera included Sorbus, Syringa, Crataegus, Chamaecyparis, Fraxinus and Populus.

Given this information a number of genera were debated as possible inclusions in the key genera list. The key genera as the collection stands at present were considered, as well as proposals for future key genera. Conifers were discussed separately.
Present genera - broadleaf

1. As proposed at the first workshop
Acer, Alnus, Aesculus, Betula, Ilex, Fagus, Malus, Magnolia, Prunus, Pyrus, Quercus, Tilia, are key genus groups and this status should not be changed.

2. Crataegus.
The number of species and cultivars of this genus present at Eastwoodhill give this group a ranking of 11th for this factor. The group was also ranked 11th for weighted score. Although the average score (7.56) is below the designated cut off point of 8.0 it was felt that the other factors merit this genus being proposed as a key genus. The problem of Pear slug was commented on, the plants will need spraying to look their best.

3. Fraxinus
This genus also merited consideration given the ranking of 14= for number of species and cultivars at Eastwoodhill. Fraxinus was ranked 13th for weighted score. The average score for this group (7.61) is also below the designated cut off point of 8.0 but Eastwoodhill seems to hold a nationally significant collection of ash (see IDS data) which should be given key genus status. The genus consistently appears in the upper portions of the analysis tables, but was not originally included in the key genus group. It is now proposed as a key genus.

4. Populus
Populus also appears in the upper group for weighted score, and within the first 20 places for number at Eastwoodhill. With regard to the latter the genus ranks as well as Juniperus, and better than Ilex or Aesculus. The average score is relatively low at 7.17. Of all the genera that consistently appear in the upper portions of the score tables this groups is the lowest ranked of all. It is proposed that Populus becomes a key genus as regards species, particularly for the new area. Clones of species should be chosen to avoid cross pollination and seeding problems. Hybrids and cultivars should be avoided (a) because these types are comprehensively covered by the Plant Materials Centre, and (b) because there are a great number of these, while Eastwoodhill is concentrating on species.

5. Sorbus
Sorbus ranks 7th for weighted score, indeed it is the highest ranking non-key genus. In fact it achieves a high average score (8.5), as well as a high rank for Number (7th), in addition to the high weighted score rank. These figures would suggest that this group should be included as a key genus. However Sorbus is climatically unsuitable, which is easily demonstrated upon examination of the trees in question. The climate is not cool enough and most of the trees are unthrifty. Many have died out and are listed as 'not found'. Sorbus is not proposed as a key genus.

6. Syringa
Syringa ranks 9th for weighted score, with an average score relatively low at 7.12. Syringa was declared not suitable as a key genus as lilac cultivars are not successful here given that they need more intense cultivation than is possible at Eastwoodhill. However species lilacs were worth considering.

7. Deciduous azaleas.
Deciduous azaleas were discussed as these form an important element of the spring character of the arboretum. There are problems in growing these plants on this site, therefore plant selection must be prioritized to take this factor into account.
8. *Camellia.*

*Camellia* was proposed as a key genus. This genus was not included in any of the genera assessments as at one time it was considered that *Camellia* (and *Rhododendron*) did not constitute an important element of the Arboretum. Therefore no calculations had been done for the group. Recent calculations show the genus to be as follows:

19 species + 199 cultivars = 218

This would place *Camellia* at the top of the table for ‘number at Eastwoodhill’. The genus was not surveyed for botanical and aesthetic score, so it cannot be added to those tables.

It was pointed out that the present collection of ‘old’ camellias at Eastwoodhill is quite important as a representation of that group of camellias and that this should be preserved. It was proposed that the Arboretum collect species camellias, including tender types from China, whilst at the same time preserving the ‘old’ collection. It was considered inappropriate to have ‘modern’ camellias at the Arboretum. Species and cultivars for the collection would have to be selected as many of the genus are not climatically suitable.

**Future key genera**

The following were proposed as potential future key genera:

1. **Celtis.**

Although there are only a few in the collection at present, this group may be an important elm family group to maintain a collection of given the recent arrival of Dutch elm disease in New Zealand.

2. **Lithocarpus** and **Castanopsis.**

These genera were suggested as a future key genus of warm temperate origin and as a companion group to the oaks. There are many species, but obtaining the plants may also be difficult.

3. **Nothofagus**

This genus may be important as a member of the oak group and as part of the Gondwanaland collection.

**Present genera - Conifers**

In the original deliberations at the first workshop it was decided that all conifers should be included as a collective key genera group because of the importance of the conifers as a whole. On investigation it transpires that there are 37 genera of conifers at Eastwoodhill, many of these are single representatives or only small groups. In order to make data handling easier only the larger groups were included in the tables for this workshop, namely *Abies, Picea, Pinus, Juniperus.* The conifers as a group had not been discussed by the workshop, this was subsequently undertaken (Appendix Tables 2.3-2.5).

In terms of number of species and cultivars at Eastwoodhill, and the weighted score, the following genera hold a significant position: *Abies, Chamaecyparis, Cupressus, Juniperus, Pinus, Picea.* There are a number of very high scoring individual examples in terms of average score, but these do not have the weight of numbers to constitute a key genus.
1. *Abies* and *Picea*
These two groups rank well in terms of weighted score and fall in the top 20 places for number at Eastwoodhill. *Abies* has an average score of 8.25 and *Picea* of 7.89. However, many of these species are not climatically suitable for this site and if a policy of collecting all species is pursued then many failures will result. It was proposed that these genera be removed from the rank of key genus and that a policy of selective acquisition be followed, based on climatic suitability (dry climate range).

2. *Cedrus*
This is a small genus group that does not rank for any of the factors measured. However, the success of the genus, and its high level of use in the structural plantings of the arboretum support the inclusion as a key genus.

3. *Chamaecyparis*
Although this genus is ranked quite highly for number at Eastwoodhill, and the weighted score is similar to that of *Juniperus*, the average score is low at only 6.28. *Chamaecyparis* is not proposed as a key genus.

4. *Cupressus*
This genus is proposed as a key genus because of its good climatic suitability. The ranking for Number is 27=, similar to *Fagus* and *Tilia*. The weighted score is also low, being near the lower cut off point, the average score is also low at 6.78. However, the climatic suitability of the group, and therefore the potential success of the group at the arboretum outweighs the previous factors and includes this group in the proposal for key genus status.

5. *Juniperus*
*Juniperus* is proposed as a key genus because of its climatic suitability for the site. With an average score of 7.11 this genus does not appear in the ranking for average score. Its position for weighted score and number are 15th and 14th respectively. Therefore, in terms of ranking this genus holds a middle range position. The climatic suitability outweighs this though, as does the significance of the collection already held at Eastwoodhill when compared with national results.

6. *Pinus*
*Pinus* is also proposed as a key genus because of its climatic suitability. This genus is the highest ranking conifer group in terms of weighted score and for number of species and cultivars at Eastwoodhill. At an average score of 8.39 it is the highest ranking major conifer group for this parameter.

**Future key genera - conifers**
*Keteleeria* and *Taiwania* were proposed due to the large number of warmer temperate examples of these groups that could be grown at Eastwoodhill. *Callitris* is proposed for climatic suitability. *Podocarpus* is proposed for the Gondwanaland collection. *Athrotaxis* and the Taxodiaceae group are proposed as an important group of Chinese and/or warm temperate flora.

**Collection policy for key genera**
After some discussion it was agreed that acquisition of plants in the key genera groups should follow the following policy:
1. The emphasis should be on species of the key genera groups. All species available should be attempted, either grow a live specimen, or if the species is not successful then keep a herbarium specimen.

2. If the genus is not a key genus then acquisition should be selective.

Issues
1. Criteria for key genera should be considered.
2. Objectives in relation to the expansion of key genera should be developed.
3. Conifer groups need to be examined and suitable species preselected.

Recommendations:
That *Camellia, Crataegus, Fraxinus* and *Populus (species only)*, be added to the list of key genera and *Cedrus, Cupressus, Juniperus* and *Pinus* be the key conifer group.

That the redefined key genera list (present) now includes: *Acer, Aesculus, Alnus, Betula, Camellia, Cedrus, Crataegus, Cupressus, Fagus, Fraxinus, Ilex, Juniperus, Malus, Magnolia, Pinus, Populus (species only), Prunus, Pyrus, Quercus, Tilia*.

That *Celtis* (and Ulmaceae), Theaceae, Magnoliaceae, *Callitris, Keteleeria, Podocarpus, Taiwania*, and Taxodiaceae be considered as potential future key genera groups.

That the acquisition policy for key genera groups should, in the absence of a specific genus plan, be the acquisition of all types where possible. If a species does not succeed at Eastwoodhill then an herbarium sample should be held.

That the acquisition policy for non key genera groups should be that of selective acquisition based primarily on climatic suitability, followed by other selection factors.
SECTION THREE: Development of the collection - Magnolia

3.1 Aim
To consider in detail the status of the genus *Magnolia* at Eastwoodhill and formulate a development plan for that genus within the collection.

3.2 Background information and field exercise
The background information for this exercise was considered (Appendix Tables 3.1-3.3). The current Eastwoodhill collection contains 61 species and cultivars of *Magnolia*, and 12 other species and cultivars of other members of the Magnolia family. This represents about 3% of the total species and cultivars at the arboretum. *Magnolia* was one of the most important genera in the Arboretum assessment, given the highest average score, and being placed highly for weighted score (4th) and for number (5th). *Talauma* and *Manglietia* both ranked highly for average score and are highlighted as single example high scoring plants.

In addition to the above Cook also purchased another 37 species and cultivars that are no longer in the collection (Appendix Table 3.2).

As a representation of the genus Eastwoodhill holds about 50% of *Liriodendron* species, about 40% of *Magnolia* species, and less than 6% of any of the other family members (Appendix Table 3.3).

The assessment results for this group were then considered (Appendix Tables 3.9-3.11). The plants assessed as being the most botanically important included a mixture of *Magnolia* and Magnolia family plants. *Manglietia*, *Michelia*, *Talauma* and *Schisandra* all occurred above the cut off of 8.0 for average score. It is notable that most of the species ranking as botanically very important are represented by only one or two specimens at Eastwoodhill. The plants assessed as being the most aesthetically important produced a different list. Notably types of *Magnolia campbellii* were considered the most important. Species that rank highly in both lists include *M. campbellii* types, *M. sargentiana* var. *robusta*, *M. sprengeri* var. *diva*, *M. dawsoniana*, *Michelia doltsopa*, *Manglietia* sp, *Talauma* sp. (Appendix Tables 3.9, 3.10).

Given the preliminary assessment of the importance of various species a field exercise was then undertaken to assess the quality of the actual plants on site. Species for consideration were those that ranked highly in one or both of the botanical and aesthetic assessments. In the field exercise individual examples were rated for health, and as an example of the species. Rating scales can be found in Appendix Three.
## 3.3 Results

Table 3.12 Preliminary and field assessment of selected Magnolia family plants

<table>
<thead>
<tr>
<th>Species</th>
<th>Reference number</th>
<th>Botanical score</th>
<th>Aesthetic score</th>
<th>Status at Eastwoodhill</th>
<th>Health score</th>
<th>Example of species score</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Magnolia officinalis</em> var. <em>biloba</em> (Barn)</td>
<td>Ga940</td>
<td>8.0</td>
<td>7.2</td>
<td>1/2</td>
<td>8.2</td>
<td>7.8</td>
</tr>
<tr>
<td><em>Michelia doltsopa</em> (Barn)</td>
<td>Ga1002</td>
<td>8.2</td>
<td>9.2</td>
<td>1/3</td>
<td>5.8</td>
<td>5.0</td>
</tr>
<tr>
<td><em>Magnolia veitchii</em> ‘Peter Veitch’</td>
<td>Ga860</td>
<td>5.0</td>
<td>7.7</td>
<td>1</td>
<td>5.8</td>
<td>5.8</td>
</tr>
<tr>
<td><em>Michelia doltsopa</em> (Black Gate)</td>
<td>DP155</td>
<td>8.2</td>
<td>9.2</td>
<td>2/3</td>
<td>6.6</td>
<td>6.2</td>
</tr>
<tr>
<td><em>Magnolia dawsoniana</em> (upper)</td>
<td>OH538</td>
<td>8.4</td>
<td>9.0</td>
<td>1</td>
<td>7.8</td>
<td>8.4</td>
</tr>
<tr>
<td><em>Magnolia sprengeri</em> var. <em>diva</em></td>
<td>OH550</td>
<td>8.8</td>
<td>9.8</td>
<td>1</td>
<td>7.4</td>
<td>5.4</td>
</tr>
<tr>
<td><em>Magnolia sargentiana</em> var. <em>robusta</em></td>
<td>OH568</td>
<td>8.6</td>
<td>9.8</td>
<td>1</td>
<td>7.0</td>
<td>6.4</td>
</tr>
<tr>
<td><em>Magnolia kobus</em> var. <em>borealis</em></td>
<td>OH544</td>
<td>6.0</td>
<td>7.0</td>
<td>1/many</td>
<td>9.0</td>
<td>8.6</td>
</tr>
<tr>
<td><em>Magnolia veitchii</em></td>
<td>OH652</td>
<td>5.8</td>
<td>7.8</td>
<td>1/3</td>
<td>8.2</td>
<td>6.4</td>
</tr>
<tr>
<td><em>Michelia compressa</em></td>
<td>DP66</td>
<td>8.6</td>
<td>6.0</td>
<td>1</td>
<td>8.8</td>
<td>8.2</td>
</tr>
<tr>
<td><em>Magnolia grandiflora</em> ‘Goliath’</td>
<td>DP148</td>
<td>6.4</td>
<td>8.4</td>
<td>1</td>
<td>8.6</td>
<td>7.0</td>
</tr>
<tr>
<td><em>Magnolia macrophylla</em></td>
<td>DP156</td>
<td>8.4</td>
<td>8.4</td>
<td>1/3</td>
<td>8.4</td>
<td>6.6</td>
</tr>
<tr>
<td><em>Magnolia macrophylla</em></td>
<td>DP157</td>
<td>8.4</td>
<td>8.4</td>
<td>2/3</td>
<td>8.2</td>
<td>8.2</td>
</tr>
<tr>
<td><em>Magnolia officinalis</em> var. <em>biloba</em></td>
<td>DP158</td>
<td>8.0</td>
<td>7.2</td>
<td>2/2</td>
<td>5.8</td>
<td>5.4</td>
</tr>
<tr>
<td><em>Magnolia campbellii</em> (Birch Hill Pond)</td>
<td>DP77</td>
<td>8.2</td>
<td>9.8</td>
<td>1/3</td>
<td>7.2</td>
<td>6.8</td>
</tr>
<tr>
<td><em>Magnolia campbellii</em> (Cook’s Corner)</td>
<td>CC5</td>
<td>8.2</td>
<td>9.8</td>
<td>2/3</td>
<td>6.2</td>
<td>5.6</td>
</tr>
<tr>
<td><em>Magnolia cylindrica</em> (Cook’s Corner)</td>
<td>CC7</td>
<td>8.2</td>
<td>7.8</td>
<td>1/2</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td><em>Magnolia</em> ‘Douglas Cook’</td>
<td>CC4</td>
<td>6.0</td>
<td>8.0</td>
<td>1/7</td>
<td>7.6</td>
<td>8.0</td>
</tr>
<tr>
<td><em>Talauma hodgsonii</em></td>
<td>CaP</td>
<td>8.8</td>
<td>8.4</td>
<td>1</td>
<td>8.0</td>
<td>6.6</td>
</tr>
<tr>
<td><em>Magnolia campbellii</em> (Cabin)</td>
<td>CaP</td>
<td>8.2</td>
<td>9.8</td>
<td>3/3</td>
<td>7.0</td>
<td>6.4</td>
</tr>
<tr>
<td><em>Magnolia sp.</em></td>
<td>CaP</td>
<td>9.0</td>
<td>8.4</td>
<td>1</td>
<td>8.6</td>
<td>7.2</td>
</tr>
<tr>
<td><em>Magnolia delavayi</em> (Cedar Garden)</td>
<td>CaP</td>
<td>7.0</td>
<td>7.6</td>
<td>1/3</td>
<td>9.2</td>
<td>8.8</td>
</tr>
<tr>
<td><em>Liriodendron tulipifera</em> ‘Variegata’</td>
<td>CaP</td>
<td>6.4</td>
<td>7.8</td>
<td>1/2</td>
<td>8.8</td>
<td>9.4</td>
</tr>
<tr>
<td><em>Schisandra sp.</em></td>
<td>CaP95</td>
<td>8.6</td>
<td>6.8</td>
<td>1</td>
<td>9.0</td>
<td>8.4</td>
</tr>
</tbody>
</table>

### Notes
1. Plants on this list scored 7.5 or over for either botanical or aesthetic score.
2. Plants are listed in the order visited.
3. All assessment scores are expressed as a mark out of ten.
4. Status at Eastwoodhill indicates the number of that species, e.g., 1/3 indicates one specimen out of three. 3/3 indicates the third specimen out of three.
### Magnolia officinalis var. biloba
This tree poses no problems, all scores are satisfactory.

### Michelia doltsopa (Barn)
Action required. This tree is a reversion from the Caerhays form. It is quite one sided due to crowding on the inside, it is also double leadered. Assessments for health and example of species were both unsatisfactory. As this species is easily available it should be repeated on a better site. There are better forms available that should be obtained, for example 'Silver Cloud'.

### Magnolia veitchii ‘Peter Veitch’
Action required. This plant is on a very hard site. Neither field ratings are satisfactory. It should be propagated and repeated. The species is available commercially.

### Micbeilia doltsopa (Black Gate)
Although this tree achieved field scores above the critical level of 6 it has some problems. It seems to have borer and it has lost its leader. It is on shallow soil and has been overshadowed (latterly overhanging branches have been removed). The identity is uncertain, the underside is rather rusty, but not enough for ‘Rusty’, it may be a D&D form.

### Magnolia dawsoniana (upper OH)
All ratings satisfactory. This species has been repeated elsewhere.

### Magnolia sprengeri var. diva
This tree is showing vigorous sucker growth indicating it has regrowth potential. But it is badly overshadowed. It is not an adequate example of the species but it will make healthy growth if suitably released and will improve over time. This species has been repeated elsewhere.

### Magnolia sargentiana var. robusta
This particular specimen should be propagated. The overhanging oak branches should be removed.

### Magnolia kobus var. borealis
This particular specimen should be propagated as it is a good form.

### Magnolia veitchii (inside OH gate)
This tree has poor form and is small for its age. It is making some strong growth. This species seems to be particularly susceptible to possums.

### Michelia compressa
A healthy tree that is a good example of the type. Remove competing branches from nearby trees. This species has been repeated elsewhere.

### Magnolia grandiflora ‘Goliath’
A healthy tree that is being crowded. Remove competing branches from nearby trees. Remove nearby cherry.

### Magnolia macrophylla (cluster)
A cluster of stems that is the remnants of heeled in trees. Healthy and a reasonable example.

### Magnolia macrophylla
Good example in all respects.

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...continued
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**Magnolia officinalis var. biloba** (Rock Point Pond). Urgent action required. A poor example that is not healthy. Some trunk sprouts are occurring indicating growth difficulties, dieback of the crown supports this assertion. There are many trees in the vicinity although the crown itself is not crowded. This species has already been repeated on Orchard Hill.

**Magnolia campbellii** (Birch Hill Pond). This plant is a mixture of *M.campbellii* and *M.campbelli f. alba*. It is satisfactory for health and as an example of the species.

**Magnolia campbellii** (Cook’s Corner). Action required. This tree is a poor example and is marginal for health. Although it is on a very windy site this plant flowers satisfactorily, it should be protected from wind. This would improve its capacity as an example of the species.

**Magnolia cylindrica** Urgent action required. This is a very unhealthy plant as the health score of 3.4 indicates, consequently it is also a poor example of the species. This species has already been resited elsewhere.

**Magnolia ‘Douglas Cook’** Satisfactory.

**Talauma hodgsonii**. Although healthy and a reasonable example, this tree is very small for its age, it has been severely suppressed. The adjacent cherry should be removed to remove competition.

**Magnolia campbellii** (Cabin). This plant is healthy enough but very crowded. This plant exhibits particularly good flower colour. It should be propagated.

**Magnolia sp.** The identity of this tree is uncertain. It is a healthy specimen and a good example. It is producing some strong growth as a result of being released from competition the season before.

**Magnolia delavayi** A very good specimen in spite of its position in shade an associated heavily with other trees.

**Liriodendron tulipifera ‘Variegata’** Satisfactory.

**Schisandra sp.** This vine has recently been cut back and reinstalled on a climbing frame after the tree it was on collapsed. It is making strong growth and is a satisfactory example.

### 3.4 Discussion - field exercise

After completing the field exercise the results were considered and discussed. The most common problem found with the specimens examined was overcrowding, almost all examples had this problem. The overcrowding problem can be reduced in many cases by removing overhanging branches or nearby trees of less value. The form of many specimens could be improved by judicious branch removal.
Many problems can also be explained by the effects of poor siting. Age of the trees is also a factor contributing to poor ratings. However the effects of release can be seen in the amount of regrowth on some of the trees. It was concluded that the Cook's Corner site is quite unsatisfactory for Magnolia, wind being the critical factor.

**Health**

With regard to the health rating it was decided that a score of 3(6) was the critical level for action. A score of 3(6) needs action, a score of 2(4) needs urgent action. Scores of 4(8) and 5(10) were satisfactory. (Scores are expressed on a 1-5 scale, then in brackets the equivalent on a 1-10 scale).

This meant that Magnolia cylindrica and Magnolia officinalis var. biloba (2nd example) needed urgent action. In both cases this has already been carried out with these species having been replanted elsewhere. A health rating of 3 also was of concern, *M. campbellii* (Cook's Corner), *Michelia doltsopa*, *M. veitchii* 'Peter Veitch'.

**Example of species**

Once again 3(6) seems to be the critical level on the scale as an example of the species, anything below this level is not acceptable as an example of the species. Of the examples viewed *Michelia doltsopa* (Barn), Magnolia Peter Veitch, Magnolia sprengerii var. diva, Magnolia officinalis var. biloba (Rock Point Pond), Magnolia campbellii (Cook's Corner), Magnolia cylindrica were not considered good examples of the species. Levels 4(8) and 5(10) are acceptable.

The fact that the trees have come this far under difficult conditions is a good test of the trees. *Magnolia* have tremendous powers of recovery. Opinion varied on the number of trees viewed that were in fact good examples. The range was between 30-60% good examples, down to only 6 trees.

**Recommendation:** That with respect to the Magnolia family trees examined in the field exercise the actions as described in Table 3.13 be undertaken.

### 3.5 Development plan for the Magnolia group at Eastwoodhill

Many aspects relating to the Magnolia group at Eastwoodhill were discussed. Given the aim of this exercise the discussion will be reported as a development plan.

**Recent acquisitions**

The following have recently been acquired and therefore did not appear on the current list.

- *Magnolia brooklynensis* 'Woodsman'
- *Magnolia* 'Caerhays Belle'
- *Magnolia denudata* 'Forrests Pink'
- *Magnolia dawsoniana* 'Chyverton Red'
- *Magnolia grandiflora* 'Little Gem'
- *Magnolia* 'Norman Gould'
- *Magnolia sargentiana*
- *Magnolia sprengerii var. diva* 'Diva'
The current collection
The policy for the current collection should follow these guidelines:
• 'old' cultivars should be kept for reference purposes.
• the *M. soulangiana* group particularly should be kept for reference.
• types originally imported by Cook should be retained.
• those special to Eastwoodhill should have more than one example. Namely *Magnolia dawsoniana*, *Magnolia sprengeri var. diva*, *M.sargentiana var. robusta*, *Magnolia kobus var. borealis*, *Magnolia campbellii* (Cabin), Manglietia.

Criteria for acquisition
The policy on acquisition should follow these guidelines:
• concentrate on species. Try everything. If it will not grow then keep a herbarium specimen.
• there is an obligation to hold unusual types for reference and educational purposes.

Attention should be paid to good form, climatic range, climatic adaptability, site selection.

Acquisition with respect to number
Acquisition with respect to number should follow these guidelines:
• as long as there is space and suitable sites then 2-3 of each important species should be held.
• plants imported by Cook should be represented by three examples.
• plants commercially available do not need multiple representation.
• species special to Eastwoodhill should be represented by more than one example, (*M.dawsoniana*, *M.sprengeri var. diva*, *M.sargentiana var. robusta*, *M.kobus var. borealis*, *M.campbellii* (Cabin), Manglietia).

Acquisition with respect to actual species
Of the plants highly ranked the following should be obtained:
• *Magnolia nitida*. Available, obtain from O.Blaumhardt.
• Manglietia hookeri. Propagate locally from Dot Gray.
• Manglietia insignis. Availability unknown.
• *Magnolia officinalis*. Appears to be unobtainable.
• *Magnolia coco*. Is at Eastwoodhill and is too tender, relocate elsewhere.
• *Magnolia hypoleuca*. Available, obtain.
• *Magnolia virginiana* ‘Autumn Delight’. Available, obtain.

Others to obtain:
• *Magnolia globosa*. Already acquired ex Pukeiti.
• *Magnolia sargentiana*. Already obtained ex ?.
• *Magnolia rostrata*. Not really available and very difficult to propagate.
• *Magnolia watsonii*. Very good scent. Obtain.
• *Magnolia wilsonii*. Obtain.
• *Magnolia ashei*. A good species but the flowers are small. Obtain.
• *Magnolia campbellii f. alba*. Obtain and put in a better position.
• *Magnolia ‘Strybing White’* for Orchard Hill. Obtain.
• *Magnolia ‘Darjeeling’* Obtain.
Expansion of the group
The Magnolia group represents a significant opportunity for expansion under the general aims of the collection as stated at the first workshop, namely the theme of warm temperate flora. Given that the percentage coverage of the family at Eastwoodhill ranges from approximately 3-50% of the genera in question, there is considerable scope for expansion. Selection of this group for expansion is supported by the consistently high assessment scores achieved by this group of plants.

Such an expansion will require an investigation into suitable material and the acquisition of the same. The following matters were identified as requiring investigation in this regard:

- The genera Manglietia, Paramichelia, and Talauma. There are many species here, some of which may be suitable for Eastwoodhill.
- Species that are climatically suitable.
- Further information on what is available in New Zealand. Manglietia and Talauma. (Contact O. Blaumhardt.)
- Further information on Michelia and Paramichelia (contact Ron Gordon).
- Inclusion of Illicium in the group.
- Investigate the Chinese connection, liaise with Ron Gordon and Pukeiti Rhododendron Trust.

Recommendation: That the development plan for the genus Magnolia at Eastwoodhill, as outlined in section 3.5 of this document, be adopted.
SECTION FOUR: Management of the collection - Development plan for Pear Park

4.1 Aim
The aim of this exercise was to formulate a strategy for managing the park over time, a plan for propagation, planting and removal. Given the aim of this exercise the results shall be presented as a development plan.

4.2 Description
Pear Park is in the lower portion of the Arboretum, in the south east corner. The site is basically flat with a gentle slope towards The Ride. Pear Park is important because of its position in the Arboretum as a whole, i.e. it is close to the carpark, and because it has sheltered open spaces. The park has difficult soil which is shallow and poorly drained. There are drains through the park across Linden Green although recent winters have not been wet enough for these to run.

Planting in Pear Park began in 1920 with pin oaks, elms, and english ash. In 1949 the Linden Green circular track was installed and the main body of the park planted. In the 1950s trees were lined out in what is now Nursery Wood. In the 1960s eucalyptus were removed. Carya ovata, Taiwania cryptomerioides, and Acer saccharum 'Arnold form' were planted in the late 1960s.

The park now contains plantings of many deciduous trees; oaks, maples, crataegus, tilia, ash and platanus are well represented. There is a significant collection of junipers in the lower part of the park. The pin oaks planted in 1920 are some of the biggest trees in the park at about 30m tall.

Plants currently in the park are illustrated by the park plans, sheets 6-9 of the arboretum set. (The reader of this thesis should refer to plans 2 and 3 in thesis Appendix Two.) Plants that have been in the park but which are no longer present are outlined in Appendix Table 4.3.

Many of the plantings in Pear Park are crowded and many are reaching the end of their useful life. At the same time other trees are in excellent condition and will continue to be so for many years. Given these problems it is necessary to formulate a management strategy to address these issues.

4.3 Theme
At the first workshop it was resolved that 'The theme of the Arboretum was that of temperate and warm temperate flora, focussing on the key genera plant groups that have already been identified.' (Key genera as outlined in first workshop report.). At the same workshop it was resolved that the role of the arboretum is 'To maintain and further the collection of Douglas Cook.'

With respect to Pear Park it was agreed that the park should continue to reflect the views and objectives of Douglas Cook. The management plan should maintain and conserve these objectives. The following were identified as the themes of Pear Park:

1. The general absence of conifers. Bill Sykes reports that it is his understanding that Douglas Cook purposely excluded conifers.

2. There is a strong rose family influence. This is demonstrated by the Malus, Crataegus, Crataegus hybrids, Prunus. Examination of the previous plants list supports this point.
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Segment of the arboretum plan showing the location of Pear Park.

Plan of Pear Park showing location of areas A-G referred to in the results. Plans are found in thesis Appendix Two.
Appendix 6: Workshop Two report

3. There is a distinct deciduous character to Pear Park. There are some evergreens, (oaks and camellias), but the majority is deciduous. Ron Gordon reports that Cook stressed to him that this park would be deciduous and that it would be a feeding ground for flora and fauna, hence the large number of fruit plants.

4. Fruiting plants. This theme is supported by the evidence in point three.

5. Following of a species composition such as outlined by Appendix Tables 4.1, 4.2.

6. The central open space is a key feature.

4.4 Park evaluation - method
To evaluate the park the following procedure was followed:
1. Consideration of the current composition of the park and other background information.
2. Definition of permanent and transitory elements
3. Field exercise

Background information
The distribution of arboretum key genera in Pear Park was examined (Appendix Table 4.1). It was noted that of the key genera Pear Park contains a significant portion of Aesculus, Fagus, Juniperus, Malus, Quercus, and Tilia.

The distribution of other genera in Pear Park was examined. Significant groups in Pear Park are Celtis, Emmenopterys, Gleditsia, Platanus, Platyctarya, Buddleia, Stuartia, Viburnum (Appendix Table 4.2). Some of these are single genus high scoring plants, for example Emmenopterys, others are significant representation of smaller genera in the arboretum, for example, 42% of the Celtis are in Pear Park, including sole examples.

Assessment of the plants in Pear Park for botanical and aesthetic value can be found in Appendix Tables 4.6 and 4.7.

Permanent and transitory elements
Permanent elements are described as those that, when in an acceptable situation, are sufficiently long lived as to be considered permanent. Transitory elements are described as those that are not long lived and will require regular replacement in relation to the permanent elements.

The definition of elements in this way allows the manager to distinguish those that will need regular attention and replacement from those that will not need such replacement. It is desirable that the framework of the park be formed from permanent elements, thus the framework of the park is always retained and is not disturbed by the need to recycle short lived material. The definition of the genera in this way does not necessarily mean that any will be removed from the park, it simply means that the transitional (shorter lived) groups will need more intensive management to keep them at their best at all times.

The permanent elements (longer lived) of Pear Park have been agreed to be:
- Acer, Aesculus, Camellia, Celtis, Cryptomeria.
- Fraxinus. This genus, when in an acceptable situation, would be a permanent element. However at present these trees are not thrifty due to being grafted onto F.excelsior stock. If grafted onto more appropriate stock then there will be no problem with the length of life of this group.
Juniperus. This genus, when growing in an acceptable situation, would be a permanent element as it is long lived. However the current site is quite unsuitable as it is too wet and shady. This fact, plus the deciduous theme of Pear Park lead to the conclusion that this grouping should be relocated.

- *Platanus, Quercus, Sequoia, Tilia, Ulmus.*

Transitional (shorter lived) species of Pear Park are:

- *Betula, Buddleia, Euonymus, Crataegus and hybrids, Cotoneaster, Malus, Philadelphus, Prunus.*

Field exercise

A field exercise was conducted that made detailed examination of the trees within the park. This was done in two stages. In the first stage the Linden Green area was examined and trees rated for health, growth phase, and as an example of the species. (Rating scales can be found in Appendix Three). Analysis of these indicators will form a basis for decision making on individual trees. In the second stage the rest of the park was examined and a series of recommendations made.

4.5 Park evaluation -results

Results for the examination of Pear Park can be seen in Table 4.5 which shows the ratings for the Linden Green section, by Table 4.8, and by plan pages A-G, which should be referred to concurrently. (In the original version of this report plans A-G followed here. Plans of Pear Park can be found in thesis Appendix Two. The location of areas A-G is shown on page 651.)

For the field ratings it was agreed that for health and example of species a score of 3, 2, or 1, required some action. Levels 4 and 5 were satisfactory. For the growth phase rating a score of 1 required some action. Field ratings have been summed and the action category for each plant indicated. Field scores are converted to a mark out of 10 for analysis. Using the levels just indicated the total scores were treated as follows:

(i) total score less than 14 - urgent action required.
(ii) total score 14 to 18 - action required in 0-5 years.
(iii) total score 19 to 23 - okay, no immediate action required.
(iv) total score 24 or more - tree excellent, no action required.

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## Preliminary assessment

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Table 4.8: Results Pear Park exercise - Recommendations

If a plant is not mentioned specifically in the recommendations then no immediate action is required.

**The Ashes** see area A.

Recommendations - urgent.
1. *Fraxinus chinensis* forms should be propagated urgently (PP171, PP179).
2. *Malus eleyi* needs urgent propagation and replanting (PP162,3).

Recommendations 0-5 years.
1. *Fraxinus pensylvanica* 'Variegata' has been repropagated and should be removed once a new plant is established (PP185).
2. *Fraxinus holotricha*, propagate as it is in declining growth phase (PP183).
3. *Fraxinus chinensis* has already been grafted onto its own seedlings. Once a new plant is established the present plant should be removed (PP177).
4. *Fraxinus pensylvanica* 'Aucubifolia', (PP158) remove as it is in poor health and is declining growth phase. The adjacent one (PP157) is a better representative.
5. *Crataegus coccinoides* has been repopagated and should be replanted as soon as good stock is available (PP155).
6. *Crataegus jackii* and *C.jonesiae* have been repopagated and will be removed once new plants are established (PP156, PP153). The soil is very poor on this site so replanting should be elsewhere.
7. *Malus* could be replanted where trees from point 4 are removed, given selection of suitable root stock.
8. The dying side limb on *Fraxinus* (PP161) should be removed as it has been ringbarked by Puriri moth.
9. *Crataegus wilsoni* (PP166) and *C.monogyna* 'Praecox' (PP167) are very crowded and should be relocated to better sites. Both have been propagated.
10. *Crataegus crus-galli* 'Pyracanthifolia' (PP165), *C.persistens* (PP168), and *Crataegus* PP164, can remain if tidied up.

Recommendations 5-10 years.
1. *Betula jacquemontii* hybrid (PP139) should be left until it starts to impinge on the *Carya* (PP140), the birch should then be removed.

Comments
1. The site is quite suitable for ash, *F.excelsior* 'Monophylla' and *F. udhei* are particularly good. The collection as a whole needs more room, but others should be established first. When grafted onto the correct stock this group of trees will improve in health.
2. *Crataegus*. These as a group are not healthy. The group should be identified from an accurate source such as the Arnold Arboretum, Boston, as many of the Hillier names are suspect. All *Crataegus* have been repopagated by P Pollock. *Crataegus* need resiting into sunny positions. ....continued
3. *Quercus glauca* is regrowing quite adequately after being released from a crowding ash branch.

4. *Malus* have been propagated by Ivan Mitchell.

**Lime Corner** see area B.

Recommendations - 0-5 years.

1. The *Quercus robur* (PP131) should be removed to allow the limes more room.
2. *Tilia platyphyllo* 'Laciniata' (PP132) should be propagated.
3. *Quercus garryana* (PP52) is in poor health, some action is needed.

**Tilia mongolica to Quercus variabilis** see area C.

Recommendations - urgent.

1. *Pyrus (Sorbus) alnifolia* (PP120), urgent propagation.
2. *Quercus acutissima ssp. cheni* (PP142), urgent propagation.
3. *Crataegus x grigonensis* (PP145), urgent propagate and relocation.

Recommendations 0-5 years.

1. *Aesculus glabra* (PP117) should be repopulated and relocated.
2. *Crataegus* hybrids (PP143, PP144), have been propagated, relocate further out once new stock is available.
3. Repopulated *Crataegus* should be rest on the opposite side of the Green where it is sunny, or along the sunny side of the lower part of the Green.

4. Actions as per last workshop report should be continued, i.e.,
   *Acer opalus* (PP129), propagate and remove.
   *Cunninghamia konishii* (PP130), propagate and remove, bring in new stock.
   *Acer pseudoplatanus* 'Worleeii' (PP127), remove.
   *Acer platanoides* 'Reitennbachii' (PP126), check ID and propagate if necessary, obtain from new source and replant.
   *Acer velutinum var. vanvolxemi* (PP123), remove.
   *Cunninghamia lanceolata* (PP 124), remove.
   *Platanus acerifolia* 'Cantabrigensis' (PP125), propagate.

**Lower Linden Green across to Gleditsia japonica** see area D.

Recommendations 0-5 years.

1. Selectively remove seedling ashes in lower corner, (PP245,246,247,248,249,298) then reassess next year. This will allow a view into the variegated elm foliage behind.

2. The smooth trunk evergreen oak should be removed. The knobby trunked one should be retained and identified (PP 250 and adjacent tree).

3. Remove *Malus* 'Jack Humm' (PP111) to allow the development of a path through here for access to the lower park. This plant has been repopulated. ....continued
4. Relocate *Malus sublobata* (PP69) further out to give more room. This plant has been repotted.

5. A new plant of *Tsuga canadensis* (PP68) should be obtained and planted elsewhere.

6. Replacement *Malus* should be planted in this area to keep the character.

7. Plant another *Malus hupehensis* in the gap indicated to complete the enclosure. 

8. Use the area below the liquidambers to replant *Malus* and/or *Crataegus*.

9. *Crataegus* stock (PP48, labelled submollis) in front of oaks to be removed to allow view into oaks.

**Comments**

The view into the wall of greenery behind *Malus baccata var. microcarpa* is very good and should be enhanced. The *Malus* along this stretch are not in good health and need to be moved further out. Chris Ryan (Toptrees, Clive), is repotting the apples from around nursery wood. It was felt to be most important to retain the feeling of space, so any planting should not encroach on the Green too much.

**Nursery Wood and the junipers** see area E.

**Recommendations - urgent.**

1. Repot all Junipers and relocate in a warmer drier site. Eventually remove existing trees as they decline. Leave in the meantime while they are still healthy.

**Recommendations 0-5 years.**

1. Side prune the *Castanea sativa* (PP75).

2. Open up the Nursery Wood area, but at the same time conserve the tunnel effect, remove dead and dying material, remove quince. *Parrotia persica* (PP94) at the end should be the focal point.

3. Relocate apples, PP243 and PP244 elsewhere, this site is too overcrowded for them anyway.

4. Remove *Prunus cerasifera ‘Atropurpurea’*(PP95) and *Fraxinus excelsior* (PP97) in lower corner to give more room to higher value trees.

5. Remove second leader from *Tilia petiolaris* (PP105).

**Comments**

The idea of retaining the nursery lines is fine, but natural attrition means that plants are dying out and many of the smaller trees are unthrifty. It is possible to conserve the tunnel effect while at the same time removing some material and improving the look of the area.

**Cottage Course** see area F.

**Recommendations - urgent.**

1. *Fraxinus xanthoxyloides* (PP23), urgent propagate.

2. *Pyrus (Sorbus) folgneri* (PP21), urgent propagate.

**Recommendations 0-5 years.**

1. Remove poor examples of *Fraxinus excelsior* along the Ride. .....continued
2. *Crataegus* under evergreen oaks to be removed as soon as new plants are established (PP44, PP45, PP241).

**Below the cottage** see area G.

Recommendations - urgent.
1. *Acer diabolicum f. purpureascens* (PP189), urgent propagation.
2. *Osmanthus suavis* (PP188), urgent propagation.

Recommendations 0-5 years.
1. Relocate *Chionanthus* (PP190) into the sun.
2. Propagate *Buddleia* and *Euonymus* for replanting as the current specimens decline.
3. Relocate trees from under lower pin oak,
   - *Acer laetum* 'Aureum' (PP201), *Acer laetum* 'Purpureum', (PP200).
   - *Euonymus salicifolia grandiflora*, (PP198), *Euonymus* PP199, PP199A.

**General**

Recommendations 10-20 years.
1. All ash should be propagated and prepared for replanting to replace existing trees as they decline.

Recommendations 20-30 years.
1. Repropagate all *Crataegus* and *Malus* to start next replacement cycle.

### 4.6 Discussion

The results as shown above outline the status of the trees examined and the level of action required. For those needing action the actual outcome will be tempered by the ascribed botanical and aesthetic importance, and the availability of that species.

**Recommendations:**

That the theme of Pear Park, as outlined in section 4.3 of this document, be ratified.

That the management strategy as recommended in section 4.5 of this document be adopted.
SECTION FIVE: Curator’s Forum

5.1 Aim
In this section an item for discussion was introduced. This relates to an area of the Arboretum that poses a current problem for the curator and which requires some group input. The item for discussion this year is the area at the top of Douglas Park known as Basinhead. For plan and plant list refer to page 661 and Table 5.1.

5.2 Background
This portion of Douglas Park is on the main thoroughfare through Douglas Park when on the Douglas Cook Walk. Physically the area is a small basin with a flat centre surrounded by small ridges, open at the south western end. The area contains mostly deciduous trees with some evergreens. A collection of lilacs was a notable feature of the area. The plantings are set around the perimeter of what was, prior to 1985, a small pond. In 1985 a severe rainstorm set in motion a deep slip on the farmland above the park which covered the Basinhead area in 1-2m of clay, the pond was completely filled in and several trees surrounded by slip debris. A number of trees died and others were buried as a result of the slip. This, and the loss of the pond have reduced the visual appeal of the park and some improvement is required.

Important features of this area were identified by the group.

1. An important physical feature was the ridge on the western side that separates Basinhead from the adjacent area. This is an open slope with scattered *Eucalyptus leucoxylon* ‘Rosea’. This piece of ground was considered very visually appealing and should be enhanced.

2. A example of *Pimus durangensis* at the lower end of Basinhead is an important specimen tree. Equally the specimen of *Populus deltoides* ‘Carolin’ at the upper end of Basinhead is an important example.

3. Other plantings of note include a fine white trunked birch, (species unknown), several blue atlas cedar, *Acer macrophyllum*, and a bunya pine which is recovering from top loss. A series of poplars, (identity not confirmed), run along the fence line at the back of Basinhead.

4. A number of more transitory elements are included in the planting. There are some *Prunus*, (plums peaches and cherries), and a selection of lilacs.

5.3 Discussion
With respect to the sloping ridge with the *Eucalyptus* the following ideas were put forward:

- leave the area alone but remove the poorer trees.
- underplant with shrubby material.
- install a low planting across the lower slope, and remove the poorer trees.
- enhance the ridge top by selectively pruning up the douglas fir, thereby emphasising the smooth ridge top.

With respect to the basin itself the following ideas were put forward:

- that the area is important as an open space, of which there are few in this part of the arboretum.
- the margins of the basin appear suitable for mollis azaleas, a planting of azalea about the margin of the basin would enhance the spring display.
- the central grassy area should be smoothed off.
Appendix 6: Workshop Two report

Segment of the arboretum plan showing the location of Basinhead.

Basinhead. For detail see the plan in thesis Appendix Two.
With respect to the view through the basin to the farmland beyond the following ideas were put forward:

• that the fence line across the rear of Basinhead should be planted with small material in order to hide the fence, but allow for the view into the hillside beyond.

With respect to plant material the following ideas were put forward:

• that *Populus deltoides ‘Carolin’* be pruned of broken branches, but otherwise be left as is.
• that the various flowering plum cultivars be removed, along with the dying conifers, to give a better view of the poplar.
• that the planting along the Pepper Flat side of the basin be rearranged in order to take better advantage of microclimate. At present many smaller plants are heavily overshadowed by larger plants along the side of the track, relocating the smaller plants into the edge of the basin (rather than along the track) would ensure better growth and display.
• that the yellow plum be removed.
• that the cherries along the track be repotted.

### Table 5.1: List of plants at Basinhead

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies pinsapo</td>
<td><em>Fir</em></td>
</tr>
<tr>
<td>Acer buergerianum</td>
<td><em>Trident maple</em></td>
</tr>
<tr>
<td>Acer macrophyllum</td>
<td><em>Big leaf maple</em></td>
</tr>
<tr>
<td>Acer negundo</td>
<td><em>Boxelder</em></td>
</tr>
<tr>
<td>Acer palmatum</td>
<td><em>Japanese maple</em></td>
</tr>
<tr>
<td>Araucaria bidwilli</td>
<td><em>Bunya pine</em></td>
</tr>
<tr>
<td>Betula platyphylla</td>
<td><em>Birch</em></td>
</tr>
<tr>
<td>Betula sp., white trunk</td>
<td><em>Birch</em></td>
</tr>
<tr>
<td>Buddleia alternifolia</td>
<td><em>Buddleia</em></td>
</tr>
<tr>
<td>Cassia tomentosa</td>
<td><em>Cassia</em></td>
</tr>
<tr>
<td>Cedrus atlantica f. glauca</td>
<td><em>Blue atlas cedar</em></td>
</tr>
<tr>
<td>Chamaecyparis pisifera, 2 forms</td>
<td></td>
</tr>
<tr>
<td>Chamaecyparis squarrosa</td>
<td></td>
</tr>
<tr>
<td>Cornus florida f. rubra</td>
<td><em>Pink flowering dogwood</em></td>
</tr>
<tr>
<td>Eucalyptus leucoxylon</td>
<td><em>Flowering gum</em></td>
</tr>
<tr>
<td>Forsythia ‘Arnold Giant’</td>
<td><em>Forsythia</em></td>
</tr>
<tr>
<td>Forsythia ‘Beatrix Farrand’</td>
<td><em>Forsythia</em></td>
</tr>
<tr>
<td>Forsythia ‘Linwood’</td>
<td><em>Forsythia</em></td>
</tr>
<tr>
<td>Fraxinus sp.</td>
<td><em>Ash</em></td>
</tr>
<tr>
<td>Grevillea robusta</td>
<td><em>Silky oak</em></td>
</tr>
<tr>
<td>Magnolia kobus</td>
<td><em>Magnolia</em></td>
</tr>
<tr>
<td>Magnolia loebneri</td>
<td><em>Magnolia</em></td>
</tr>
<tr>
<td>Populus deltoides ‘Carolin’</td>
<td><em>Poplar</em></td>
</tr>
<tr>
<td>Populus sp., 2</td>
<td><em>Poplar</em></td>
</tr>
<tr>
<td>Prunus x blireana</td>
<td><em>Purple leaf plum</em></td>
</tr>
</tbody>
</table>
A number of useful ideas were put forward in the discussion of the Basinhead area. A botanical assessment of the plantings has not been done so no figures on the importance of the plant material are available for use in the discussion. The ideas outlined above should be used in conjunction with a plant material assessment as a basis for decision making.

**Recommendations:**
That the ideas outlined in discussion section 5.3 be considered in the development of the Basinhead area.

That an assessment of the plant material in Basinhead be conducted, and the results thereof be used in conjunction with discussion 5.3 to resolve development issues for the Basinhead area.

{In the original version of this report a plan of Basinhead appeared here. The reader of this thesis will find that plan in thesis Appendix Two.}
SECTION SIX: Conclusions

After some discussion the following conclusions were reached:

1. A comments box should be included on the field exercise forms.
2. The next workshop should be held early 1991.
3. The next workshop should include:
   - a section on new issues.
   - key genus examination, *Acer*.
   - a park management exercise, perhaps Corner Park.
   - an examination of a portion of the new area.

Recommendations:
That the third workshop be held in early 1991.

That the third workshop address topics such as outlined in section six of this document.
APPENDIX: Programme for the second workshop

The Second Eastwoodhill Arboretum Workshop April 1990

Programme

Friday

8.30am Welcome and Introduction
8.45-10.00 Section One: Issues
10.30-12.00 Section Two: Key genera study
          Section Three: Magnolia exercise, introduction
1.00-3.30 Section Three: Magnolia exercise, field exercise
4.00-5.00 Section Three: Magnolia exercise, discussion and conclusion

Saturday

8.30-10.00 Section Four: Pear Park exercise
10.30-12.00 Section Four: Pear Park, field exercise
1.00-3.00 Section Four: Pear Park exercise, discussion and conclusion
3.30-5.00 Section Five: Bush area exercise

Sunday

8.30-10.00 Curator’s forum: two issues of current concern
10.30-12.00 Workshop conclusion, discussion of new issues and priorities
APPENDIX: Tables referred to in the text.

KEY GENERA (Section Two) - TABLES REFERRED TO IN THE TEXT

Table 2.1  Key Genera. Scores assigned at the first Workshop

<table>
<thead>
<tr>
<th>Genus</th>
<th>Botanical score</th>
<th>Aesthetic score</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies</td>
<td>8.50</td>
<td>8.00</td>
<td>8.25</td>
</tr>
<tr>
<td>Aesculus</td>
<td>8.33</td>
<td>8.80</td>
<td>8.55</td>
</tr>
<tr>
<td>Alnus</td>
<td>7.00</td>
<td>6.14</td>
<td>6.60</td>
</tr>
<tr>
<td>Betula</td>
<td>8.89</td>
<td>8.89</td>
<td>8.89</td>
</tr>
<tr>
<td>Fagus</td>
<td>8.44</td>
<td>8.00</td>
<td>8.22</td>
</tr>
<tr>
<td>Ilex</td>
<td>8.44</td>
<td>8.00</td>
<td>8.22</td>
</tr>
<tr>
<td>Juniperus</td>
<td>8.00</td>
<td>6.22</td>
<td>7.11</td>
</tr>
<tr>
<td>Malus</td>
<td>8.67</td>
<td>8.11</td>
<td>8.39</td>
</tr>
<tr>
<td>Magnolia</td>
<td>9.56</td>
<td>9.33</td>
<td>9.44</td>
</tr>
<tr>
<td>Picea</td>
<td>8.22</td>
<td>7.56</td>
<td>7.89</td>
</tr>
<tr>
<td>Pinus</td>
<td>9.10</td>
<td>7.67</td>
<td>8.39</td>
</tr>
<tr>
<td>Prunus</td>
<td>9.11</td>
<td>9.00</td>
<td>9.06</td>
</tr>
<tr>
<td>Pyrus</td>
<td>7.78</td>
<td>6.89</td>
<td>7.33</td>
</tr>
<tr>
<td>Quercus</td>
<td>9.33</td>
<td>8.89</td>
<td>9.11</td>
</tr>
<tr>
<td>Tilia</td>
<td>8.67</td>
<td>8.00</td>
<td>8.33</td>
</tr>
</tbody>
</table>

Notes
These are the key genera as identified at the first workshop. Although conifers as a whole were targeted as key genera only the largest groups have been dealt with.
### Table 2.2 Key genus attributes and ranking

<table>
<thead>
<tr>
<th>Key genus</th>
<th>Number of species and cultivars at Eastwoodhill (N)</th>
<th>N as a percentage of total number of species and cultivars at Eastwoodhill (%)</th>
<th>Average score (Av)</th>
<th>Weighted score ($W = % \times Av$)</th>
<th>Ranked for N</th>
<th>Ranked for W</th>
<th>Ranked for Av</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Abies</em></td>
<td>33 + 4 = 37</td>
<td>1.73</td>
<td>8.25</td>
<td>14.27</td>
<td>10</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td><em>Acer</em></td>
<td>77 + 57 = 134</td>
<td>6.30</td>
<td>9.19</td>
<td>57.89</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><em>Aesculus</em></td>
<td>16 + 5 = 21</td>
<td>0.98</td>
<td>8.55</td>
<td>8.38</td>
<td>21</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td><em>Alnus</em></td>
<td>24 + 5 = 29</td>
<td>1.36</td>
<td>6.60</td>
<td>8.98</td>
<td>14 =</td>
<td>17</td>
<td>nr</td>
</tr>
<tr>
<td><em>Betula</em></td>
<td>37 + 3 = 40</td>
<td>1.88</td>
<td>8.89</td>
<td>16.71</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><em>Camellia</em></td>
<td>19 + 199 = 218</td>
<td>10.00</td>
<td>-.</td>
<td>-.</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>Cedrus</em></td>
<td>4 + 6 = 10</td>
<td>0.47</td>
<td>7.67</td>
<td>3.6</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
</tr>
<tr>
<td><em>Crataegus</em></td>
<td>29 + 7 = 36</td>
<td>1.69</td>
<td>7.56</td>
<td>12.79</td>
<td>11</td>
<td>11</td>
<td>nr</td>
</tr>
<tr>
<td><em>Cupressus</em></td>
<td>12 + 5 = 17</td>
<td>0.79</td>
<td>6.78</td>
<td>5.41</td>
<td>27 =</td>
<td>29</td>
<td>nr</td>
</tr>
<tr>
<td><em>Fagus</em></td>
<td>5 + 12 = 17</td>
<td>0.79</td>
<td>8.22</td>
<td>6.49</td>
<td>27 =</td>
<td>23</td>
<td>33 =</td>
</tr>
<tr>
<td><em>Fraxinus</em></td>
<td>27 + 4 = 31</td>
<td>1.45</td>
<td>7.61</td>
<td>11.03</td>
<td>13</td>
<td>12</td>
<td>nr</td>
</tr>
<tr>
<td><em>Ilex</em></td>
<td>16 + 7 = 23</td>
<td>1.08</td>
<td>8.22</td>
<td>8.88</td>
<td>19</td>
<td>19</td>
<td>33 =</td>
</tr>
<tr>
<td><em>Juniperus</em></td>
<td>22 + 7 = 29</td>
<td>1.36</td>
<td>7.11</td>
<td>9.67</td>
<td>14 =</td>
<td>15</td>
<td>nr</td>
</tr>
<tr>
<td><em>Malus</em></td>
<td>35 + 27 = 62</td>
<td>2.91</td>
<td>8.39</td>
<td>24.42</td>
<td>4</td>
<td>5</td>
<td>22 =</td>
</tr>
<tr>
<td><em>Magnolia</em></td>
<td>33 + 28 = 61</td>
<td>2.87</td>
<td>9.44</td>
<td>27.09</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><em>Picea</em></td>
<td>24 + 4 = 28</td>
<td>1.31</td>
<td>7.89</td>
<td>10.33</td>
<td>17</td>
<td>13</td>
<td>nr</td>
</tr>
<tr>
<td><em>Pinus</em></td>
<td>60 + 0 = 60</td>
<td>2.82</td>
<td>8.39</td>
<td>23.65</td>
<td>6</td>
<td>6</td>
<td>22 =</td>
</tr>
<tr>
<td><em>Populus</em></td>
<td>13 + 5 = 28</td>
<td>1.31</td>
<td>7.17</td>
<td>9.43</td>
<td>16 =</td>
<td>16</td>
<td>nr</td>
</tr>
<tr>
<td><em>Prunus</em></td>
<td>43 + 63 = 106</td>
<td>4.98</td>
<td>9.06</td>
<td>45.12</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><em>Pyrus</em></td>
<td>6 + 0 = 6</td>
<td>0.28</td>
<td>7.33</td>
<td>2.05</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
</tr>
<tr>
<td><em>Quercus</em></td>
<td>84 + 15 = 99</td>
<td>4.65</td>
<td>9.11</td>
<td>42.36</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><em>Tilia</em></td>
<td>16 + 1 = 17</td>
<td>0.79</td>
<td>8.33</td>
<td>6.58</td>
<td>27 =</td>
<td>22</td>
<td>24 =</td>
</tr>
</tbody>
</table>

This table has been modified to include the additional genera that were assigned key genus status at this workshop. (*Camellia, Cedrus, Crataegus, Cupressus, Fraxinus, Populus*). *nr* = not ranked.

*N as a % of the collection = \frac{\text{Number of sp and cvr of that genus at Eastwoodhill}}{\text{Total number of sp and cvr at Eastwoodhill}} \times 100*

Weighted score.

This score allows us to assess the collection as it is at present in terms of the contribution of a particular genus of plants to the collection. It helps us separate botanically very important genera of which there are many species and cultivars, from botanically important genera of which there are few examples. For example, compare *Acer* with *Trochodendron*. *Acer* scores highly botanically and there are many species and cultivars in the collection, therefore the overall contribution of the genus to the collection is high. On the other hand, *Trochodendron*, which also scores highly, has only one representative and so its overall contribution to the collection is less.
### Table 2.3 Genera at Eastwoodhill ranked according to Average score

<table>
<thead>
<tr>
<th>Genus</th>
<th>Average score</th>
<th>Rank</th>
<th>Genus</th>
<th>Average score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Magnolia</em></td>
<td>9.44</td>
<td>1</td>
<td><em>Cornus</em></td>
<td>8.22</td>
<td>33=</td>
</tr>
<tr>
<td>Tetracentron</td>
<td>9.20</td>
<td>2</td>
<td><em>Fagus</em></td>
<td>8.22</td>
<td>33=</td>
</tr>
<tr>
<td><em>Acer</em></td>
<td>9.12</td>
<td>3</td>
<td><em>Ilex</em></td>
<td>8.22</td>
<td>33=</td>
</tr>
<tr>
<td><em>Quercus</em></td>
<td>9.11</td>
<td>4</td>
<td><em>Fothergilla</em></td>
<td>8.21</td>
<td>36=</td>
</tr>
<tr>
<td><em>Prunus</em></td>
<td>9.06</td>
<td>5</td>
<td><em>Ehretia</em></td>
<td>8.20</td>
<td>37=</td>
</tr>
<tr>
<td><em>Talauma</em></td>
<td>9.00</td>
<td>6</td>
<td><em>Syrax</em></td>
<td>8.19</td>
<td>38=</td>
</tr>
<tr>
<td><em>Betula</em></td>
<td>8.89</td>
<td>7=</td>
<td><em>Calodendrum</em></td>
<td>8.18</td>
<td>39=</td>
</tr>
<tr>
<td><em>Stuartia</em></td>
<td>8.89</td>
<td>7=</td>
<td><em>Crataemus</em></td>
<td>8.17</td>
<td>40=</td>
</tr>
<tr>
<td><em>Emmenopterys</em></td>
<td>8.83</td>
<td>9</td>
<td><em>Crataegus</em></td>
<td>8.13</td>
<td>41=</td>
</tr>
<tr>
<td><em>Davidia</em></td>
<td>8.71</td>
<td>10=</td>
<td><em>Cercidiphyllum</em></td>
<td>8.12</td>
<td>42=</td>
</tr>
<tr>
<td><em>Schizophragma</em></td>
<td>8.71</td>
<td>10=</td>
<td><em>Neolitsea</em></td>
<td>8.12</td>
<td>42=</td>
</tr>
<tr>
<td><em>Lardizabala</em></td>
<td>8.67</td>
<td>12=</td>
<td><em>Parasyringa</em></td>
<td>8.12</td>
<td>42=</td>
</tr>
<tr>
<td><em>Magnietia</em></td>
<td>8.67</td>
<td>12=</td>
<td><em>Ginkgo</em></td>
<td>8.11</td>
<td>45=</td>
</tr>
<tr>
<td><em>Picrasma</em></td>
<td>8.67</td>
<td>12=</td>
<td><em>Metasequoia</em></td>
<td>8.11</td>
<td>45=</td>
</tr>
<tr>
<td><em>Aesculus</em></td>
<td>8.55</td>
<td>15</td>
<td><em>Itea</em></td>
<td>8.08</td>
<td>47=</td>
</tr>
<tr>
<td><em>Sorbus</em></td>
<td>8.50</td>
<td>16=</td>
<td><em>Pistacia</em></td>
<td>8.07</td>
<td>48=</td>
</tr>
<tr>
<td><em>Disanthus</em></td>
<td>8.50</td>
<td>16=</td>
<td><em>Cercis</em></td>
<td>8.06</td>
<td>49=</td>
</tr>
<tr>
<td><em>Platycarya</em></td>
<td>8.50</td>
<td>16=</td>
<td><em>Colquhounia</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Schima</em></td>
<td>8.50</td>
<td>16=</td>
<td><em>Eusuchaphus</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Glyptostrobus</em></td>
<td>8.44</td>
<td>20</td>
<td><em>Heteromorpha</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
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<td>21</td>
<td><em>Michelia</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Malus</em></td>
<td>8.39</td>
<td>22=</td>
<td><em>Osydendron</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Pirus</em></td>
<td>8.39</td>
<td>22=</td>
<td><em>Paulownia</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Frelynia</em></td>
<td>8.33</td>
<td>24=</td>
<td><em>Photinia</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Seiadopitys</em></td>
<td>8.33</td>
<td>24=</td>
<td><em>Sassafras</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Taiwania</em></td>
<td>8.33</td>
<td>24=</td>
<td><em>Staphylea</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Tilia</em></td>
<td>8.33</td>
<td>24=</td>
<td><em>Viburnum</em></td>
<td>8.00</td>
<td>50=</td>
</tr>
<tr>
<td><em>Nyssa</em></td>
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<td>24=</td>
<td></td>
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<tr>
<td><em>Keteleeria</em></td>
<td>8.27</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Abies</em></td>
<td>8.25</td>
<td>30=</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dipelta</td>
<td>8.25</td>
<td>30=</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mallotus</em></td>
<td>8.25</td>
<td>30=</td>
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</tr>
</tbody>
</table>

* Key genera

All other genera below this point
Table 2.4 Genera ranked according to the Number of species and cultivars at Eastwoodhill

<table>
<thead>
<tr>
<th>Genus</th>
<th>Number of species and cultivars at Eastwoodhill</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer *</td>
<td>134</td>
<td>1</td>
</tr>
<tr>
<td>Prunus *</td>
<td>106</td>
<td>2</td>
</tr>
<tr>
<td>Quercus *</td>
<td>99</td>
<td>3</td>
</tr>
<tr>
<td>Malus *</td>
<td>62</td>
<td>4</td>
</tr>
<tr>
<td>Magnolia *</td>
<td>61</td>
<td>5</td>
</tr>
<tr>
<td>Pirus *</td>
<td>60</td>
<td>6</td>
</tr>
<tr>
<td>Sorbus</td>
<td>49</td>
<td>7</td>
</tr>
<tr>
<td>Syringa</td>
<td>43</td>
<td>8</td>
</tr>
<tr>
<td>Betula *</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>Abies *</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>Crataegus</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>Chamaecyparis</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Fraxinus</td>
<td>31</td>
<td>13</td>
</tr>
<tr>
<td>Almus *</td>
<td>29</td>
<td>14=</td>
</tr>
<tr>
<td>Juniperus</td>
<td>29</td>
<td>14=</td>
</tr>
<tr>
<td>Populus</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>Picea *</td>
<td>28</td>
<td>16=</td>
</tr>
<tr>
<td>Clematis</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Ilex *</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Viburnum</td>
<td>22</td>
<td>20</td>
</tr>
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<td>Aesculus *</td>
<td>21</td>
<td>21</td>
</tr>
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<td>Buddleia</td>
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<td>22</td>
</tr>
<tr>
<td>Acacia</td>
<td>18</td>
<td>23=</td>
</tr>
<tr>
<td>Berberis</td>
<td>18</td>
<td>23=</td>
</tr>
<tr>
<td>Euonymus</td>
<td>18</td>
<td>23=</td>
</tr>
<tr>
<td>Ulmus</td>
<td>18</td>
<td>23=</td>
</tr>
<tr>
<td>Cupressus</td>
<td>17</td>
<td>27=</td>
</tr>
<tr>
<td>Fagus *</td>
<td>17</td>
<td>27=</td>
</tr>
<tr>
<td>Tilia *</td>
<td>17</td>
<td>27=</td>
</tr>
<tr>
<td>Cornus</td>
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<td>30</td>
</tr>
<tr>
<td>Cotoneaster</td>
<td>16</td>
<td>30=</td>
</tr>
<tr>
<td>Lonicera</td>
<td>15</td>
<td>32=</td>
</tr>
<tr>
<td>Philadelphus</td>
<td>15</td>
<td>32=</td>
</tr>
<tr>
<td>Salix</td>
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<td></td>
</tr>
<tr>
<td>Gleditsia</td>
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<td></td>
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<tr>
<td>Eucalyptus</td>
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<td></td>
</tr>
<tr>
<td>Thuja</td>
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<tr>
<td>Cryptomeria</td>
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<td>Nothofagus</td>
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<td></td>
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<tr>
<td>Platanus</td>
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<td></td>
</tr>
<tr>
<td>Carpinus</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Cedrus</td>
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<td></td>
</tr>
<tr>
<td>Photinia</td>
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</tr>
<tr>
<td>Spiraea</td>
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</table>

All others below 10. *Key genus
Table 2.5 Genera ranked according to the Weighted Score #

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<tr>
<th>Genus</th>
<th>Weighted score</th>
<th>Average score</th>
</tr>
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<tbody>
<tr>
<td>Acer *</td>
<td>57.89</td>
<td>9.19</td>
</tr>
<tr>
<td>Prunus *</td>
<td>45.12</td>
<td>9.06</td>
</tr>
<tr>
<td>Quercus *</td>
<td>42.36</td>
<td>9.11</td>
</tr>
<tr>
<td>Magnolia *</td>
<td>27.09</td>
<td>9.44</td>
</tr>
<tr>
<td>Malus *</td>
<td>24.42</td>
<td>8.39</td>
</tr>
<tr>
<td>Pimus *</td>
<td>23.65</td>
<td>8.39</td>
</tr>
<tr>
<td>Sorbus</td>
<td>19.58</td>
<td>8.50</td>
</tr>
<tr>
<td>Betula *</td>
<td>16.71</td>
<td>8.89</td>
</tr>
<tr>
<td>Syringa</td>
<td>14.35</td>
<td>7.12</td>
</tr>
<tr>
<td>Abies *</td>
<td>14.27</td>
<td>8.25</td>
</tr>
<tr>
<td>Crataegus</td>
<td>12.79</td>
<td>7.56</td>
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<tr>
<td>Fraxinus</td>
<td>11.03</td>
<td>7.61</td>
</tr>
<tr>
<td>Picea *</td>
<td>10.33</td>
<td>7.89</td>
</tr>
<tr>
<td>Chamaecyparis</td>
<td>10.33</td>
<td>6.28</td>
</tr>
<tr>
<td>Juniperus *</td>
<td>9.67</td>
<td>7.11</td>
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<tr>
<td>Populus</td>
<td>9.43</td>
<td>7.17</td>
</tr>
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<td>Abus *</td>
<td>8.98</td>
<td>6.60</td>
</tr>
<tr>
<td>Clematis</td>
<td>8.99</td>
<td>7.65</td>
</tr>
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<td>Ilex *</td>
<td>8.88</td>
<td>8.22</td>
</tr>
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<td>Aesculus *</td>
<td>8.38</td>
<td>8.55</td>
</tr>
<tr>
<td>Viburnum</td>
<td>8.27</td>
<td>8.00</td>
</tr>
<tr>
<td>Tilia *</td>
<td>6.58</td>
<td>8.33</td>
</tr>
<tr>
<td>Fagus *</td>
<td>6.49</td>
<td>8.22</td>
</tr>
<tr>
<td>Cormus</td>
<td>6.18</td>
<td>8.22</td>
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<tr>
<td>Ulmus</td>
<td>6.11</td>
<td>7.22</td>
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<td>Euonymus</td>
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<td>6.44</td>
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<td>Philadelphus</td>
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<td>6.89</td>
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<tr>
<td>Lonicera</td>
<td>4.80</td>
<td>6.81</td>
</tr>
</tbody>
</table>

Many entries lower than 4.8

Pyrus | 2.05 |

# Weighted score = Average score x percentage. Where percentage is ‘Number of species and cultivars of that genus at EWH as a percentage of the total number of species and cultivars at EWH’. Percentages can be found in Table 2.2.

This score allows us to assess the collection as it is at present in terms of the contribution of a particular genus of plants to the collection. It helps us separate botanically very important genera of which there are many species and cultivars, from botanically important genera of which there are few examples. For example compare Acer with Trochodendron. Acer scores highly botanically and there are many species and cultivars in the collection, therefore the overall contribution of the genus to the collection is high. On the other hand, Trochodendron which also scores highly, has only one representative and so its overall contribution to the collection is less.
## Table 2.6 Families ranked for combined weighted score

<table>
<thead>
<tr>
<th>Family</th>
<th>Weighted total (WT=\sum(\text{Av} \times \text{N}^*))</th>
<th>Mean of average score for genera in this family</th>
<th>Number of key genera in this family</th>
<th>Number of genera at Eastwoodhill that belong to this family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosaceae</td>
<td>2704.28</td>
<td>7.00</td>
<td>three</td>
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</tr>
<tr>
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<td>1231.46</td>
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<td>1</td>
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<td>Pinaceae</td>
<td>1195.05</td>
<td>7.75</td>
<td>three</td>
<td>8</td>
</tr>
<tr>
<td>Fagaceae</td>
<td>1148.06</td>
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<td>two</td>
<td>5</td>
</tr>
<tr>
<td>Oleaceae</td>
<td>780.91</td>
<td>6.60</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Cupressaceae</td>
<td>695.98</td>
<td>6.78</td>
<td>three</td>
<td>8</td>
</tr>
<tr>
<td>Betulaceae</td>
<td>688.91</td>
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<td>two</td>
<td>5</td>
</tr>
<tr>
<td>Magnoliaceae</td>
<td>662.15</td>
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<td>one</td>
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<tr>
<td>Fabaceae</td>
<td>537.61</td>
<td>6.69</td>
<td>-</td>
<td>32</td>
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<td>Caprifoliaceae</td>
<td>370.06</td>
<td>6.62</td>
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<td>8</td>
</tr>
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<td>Ranunculaceae</td>
<td>233.25</td>
<td>7.30</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Ulmaceae</td>
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<td>-</td>
<td>3</td>
</tr>
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<td>Aquifoliaceae</td>
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<td>1</td>
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<td>8.55</td>
<td>One</td>
<td>1</td>
</tr>
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<td>172.05</td>
<td>6.63</td>
<td>-</td>
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<td>Bignoniaceae</td>
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<td>Tiliaceae</td>
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<td>8.33</td>
<td>One</td>
<td>2</td>
</tr>
</tbody>
</table>

# Weighted total for any family = the sum of (average score x number of species and cultivars at Eastwoodhill) for each genus in the family.
All others weighted total below 100
### Table 2.7
Lists of additional species and cultivars present in other collections. Data from MacKay (1990a).

Genera listed: Abies, Acer, Aesculus, Alnus, Betula, Fagus, Juniperus, Malus, Prunus, Pyrus, Quercus, Tilia Magnolia and 9lex are listed separately in the detailed exercise on those two genera.

<table>
<thead>
<tr>
<th>Genera</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABIES</strong></td>
<td></td>
</tr>
<tr>
<td>Abies balsamea 'Nana'</td>
<td>Acer pseudoplatanus 'Victoria'</td>
</tr>
<tr>
<td>Abies borisii-regis</td>
<td>Acer rubrum 'Scanlon'</td>
</tr>
<tr>
<td>Abies x bornmuelleriana</td>
<td>Acer sieboldianum var. macrophyllum</td>
</tr>
<tr>
<td>Abies chensiensis var. ernestii</td>
<td>Acer tartaricum</td>
</tr>
<tr>
<td>Abies cilicica</td>
<td></td>
</tr>
<tr>
<td>Abies concolor 'Lowiana'</td>
<td>Aesculus indica 'Sydney Pearce'</td>
</tr>
<tr>
<td>Abies delavayi var. smithii female.</td>
<td>Aesculus indica 'Tibettii'</td>
</tr>
<tr>
<td>Abies ernestii var. salouenensis</td>
<td>Aesculus neglecta 'Erythroblastos'</td>
</tr>
<tr>
<td>Abies equi-trojana</td>
<td>Aesculus neglecta 'Harbisonii'</td>
</tr>
<tr>
<td>Abies fargesi</td>
<td></td>
</tr>
<tr>
<td>Abies lasiocarpa 'Arizonica'</td>
<td></td>
</tr>
<tr>
<td>Abies lasiocarpa 'Arizona Compacta'</td>
<td></td>
</tr>
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<td>Abies marocana</td>
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</tr>
<tr>
<td>Abies magnifica var. lasiocarpa</td>
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</tr>
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<td>Abies magnifica var. shastensis</td>
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</tr>
<tr>
<td>Abies nephrolepis</td>
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<tr>
<td>Abies nordmanniana male</td>
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</tr>
<tr>
<td>Abies pardei</td>
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<tr>
<td>Abies pindrow</td>
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<td>Abies religiosa var. emarginata</td>
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<tr>
<td>Abies sachalenensis</td>
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<td>Abies siberica</td>
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<td>Abies spectabilis</td>
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<td>Abies vejari</td>
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</tr>
<tr>
<td><strong>ACER</strong></td>
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</tr>
<tr>
<td>Acer circinatum x palmatum</td>
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</tr>
<tr>
<td>Acer franchetti</td>
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</tr>
<tr>
<td>Acer micranthum</td>
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</tr>
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<td>Acer nikoense x griseum</td>
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<td>Acer ningapense</td>
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<tr>
<td>Acer palmatum several varieties</td>
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<td>Acer platanoides 'Laciniatum'</td>
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<td>Acer platanoides 'Rubrum'</td>
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<td>Acer platanoides 'Waldseei'</td>
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<td>Acer pseudoplatanus 'Prince Handjerg'</td>
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<tr>
<td><strong>ALNUS</strong></td>
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<td>Alnus maximowiczii</td>
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<td>Alnus sinuata</td>
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<td>Alnus viridis</td>
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<td>Betula davurica</td>
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<td>Betula ermanni ganjuensis ?</td>
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<td>Betula 'Jerymys'</td>
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<tr>
<td>Betula macrophyllum</td>
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<td>Betula nana</td>
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<td>Betula nigra 'Gallen'</td>
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</tr>
<tr>
<td>Betula pendula 'Purpurea'</td>
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</tr>
<tr>
<td>Betula platyphylla 'Purpurea'</td>
<td></td>
</tr>
<tr>
<td><strong>FAGUS</strong></td>
<td></td>
</tr>
<tr>
<td>Fagus sylvatica 'Ansorgei'</td>
<td></td>
</tr>
<tr>
<td>'Aurea Pendula'</td>
<td></td>
</tr>
<tr>
<td>'Dawyck Gold'</td>
<td></td>
</tr>
<tr>
<td>'Dawyck Purple'</td>
<td></td>
</tr>
<tr>
<td>'Swat Magret'</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 6: Workshop Two report

JUNIPERUS
J. ashei
J. bermudiana
J. bermudiana bermudiana
J. chinensis
J. chinensis cultivars
J. chinensis 'Mountbatten'
J. chinensis 'Columnaris Glaucia'
J. communis cultivars
J. conferta
J. davurica 'Expansa'
J. deppeana pachyphloea
J. horizontalis cultivars
J. macrodona
J. media cultivars
J. osteosperma
J. oxycedrus var. macrocarpa
J. phoenica
J. pinchotii
J. procumbens
J. procumbens 'Nana'
J. recurva var. coxii dwarf
J. sabina cultivars
J. sabina 'Luchuensis'
J. sargentii 'Glaucia'
J. scopularum
J. scopularum 'Table Top Blue'
Juniperus 'Spartan'
J. squamata cultivars
J. taxifolia var. luchuensis
J. thurifera
J. utahensis
J. virginiana
J. virginiana 'Pathfinder'
J. virginiana 'Skyrocket'
J. virginiana 'Tollesons Weeping'

MALUS
Malus sargentii
Malus toeringoides
Malus transitoria
Malus 'Ballerina'
Malus 'Blue Mountain'
Malus 'Dorothea'
Malus 'Elizabeth Nairn'
Malus 'Gorgeous'

Malus 'Jack Humm'
Malus 'Profusion'
Malus 'Red Jade'
Malus 'Sovereign'
Malus 'Strathmore'
Malus 'St John'
Malus 'van Eseltine'

PICEA
Picea abies cultivars
Picea abies 'Aurea'
Picea abies 'Glaucia'
Picea abies 'Humilis'
Picea abies 'Little Gem'
Picea abies 'Ohlendorffi'

Picea asperata
Picea chihuahuana
Picea glauca cultivars
Picea engelmannii var. mexicana
Picea farreri
Picea glenhnii
Picea jezoensis
Picea jezoensis var. hondoensis
Picea koraiensis
Picea likiangensis
Picea likiangensis var. purpurea

Picea mariana
Picea meyeri
Picea montgena
Picea omorika 'Pendula'
Picea orientalis 'Nana'
Picea orientalis 'Skylands'
Picea polita

Picea pungens glauca 'Kosteriana'
Picea pungens 'Moerheimii'
Picea retroflexa

Picea schrenkiana var. tianshanica

PINUS
Pinus attenuata
Pinus ayachauite var. veitchii
Pinus balfouriana
Pinus bungeana
Pinus cembroides
Pinus cembroides var. edulis
Pinus cembroides var. monophylla
Appendix 6: Workshop Two report

Pinus cooperi var. ornelasi
Pinus densata
Pinus edulis fallax?
Pinus elliottii
Pinus engelmannii
Pinus flexilis
Pinus flexilis var. reflexa
Pinus gerardiana
Pinus griffithii
Pinus hartwigi
Pinus hwangshanensis
Pinus khasya
Pinus koraiensis ‘Glaucia’
Pinus leiophylla
Pinus leucodermis
Pinus maximartinezii
Pinus michoanana
Pinus nigra var. cebenensis
Pinus nigra var. pyramidalata
Pinus oaxacana
Pinus palustris
Pinus pentaphylla var. himekomatsu
Pinus parviflora var. pentaphylla
Pinus pinceana
Pinus pityusa
Pinus pseudostrobus
Pinus pseudostrobus var.
Pinus pseudostrobus var. apulcensis
Pinus pumila
Pinus radiata ‘Aurea’
Pinus radiata ‘Marshwood’
Pinus roxburgii
Pinus rudis
Pinus strobiiformis
Pinus sylvestriformis
Pinus sylvestris ‘Beautronensis’
Pinus sylvestris mongolica?
Pinus taeda
Pinus torreyana
Pinus washoensis

Prunus campanulata ‘Superba’
Prunus cerasus
Prunus cerasus ‘Rhexii’
Prunus ‘Claret Belle’
Prunus conradii ‘Malifolia’
Prunus cornuta
Prunus cyclaminea
Prunus ‘Daihoku’
Prunus ‘Ichiyoi’
Prunus glandulosa ‘Alba Plena’
Prunus kurilensis ‘Ruby’
Prunus laurocerasus ‘Otto Lutkyen’
Prunus ‘Orchid Pink’
Prunus ‘Pearly Shadows’
Prunus persica ‘Pendu’
‘Pink Ballerina’
‘Pink Cloud’
Prunus ‘Pink Clouds’
Prunus prostrata
Prunus pseudocerasus
Prunus pumila var. depressa
Prunus ‘Seaview Beauty’
Prunus serotina ‘Salicifolia’
Prunus serrulata ‘Amanogawa’
Prunus serrulata var. pubescens
Prunus serrulata var. spontanea
Prunus serrulata uniflora?
Prunus serrulata ‘Shirofugen’
Prunus speciosa
Prunus speciosa ‘Oshima’
Prunus subhirtella ‘Ascendens Rosea’
Prunus subhirtella ‘Falling Snow’
Prunus subhirtella ‘Halle Juliette’
Prunus subhirtella ‘Peggy Wilson’
Prunus subhirtella x yedoensis
Prunus triloba
Prunus virginiana
Prunus yedoensis ‘Chinese Brocade’

PYRUS

Pyrus amoena
Pyrus betulifolia
Pyrus callereana
Pyrus callereana faurei?
Pyrus pyrifolia
Pyrus salicifolia
Pyrus salicifolia 'Pendula'
Pyrus ussuriensis

QUERCUS
Quercus affinis
Quercus castaneaefolia
Quercus x heterophylla
Quercus incana
Quercus laurifolia
Quercus petraea 'Fastigiata'
Quercus prinus x canariensis
Quercus serrata 'Aurea'
Quercus virginiana
also see Hackfalls Arboretum catalogue

TILIA
Tilia japonica
Tilia megaphylla
Tilia orbicularis
Tilia platyphylla 'Rubra'
SECTION THREE: DEVELOPMENT OF THE GENUS MAGNOLIA AT EASTWOODHILL

Table 3.1: Information on the genera under consideration

<table>
<thead>
<tr>
<th>Genus</th>
<th>Number of species and cultivars at Eastwoodhill (N)</th>
<th>N as a percentage of total number of species and cultivars at Eastwoodhill (%)</th>
<th>Average score (Av.)</th>
<th>Weighted score W=%×Av.</th>
<th>Ranked for N</th>
<th>Ranked for W</th>
<th>Ranked for Av.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liriodendron</td>
<td>2+2 =4</td>
<td>0.18</td>
<td>7.65</td>
<td>1.37</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
</tr>
<tr>
<td>Magnolia</td>
<td>33+28=61</td>
<td>2.87</td>
<td>9.44</td>
<td>27.09</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Manglietia</td>
<td>1+0 =1</td>
<td>0.047</td>
<td>8.67</td>
<td>0.40</td>
<td>nr</td>
<td>nr</td>
<td>12=</td>
</tr>
<tr>
<td>Michelia</td>
<td>3+1 =4</td>
<td>0.18</td>
<td>8.00</td>
<td>1.44</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
</tr>
<tr>
<td>Schisandra</td>
<td>2+0 =2</td>
<td>0.09</td>
<td>7.36</td>
<td>0.66</td>
<td>nr</td>
<td>nr</td>
<td>nr</td>
</tr>
<tr>
<td>Talauma</td>
<td>1+0 =1</td>
<td>0.047</td>
<td>9.00</td>
<td>0.42</td>
<td>nr</td>
<td>nr</td>
<td>6</td>
</tr>
</tbody>
</table>

'Number at Eastwoodhill' is expressed as species + cultivars = total.

'Number as % of collection' expresses the number of species and cultivars of that genus as a percentage of the total number of species and cultivars in the collection.

nr = not ranked

Table 3.3: Portion of the genera represented at Eastwoodhill

<table>
<thead>
<tr>
<th>Genus</th>
<th>Number of species in genus</th>
<th>Reference</th>
<th>Number of species at Eastwoodhill</th>
<th>N as % of total number of species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liriodendron</td>
<td>2</td>
<td>H3, K</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Magnolia</td>
<td>80-85</td>
<td>K, H3</td>
<td>33</td>
<td>41</td>
</tr>
<tr>
<td>Manglietia</td>
<td>30</td>
<td>K</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Michelia</td>
<td>45-50</td>
<td>K, H3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Schisandra</td>
<td>25</td>
<td>K, H3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Talauma</td>
<td>40</td>
<td>H3</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Notes:
- The number at EWH include only the species, not the cultivars. The percentage is worked out on that basis.
- H3 is Hortus III, K is Krussman.
### Table 3.2.1 Magnoliaceae - List of plants, plants purchased, at Eastwoodhill

<table>
<thead>
<tr>
<th>Current</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liriodendron tulipifera</td>
<td></td>
</tr>
<tr>
<td>Liriodendron tulipifera 'Aureo Marginata'</td>
<td></td>
</tr>
<tr>
<td>Liriodendron tulipifera 'Fastigata'</td>
<td></td>
</tr>
<tr>
<td>Manglietia hookeri</td>
<td></td>
</tr>
<tr>
<td>Manglietia insignis</td>
<td></td>
</tr>
<tr>
<td>Michelia compressa</td>
<td></td>
</tr>
<tr>
<td>Michelia doltsopa</td>
<td></td>
</tr>
<tr>
<td>Micheliafigo</td>
<td></td>
</tr>
<tr>
<td>Schisandra coccinea</td>
<td></td>
</tr>
<tr>
<td>Talauma hodgsonii</td>
<td></td>
</tr>
</tbody>
</table>

Plants purchased by W D Cook - additional to the above

| Schisandra chinensis rubra | S1939, (Bean II lib) |
| Schisandra chinensis var. rubriflora | H&S1937,47, (Bean S lib) |

### Table 3.2.2 Magnolia - List of plants, plants purchased, at Eastwoodhill

<table>
<thead>
<tr>
<th>Current</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnolia acuminata ‘Golden Glow’</td>
<td></td>
</tr>
<tr>
<td>Magnolia campbellii</td>
<td></td>
</tr>
<tr>
<td>M. alba</td>
<td></td>
</tr>
<tr>
<td>‘Charles Raffill’</td>
<td></td>
</tr>
<tr>
<td>M. coco</td>
<td></td>
</tr>
<tr>
<td>M. cordata</td>
<td></td>
</tr>
<tr>
<td>M. cylindrica</td>
<td></td>
</tr>
<tr>
<td>M. dawsoniana</td>
<td></td>
</tr>
<tr>
<td>M. delavayi</td>
<td></td>
</tr>
<tr>
<td>M. demidata</td>
<td></td>
</tr>
<tr>
<td>M. demidata ‘Purple Eye’</td>
<td></td>
</tr>
<tr>
<td>M. ‘Douglas Cook’</td>
<td></td>
</tr>
<tr>
<td>M. ‘Early Rose’</td>
<td></td>
</tr>
<tr>
<td>M. fraseri</td>
<td></td>
</tr>
<tr>
<td>M. grandiflora</td>
<td></td>
</tr>
<tr>
<td>‘Angustifolia’</td>
<td></td>
</tr>
<tr>
<td>‘Exmouth’</td>
<td></td>
</tr>
<tr>
<td>‘Ferruginea’</td>
<td></td>
</tr>
<tr>
<td>‘Goliath’</td>
<td></td>
</tr>
<tr>
<td>M. heptapeta ‘Purple Eye’</td>
<td></td>
</tr>
<tr>
<td>M. ‘Heaven Scent’</td>
<td></td>
</tr>
<tr>
<td>M. hypoleuca</td>
<td></td>
</tr>
<tr>
<td>M. ‘Iolanthe’</td>
<td></td>
</tr>
<tr>
<td>M x ‘Kewensis’</td>
<td></td>
</tr>
<tr>
<td>M. kobus</td>
<td></td>
</tr>
<tr>
<td>M. kobus var. borealis</td>
<td></td>
</tr>
<tr>
<td>M. liliflora</td>
<td></td>
</tr>
<tr>
<td>M. x loebneri</td>
<td></td>
</tr>
<tr>
<td>M. macrophylla</td>
<td></td>
</tr>
<tr>
<td>M. nitida</td>
<td></td>
</tr>
<tr>
<td>M. officinalis</td>
<td></td>
</tr>
<tr>
<td>M. officinalis var. biloba</td>
<td></td>
</tr>
<tr>
<td>M. ‘Peppermint Stick’</td>
<td></td>
</tr>
<tr>
<td>M. ‘Pinkie’</td>
<td></td>
</tr>
<tr>
<td>M x proctoriana</td>
<td></td>
</tr>
<tr>
<td>M. ‘Royal Crown’</td>
<td></td>
</tr>
<tr>
<td>M. salicifolia</td>
<td></td>
</tr>
<tr>
<td>M. sargentiana var. robusta</td>
<td></td>
</tr>
<tr>
<td>M. ‘Serene’</td>
<td></td>
</tr>
<tr>
<td>M. sieboldii</td>
<td></td>
</tr>
<tr>
<td>M x soulangiana</td>
<td></td>
</tr>
<tr>
<td>M. soulangiana</td>
<td>Plants purchased by W D Cook - additional to the above</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>'Alba'</td>
<td>Magnolia ashei</td>
</tr>
<tr>
<td>'Alexandrina'</td>
<td>Magnolia campbellii ssp. mollicomata best pink</td>
</tr>
<tr>
<td>'Brozzoni'</td>
<td>Magnolia campbellii ssp. mollicomata 'Fastigista'</td>
</tr>
<tr>
<td>'Lennei'</td>
<td>Magnolia denudata 'Picture'</td>
</tr>
<tr>
<td>'Lennei Alba'</td>
<td>Magnolia denudata 'Picture'</td>
</tr>
<tr>
<td>'Norbetii'</td>
<td>Magnolia glauca</td>
</tr>
<tr>
<td>'Rustica Rubra'</td>
<td>Magnolia globosa (tsarongensis)</td>
</tr>
<tr>
<td>'Speciosa'</td>
<td>Magnolia globosa var. sinensis</td>
</tr>
<tr>
<td>'Triumphans' (denudata triumphans)</td>
<td>Magnolia grandiflora longifolia</td>
</tr>
<tr>
<td>'Verbanica'</td>
<td>Magnolia 'Highdownensis'</td>
</tr>
<tr>
<td>M. sprengeri var. diva</td>
<td>Magnolia liliflora 'Nigra'</td>
</tr>
<tr>
<td>M. stellata</td>
<td>Magnolia loebneri 'Merrill'</td>
</tr>
<tr>
<td>M x thompsoniana</td>
<td>Magnolia loebneri 'Nigra'</td>
</tr>
<tr>
<td>M. tripodata</td>
<td>Magnolia mollicomata see campbellii ssp. mollicomata</td>
</tr>
<tr>
<td>M x veitchii</td>
<td>Magnolia nicholsoniana</td>
</tr>
<tr>
<td>M. virginiana</td>
<td>Magnolia nitida</td>
</tr>
<tr>
<td>M. virginiana var. australis</td>
<td>Magnolia parviflora</td>
</tr>
<tr>
<td>M. wilsonii</td>
<td>Magnolia parviflora 'Flore Plena'</td>
</tr>
<tr>
<td></td>
<td>Magnolia pyramidata</td>
</tr>
<tr>
<td></td>
<td>Magnolia rostrata</td>
</tr>
<tr>
<td></td>
<td>Magnolia salicifolia var. concolor</td>
</tr>
<tr>
<td></td>
<td>Magnolia sargentiana</td>
</tr>
<tr>
<td></td>
<td>Magnolia sinensis</td>
</tr>
<tr>
<td>Magnolia soulangiana</td>
<td>Magnolia soulangiana</td>
</tr>
<tr>
<td>'Alba'</td>
<td>'Alba'</td>
</tr>
<tr>
<td>'Alba Superba'</td>
<td>'Alba Superba'</td>
</tr>
<tr>
<td>'Amabilis'</td>
<td>'Amabilis'</td>
</tr>
<tr>
<td>'Norbetii'</td>
<td>'Norbetii'</td>
</tr>
<tr>
<td>'Speciosa'</td>
<td>'Speciosa'</td>
</tr>
<tr>
<td>Magnolia sprengeri</td>
<td>Magnolia sprengeri var. elongata</td>
</tr>
<tr>
<td>Magnolia stellata</td>
<td>Magnolia stellata 'Waterlily'</td>
</tr>
<tr>
<td>Magnolia virginiana</td>
<td>Magnolia virginiana</td>
</tr>
<tr>
<td>Magnolia watsonii</td>
<td>Magnolia watsonii</td>
</tr>
<tr>
<td>Magnolia wilsonii</td>
<td>Magnolia wilsonii 'Lord Wakehurst'</td>
</tr>
</tbody>
</table>
Table 3.4  Extensions of the genera

MAGNOLIACEAE: 12 genera.
Aromadendron: 3 species from Malaysia and China. Not in cultivation according to Krussman.
Alcimandra: 1 species from the Himalaya. A. cathcartii
Liriodendron: 2 species, 1 already present. The other is L. chinense.
Michelia: champaca Himalaya
formosana Taiwan
nilagirica India
sinensis China
velutina Himalaya
Schisandra: chinensis Asia
coccinea USA
henryi China
propingua China
repanda Japan, Korea
sphaerandra China
sphenanthera China
Talauma: 1 species, already present

Table 3.5  Suggested acquisitions for Eastwoodhill

Group members suggested the following plants:
Illicium sp. Magnolia parviflora
Kadsura japonica Magnolia ‘Purple Globe’
Liriodendron chinense Magnolia rostrata
Magnolia, tropical species Magnolia scheideana
Magnolia ashei Magnolia sinensis
Magnolia brooklyensis ‘Evanorii’ Magnolia ‘Sundance’
Magnolia ‘Caerhays Belle’ Magnolia virginiana ‘Autumn Delight’
Magnolia campbellii cultivars Magnolia ‘Vulcan’
M. campbellii ssp. mollicomata ‘Lanarth’ Magnolia ‘Wadas Memory’
M. campbellii ssp. mollicomata ‘Kew Surprise’ Magnolia watsonii
M. campbellii ssp. mollicomata ‘Maharajah’ Magnolia ‘Yellowbird’
Magnolia dealbata Michelia yunnanense
Magnolia denudata ‘Purple Eye’ Michelia, carefully sited
Magnolia fraseri Talauma mexicana
Magnolia globosa
Magnolia grandiflora ‘Little Gem’
Magnolia grandiflora ‘Samuel Somers’
Magnolia grandiflora x virginiana ‘Freeman’
Magnolia ‘Leonard Messel’
Magnolia ‘Mark Jury’
Magnolia ‘Michael Rosse’
Appendix 6: Workshop Two report

{Tables 3.6-3.8 no longer exist. The exercise, as originally planned, also included Ilex, but that part of the exercise that was never conducted due to shortage of time. The tables have been removed from this record.}

Table 3.9  Magnolia ranking for botanical score

<table>
<thead>
<tr>
<th>Species</th>
<th>Botanical score</th>
<th>Rank</th>
<th>Number of individuals of that species or cultivar at Eastwoodhill</th>
<th>Aesthetic score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnolia coco</td>
<td>9.2</td>
<td>1</td>
<td>1</td>
<td>5.2</td>
</tr>
<tr>
<td>Magnolia nitida</td>
<td>9.0</td>
<td>2</td>
<td>0</td>
<td>8.6</td>
</tr>
<tr>
<td>Manglietia insignis</td>
<td>9.0</td>
<td>2=</td>
<td>0</td>
<td>8.4</td>
</tr>
<tr>
<td>Manglietia hookeri</td>
<td>8.8</td>
<td>4=</td>
<td>1</td>
<td>8.4</td>
</tr>
<tr>
<td>Talauma hedgesoni</td>
<td>8.8</td>
<td>4=</td>
<td>1</td>
<td>8.4</td>
</tr>
<tr>
<td>Magnolia sprengeri var. diva</td>
<td>8.8</td>
<td>4=</td>
<td>1</td>
<td>9.8</td>
</tr>
<tr>
<td>Mag. sargentiana var. robusta</td>
<td>8.6</td>
<td>7</td>
<td>1</td>
<td>9.8</td>
</tr>
<tr>
<td>Michelia compressa</td>
<td>8.6</td>
<td>7=</td>
<td>1</td>
<td>6.0</td>
</tr>
<tr>
<td>Schisandra coccinea</td>
<td>8.6</td>
<td>7</td>
<td>1</td>
<td>6.8</td>
</tr>
<tr>
<td>Magnolia dawsoniana</td>
<td>8.4</td>
<td>10=</td>
<td>1</td>
<td>9.0</td>
</tr>
<tr>
<td>Magnolia macrophylla</td>
<td>8.4</td>
<td>10=</td>
<td>3</td>
<td>8.4</td>
</tr>
<tr>
<td>Magnolia officinalis</td>
<td>8.4</td>
<td>10=</td>
<td>0</td>
<td>7.2</td>
</tr>
<tr>
<td>Michelia doltsopa</td>
<td>8.2</td>
<td>13=</td>
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<th>Botanical score</th>
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Appendix 6: Workshop Two report

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<th>Botanical score</th>
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### Table 3.11  
**Ratings for species at Eastwoodhill - Magnolia**

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<th>Rank for Aesthetic score</th>
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<td>Yes</td>
</tr>
</tbody>
</table>

...continued
<table>
<thead>
<tr>
<th>Species</th>
<th>Botanical score</th>
<th>Aesthetic score</th>
<th>Rank for Botanical score</th>
<th>Rank for Aesthetic score</th>
<th>Present in other collections</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Alexandrina'</td>
<td>5.0</td>
<td>7.4</td>
<td>nr</td>
<td>36=</td>
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<tr>
<td>'Brozzoni'</td>
<td>4.8</td>
<td>7.0</td>
<td>nr</td>
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</tr>
<tr>
<td>'Lennei'</td>
<td>5.8</td>
<td>7.2</td>
<td>nr</td>
<td>42=</td>
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<tr>
<td>'Lennei Alba'</td>
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<td>nr</td>
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<tr>
<td>'Norbetii'</td>
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<td>nr</td>
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<td>'Rustica Rubra'</td>
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<td>'Speciosa'</td>
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<td>'Triumphans'</td>
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<tr>
<td>'Verbanica'</td>
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<tr>
<td>Magnolia sprengeri var. diva</td>
<td>8.8</td>
<td>9.8</td>
<td>4=</td>
<td>1=</td>
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<tr>
<td>Magnolia stellata</td>
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<td>8.8</td>
<td>nr</td>
<td>8</td>
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<tr>
<td>'Rosea'</td>
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<td>nr</td>
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<tr>
<td>'King Rose'</td>
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<td>nr</td>
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<tr>
<td>Magnolia x thompsoniana</td>
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<tr>
<td>Magnolia tripetala</td>
<td>7.0</td>
<td>6.0</td>
<td>26=</td>
<td>nr</td>
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<tr>
<td>Magnolia x veitchii</td>
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<td>7.8</td>
<td>nr</td>
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<tr>
<td>‘Isca’</td>
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<tr>
<td>‘Peter Veitch’</td>
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<td>6.4</td>
<td>nr</td>
<td>nr</td>
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<tr>
<td>Magnolia wilsonii</td>
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<td>8.4</td>
<td>19=</td>
<td>12=</td>
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<tr>
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<td>8.0</td>
<td>21=</td>
<td>20=</td>
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<td>no data</td>
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<tr>
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<td>7.8</td>
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<td>8.2</td>
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<td>Manglietia insignis</td>
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<td>8.4</td>
<td>2=</td>
<td>12=</td>
<td>no data</td>
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<tr>
<td>Michelia compressa</td>
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<td>6.0</td>
<td>7=</td>
<td>nr</td>
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<tr>
<td>Michelia dolcsoa</td>
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<td>9.2</td>
<td>13=</td>
<td>6</td>
<td>no data</td>
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<tr>
<td>Michelia figo</td>
<td>7.2</td>
<td>6.2</td>
<td>22=</td>
<td>nr</td>
<td>no data</td>
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<tr>
<td>Schisandra coccinea</td>
<td>8.6</td>
<td>6.8</td>
<td>7=</td>
<td>nr</td>
<td>no data</td>
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<tr>
<td>Talauma Hodgsonii</td>
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<td>8.4</td>
<td>4=</td>
<td>12=</td>
<td>no data</td>
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### SECTION FOUR: MANAGEMENT PLAN FOR PEAR PARK

**Table 4.1: Arboretum key genera in Pear Park**

<table>
<thead>
<tr>
<th>Key genus</th>
<th>Present in Pear Park</th>
<th>Number of species and cultivars in Pear Park</th>
<th>No. of species and cultivars in Pear Park as a percentage of the number of species and cultivars in the current collection</th>
<th>Are the plants sole examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies</td>
<td>yes</td>
<td>1</td>
<td>2.7</td>
<td>no</td>
</tr>
<tr>
<td>Acer</td>
<td>yes</td>
<td>19</td>
<td>14</td>
<td>yes</td>
</tr>
<tr>
<td>Aesculus</td>
<td>yes</td>
<td>6</td>
<td>28</td>
<td>yes</td>
</tr>
<tr>
<td>Alnus</td>
<td>yes</td>
<td>2</td>
<td>6.89</td>
<td>no</td>
</tr>
<tr>
<td>Betula</td>
<td>yes</td>
<td>3</td>
<td>7.5</td>
<td>no</td>
</tr>
<tr>
<td>Fagus</td>
<td>yes</td>
<td>4</td>
<td>23</td>
<td>no</td>
</tr>
<tr>
<td>Ilex</td>
<td>no</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Juniperus</td>
<td>yes</td>
<td>12</td>
<td>41</td>
<td>yes</td>
</tr>
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<td>Malus</td>
<td>yes</td>
<td>17</td>
<td>2.7</td>
<td>yes</td>
</tr>
<tr>
<td>Magnolia</td>
<td>yes</td>
<td>1</td>
<td>1.6</td>
<td>no</td>
</tr>
<tr>
<td>Picea</td>
<td>no</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Pinus</td>
<td>no</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Prunus</td>
<td>yes</td>
<td>6</td>
<td>5.6</td>
<td>no</td>
</tr>
<tr>
<td>Pyrus</td>
<td>yes</td>
<td>3</td>
<td>50</td>
<td>no?</td>
</tr>
<tr>
<td>Quercus</td>
<td>yes</td>
<td>24</td>
<td>24</td>
<td>yes</td>
</tr>
<tr>
<td>Tilia</td>
<td>yes</td>
<td>8</td>
<td>47</td>
<td>yes</td>
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</table>

**Table 4.2: Park key genera**

<table>
<thead>
<tr>
<th>Genus</th>
<th>Average score</th>
<th>Number of species and cultivars in Pear Park</th>
<th>Number of species and cultivars in Pear Park as a percentage of number of species and cultivars in the current collection</th>
<th>Are the plants sole examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celtis</td>
<td>6.83</td>
<td>3</td>
<td>42</td>
<td>yes</td>
</tr>
<tr>
<td>Crataemespilus</td>
<td>8.17</td>
<td>2</td>
<td>100</td>
<td>yes</td>
</tr>
<tr>
<td>Crataegomespilus</td>
<td>8.13</td>
<td>1</td>
<td>100</td>
<td>yes</td>
</tr>
<tr>
<td>Crataegus</td>
<td>7.56</td>
<td>13</td>
<td>36</td>
<td>yes</td>
</tr>
<tr>
<td>Emmenopterys</td>
<td>8.83</td>
<td>1</td>
<td>100</td>
<td>yes</td>
</tr>
<tr>
<td>Fraxinus</td>
<td>7.61</td>
<td>15</td>
<td>48</td>
<td>yes</td>
</tr>
<tr>
<td>Gleditsia</td>
<td>7.22</td>
<td>3</td>
<td>23</td>
<td>no</td>
</tr>
<tr>
<td>Platanus</td>
<td>7.22</td>
<td>4</td>
<td>36</td>
<td>yes</td>
</tr>
<tr>
<td>Platycarya</td>
<td>8.50</td>
<td>1</td>
<td>100</td>
<td>yes</td>
</tr>
<tr>
<td>Stuaria</td>
<td>8.89</td>
<td>1</td>
<td>14</td>
<td>no</td>
</tr>
<tr>
<td>Buddleia</td>
<td>6.35</td>
<td>3</td>
<td>15</td>
<td>yes</td>
</tr>
<tr>
<td>Viburnum</td>
<td>8.00</td>
<td>1</td>
<td>4.5</td>
<td>yes</td>
</tr>
</tbody>
</table>

Park key genera as proposed by the author.

Sole examples - if answered yes, then there are members of that genus in Pear Park that are the only representative of the species at EWH.
## Appendix 6: Workshop Two report

### Table 4.3 Plants previously present in Pear Park

Plants listed for Pear Park by W D Cook - but which are no longer present.

<table>
<thead>
<tr>
<th>Bottom corner by Aesculus pyramidalis</th>
<th>Philadelphus ‘Belle Etoile’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbus domestica</td>
<td>Philadelphus ‘Etoile Rose’</td>
</tr>
<tr>
<td>Sorbus intermedia</td>
<td>Aesculus glaucescens</td>
</tr>
<tr>
<td>Sorbus folsneri ‘Pendula’</td>
<td>Cotoneaster moupinensis</td>
</tr>
<tr>
<td>Sorbus gracilis</td>
<td></td>
</tr>
<tr>
<td>Sorbus hupehensis ‘Aperta’</td>
<td></td>
</tr>
<tr>
<td>Sorbus megalocarpa</td>
<td></td>
</tr>
<tr>
<td>Sorbus mongeotii</td>
<td></td>
</tr>
<tr>
<td>Sorbus rehderiana</td>
<td></td>
</tr>
<tr>
<td>Sorbaronia fallax?</td>
<td></td>
</tr>
<tr>
<td>Sorbus arranensis</td>
<td></td>
</tr>
<tr>
<td>Sorbus aucuparia ‘Aspleniifolia’</td>
<td></td>
</tr>
<tr>
<td>Quercus pedunculata ‘Purpurescens’</td>
<td></td>
</tr>
<tr>
<td>Malus glabrata</td>
<td></td>
</tr>
<tr>
<td>Malus ‘John Downie’</td>
<td></td>
</tr>
<tr>
<td>Lime corner going up towards the ashes</td>
<td></td>
</tr>
<tr>
<td>Tilia tuan</td>
<td></td>
</tr>
<tr>
<td>Castanea macrocarpa</td>
<td></td>
</tr>
<tr>
<td>Castanea mollisima</td>
<td></td>
</tr>
<tr>
<td>Castanea alnifolia</td>
<td></td>
</tr>
<tr>
<td>Castanea sativa ‘Heterophylla’</td>
<td></td>
</tr>
<tr>
<td>Castanea crenata</td>
<td></td>
</tr>
<tr>
<td>Castanea dentata</td>
<td></td>
</tr>
<tr>
<td>Quercus sessiflora ‘Rubicunda’</td>
<td></td>
</tr>
<tr>
<td>Quercus pontica</td>
<td></td>
</tr>
<tr>
<td>Hawthorns to ashes and further</td>
<td></td>
</tr>
<tr>
<td>Crataegus holmesiana</td>
<td></td>
</tr>
<tr>
<td>Crataegus macranthera</td>
<td></td>
</tr>
<tr>
<td>Fraxinus griffithi</td>
<td></td>
</tr>
<tr>
<td>Quercus myrsinifolia</td>
<td></td>
</tr>
<tr>
<td>Tilia molkei</td>
<td></td>
</tr>
<tr>
<td>Zanthoxylum and up</td>
<td></td>
</tr>
<tr>
<td>Ostrya japonica</td>
<td></td>
</tr>
<tr>
<td>Fraxinus paixiana</td>
<td></td>
</tr>
<tr>
<td>Zelkova davidiana</td>
<td></td>
</tr>
<tr>
<td>Near two catalpas</td>
<td></td>
</tr>
<tr>
<td>Aesculus neglecta</td>
<td></td>
</tr>
<tr>
<td>Aesculus mutabilis ‘Harbisoni’</td>
<td></td>
</tr>
<tr>
<td>Aesculus georgiana</td>
<td></td>
</tr>
<tr>
<td>Philadelphus ‘Favourite’</td>
<td></td>
</tr>
<tr>
<td>Bottom comer by Aesculus pyramidalis</td>
<td></td>
</tr>
<tr>
<td>Sorbus domestica</td>
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</tr>
<tr>
<td>Sorbus intermedia</td>
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<tr>
<td>Sorbus folsneri ‘Pendula’</td>
<td></td>
</tr>
<tr>
<td>Sorbus gracilis</td>
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<tr>
<td>Sorbus hupehensis ‘Aperta’</td>
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<td>Sorbus megalocarpa</td>
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<td>Sorbus mongeotii</td>
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<tr>
<td>Sorbus rehderiana</td>
<td></td>
</tr>
<tr>
<td>Sorbaronia fallax?</td>
<td></td>
</tr>
<tr>
<td>Sorbus arranensis</td>
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<tr>
<td>Sorbus aucuparia ‘Aspleniifolia’</td>
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<tr>
<td>Quercus pedunculata ‘Purpurescens’</td>
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<td>Malus glabrata</td>
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<tr>
<td>Malus ‘John Downie’</td>
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<td>Lime corner going up towards the ashes</td>
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<tr>
<td>Tilia tuan</td>
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<td>Castanea macrocarpa</td>
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<td>Castanea mollisima</td>
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<tr>
<td>Castanea sativa ‘Heterophylla’</td>
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<tr>
<td>Castanea crenata</td>
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<td>Castanea dentata</td>
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<tr>
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<td>Quercus pontica</td>
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<tr>
<td>Hawthorns to ashes and further</td>
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</tr>
<tr>
<td>Crataegus holmesiana</td>
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<tr>
<td>Crataegus macranthera</td>
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<td>Fraxinus griffithi</td>
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<td>Quercus myrsinifolia</td>
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<td>Tilia molkei</td>
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<tr>
<td>Zanthoxylum and up</td>
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<td>Ostrya japonica</td>
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<tr>
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<td></td>
</tr>
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<tr>
<td>Near two catalpas</td>
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<tr>
<td>Aesculus neglecta</td>
<td></td>
</tr>
<tr>
<td>Aesculus mutabilis ‘Harbisoni’</td>
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</tr>
<tr>
<td>Aesculus georgiana</td>
<td></td>
</tr>
<tr>
<td>Philadelphus ‘Favourite’</td>
<td></td>
</tr>
</tbody>
</table>
Hamamelis mollis
Malus purpurea
Hymenosporum sp.

Notes in Bean
Acer trautvetteri
Anthyllis barba-jovis
Buddleia davidii rosea-floribunda
Carpinus carolinianus
Castanea sativa 'Maron de Lyon'
Crataegus crus-galli
Euonymus suave
Jasminium nudiflorum
Lonicerax syringanths
Prunus conradianae 'Flore Plena'
Quercus ilicifolia
Quercus macrocarpa
Quercus pontica
Ulmus carpinifolia 'Pendula'

According to notebook 20
Abies nordmannia
Acer rubrum sanguinuem (the ride)
Acer saccharum (the ride)
Amlanchier canadensis
Anagris foetida (under buddleia below bills)
Anthyllis barba-jovis (below bills)
Callicarpa purpurea (below bills)
Camellia 'Bonomania', 'Candidissima' (bills)
Crataegus 'Prince Frederick William' (at bills on bank)
Crataegus 'William', 'Wabusuki'
Euonymus ivensae
Euonymus macrannhdera
Euonymus punctata
Euonymus alatus (bills)
Euonymus atropurpureus (below bills)
Euonymus intermedius (below bills)
Euonymus suave (below bills)
Euonymus maacki (the ride, bills)
Frasinus nigra (down drive, sheep yards)
Frasinus oregona (Douglas Park, Pear Park)
Frasinus heterophylla
Frasinus griffithi
Frasinus americana (sheep yards, drive edge)
Frasinus angustifolia
Frasinus angustifolia lentsificolia
Frasinus angustifolia oxycarpa
Frasinus americana acuminata?
Gymnocladus dioicus (the ride)
Laburnum alpinum (bills path)
Appendix 6: Workshop Two report

SECTION FIVE: DEVELOPMENT OF THE COLLECTION - BUSH AREA

Table 5.1  
Species already in the bush area

Planted
Agathis australis
Coprosma australis
Cordyline australis
Dacrydium cupressinum
Griselinia littoralis
Knightia excelsa
Pittosporum crassifolium
Pittosporum eugenioides
Pittosporum sp
Podocarpus totara
Phyllocladus sp
Pseudopanax crassifolium
Nothofagus fusca
Nothofagus solandri
Schaefflera sp
Sophora sp

Self-seeded species
Betula pendula
Celastrus sp
Coprosma sp
Cotoneaster sp
Cornus capitata
Leptospermum scoparium
Prunus campanulata
Prunus cerasifera 'Atropurpurea'
Pinus radiata
Salix sp.

Trees planted on the margins
Cedrus atlantica f. glauca
Fagus sylvatica
Quercus palustris
Fagus sylvatica 'Purpurea'
Taxodium distichum
| **Abutilon striatum 'Thompsoni'** | Quillaja saponaria |
| **Ailanthus jorulensis** | Rhamnus spinosus |
| **Araucaria araucana** | Schinus molle |
| **Aristotelia chilensis** | Schinus terebinthifolius |
| **Australcedrus chilensis** | Solanum rantonetti |
| **Azara integryolia** | Tibouchina semidecandra |
| **Azara lanceolata** | **Azara microphylla** |
| **Azara petiolaris** | **Azara serrata** |
| **Azara triangulata** | **Buddleia globosa** |
| **Berberis actinacantha** | **Calliandra tweedii** |
| **Berberis darwinii** | **Cantua buxifolia** |
| **Berberis linearifolia** | **Cantua bicolor** |
| **Bomarea caldesiana** | **Cissus striata** |
| **Bomarea multiflora** | **Crinodendron hookerianum** |
| **Buddleia globosa** | **Cupressus guadalupensis** |
| **Calliandra tweedii** | **Desfontanea spinosa** |
| **Cantua buxifolia** | **Doxantha unguis-cati** |
| **Cantua bicolor** | **Duranta repens** |
| **Cissus striata** | **Eccremocarpus scaber + 1** |
| **Crinodendron hookerianum** | **Embothrium coccineum** |
| **Cupressus guadalupensis** | **Escallonia laevis** |
| **Desfontanea spinosa** | **Eucryphia cordifolia** |
| **Doxantha unguis-cati** | **Feijoa sp** |
| **Duranta repens** | **Lantana camara** |
| **Eccremocarpus scaber + 1** | **Larizaba bicornata** |
| **Embothrium coccineum** | **Lathyrus pubescens** |
| **Erythrina crista-galli** | **Lomatia ferruginea** |
| **Escallonia bifida** | **Matisia boaria** |
| **Escallonia laevis** | **Myrtus lechlerana** |
| **Eucryphia cordifolia** | **Myrtus luma** |
| **Feijoa sp** | **Myrtus ugni** |
| **Lantana camara** | **Nothofagus alpina** |
| **Larizaba bicornata** | **Nothofagus antartica** |
| **Lathyrus pubescens** | **Nothofagus dombeyi** |
| **Lomatia ferruginea** | **Nothofagus obliqua** |
| **Matisia boaria** | **Passiflora antioquiensis** |
| **Myrtus lechlerana** | **Podocarpus andinus** |
| **Myrtus ugni** | **Podocarpus salignus** |
| **Nothofagus alpina** | **Platania mexicana** |
| **Nothofagus antartica** | **Prunus salicifolia** |
| **Nothofagus dombeyi** | **Quercus crassifolia** |
| **Nothofagus obliqua** | **Quercus mexicana** |
| **Passiflora antioquiensis** | **Quercus reticulata** |
| **Podocarpus andinus** | **Salvia mexicana** |
| **Podocarpus salignus** | **MEXICO** |
| **Abies concolor + 3** | **Abies religiosa** |
| **Acer negundo var. mexicana** | **Beloperone guttata** |
| **Beschorneria yuccoides** | **Calliandra portoricensis** |
| **Calliandra portoricensis** | **Cestrum elegans** |
| **Cestrum aurantiacum** | **Choisyta ternata** |
| **Crataegus mexicana** | **Cupressus benthami + 1** |
| **Cupressus lusitanica** | **Cyrrha racemiflora** |
| **Eupatorium ligustrifolia** | **Genista lutea** |
| **Garrya laurifoliassp. macrophylla** | **Juniperus flaccida** |
| **Juniperus flaccida** | **Phaedranthus sp** |
| **Philadelpus mexicana** | **Picea mexicana** |
| **Picea mexicana** | **Pinus ayacahuite** |
| **Pinus coultieri** | **Pinus culminicola** |
| **Pinus durangensis** | **Pinus greggi** |
| **Pinus jeffreyi** | **Pinus jeffreyi** |
| **Pinus lambertiana** | **Pinus lambertiana** |
| **Pinus lawsonii** | **Pinus lumholtzi** |
| **Pinus montezume** | **Pinus montezume** |
| **Pinus nelsoni** | **Pinus nelsoni** |
| **Pinus occar pa** | **Pinus patula** |
| **Salvia mexicana** | **Solanum rantonetti** |
### Table 5.3  
New Zealand flora already at Eastwoodhill

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### Table 5.4  
Flora from South American - potential subjects for the area

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**Conifers**

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<td>Araucariaceae</td>
<td>Chile, Arg</td>
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<td>Chile</td>
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<td>Fitzroya cupressoides</td>
<td>Tree</td>
<td>Cupressaceae</td>
<td>Chile</td>
</tr>
<tr>
<td>Pilgerodendron uviferum</td>
<td>Shrub</td>
<td>Cupressaceae</td>
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<td>Chile</td>
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<td>Podocarpus cardenasii</td>
<td>Tree</td>
<td>Podocarpaceae</td>
<td>Bolivia</td>
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<td>Podocarpus utilior</td>
<td>Tree</td>
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<td>Peru, Bolivia</td>
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<td>Saxegotheca conspicua</td>
<td>Shrub</td>
<td>Podocarpaceae</td>
<td>Chile</td>
</tr>
</tbody>
</table>

(Information from Krussman, 1984,1985)
APPENDIX: Rating scales used in field exercises

HEALTH
1  Unlikely to survive
2  Alive, poorly furnished, signs of stress, dying back
3  Fully furnished, signs of stress, not growing
4  Well furnished, healthy, no stress signs, growing slowly.
5  Well furnished, healthy, no stress signs, growing vigorously,

AS AN EXAMPLE OF THE SPECIES
1  Not representative of the species, all factors unsatisfactory
2  Poor example of the species, three factors unsatisfactory
3  Identifiable example of the species, two factors unsatisfactory.
4  Good example of the species, only one factor unsatisfactory
5  Excellent, all factors good.

Factors
- health
- association with other trees
- form (shape)
- form (structure)

GROWTH PHASE
1  Senescent - not growing, declining canopy.
2  Mature - adult features, growth regenerative
3  Immature vigorous - adult features, growth vigorous
4  Juvenile vigorous - established, in rapid growth, juvenile features
5  Establishment - Plant still establishing, not yet growing
APPENDIX: List of Participants in the second workshop

Mr Bob Berry, Plantsman and Farmer, Hackfalls Arboretum, Gisborne.
Mr Spencer Bush, Arboretum Supervisor, Gisborne.
Mr Peter Cave, Nurseryman, Cambridge.
Professor David Chalmers, Professor of Horticultural Science, Massey University.
Mr Garry Clapperton, Curator, Eastwoodhill.
Mr Gordon Collier, Consultant and Plantsman, Taihape. (Surveys only)
Mr Rodney Faulkner, Farmer and Arboretum Trust Board, Gisborne.
Mr Ron Gordon, Farmer and Plantsman, Taihape.
Mr Michael Hudson, Plantsman and Farmer, Hawkes Bay.
Mr Allan Jellyman, Community Services Director, New Plymouth. (Surveys only)
Mrs Marion MacKay, Department of Horticultural Science, Massey University.
Mr Ian McKeen, Farmer and Plantsman, Rangiwahea.
Mr Paul Pollock, Nurseryman and Arboretum Trust Board, Gisborne.
Dr Bill Sykes, Botanist, D.S.I.R. Land Resources Division, Christchurch.
Appendix 7

Report of the third workshop

REPORT OF THE THIRD EASTWOODHILL ARBORETUM WORKSHOP:

ASPECTS OF COLLECTION DEVELOPMENT AND EXPANSION

Held at Eastwoodhill on 16-17 March 1991

Marion MacKay
Massey University, Palmerston North

Eastwoodhill Publication No. 6
Published 1991
Appendix 7: Workshop Three report

Contents

SECTION ONE: Issues.
SECTION TWO: Development of the genus *Acer* at Eastwoodhill.
SECTION THREE: Development of the new area.
SECTION FOUR: Management plan for Orchard Hill.
SECTION FIVE: Management plan for Basinhead.
SECTION SIX: Conclusions.

APPENDIX ONE: Programme.
APPENDIX TWO: Tables referred to in the text.
APPENDIX THREE: Rating scales used for field exercises.
APPENDIX FOUR: List of participants.

Footnote: The workshop report in this thesis has been slightly modified from the original. Format has been modified slightly for this thesis. Content has been modified with respect to the plans of Orchard Hill and Basinhead, which have been removed in this version. The reader is referred to the same plans in thesis Appendix Two. Content has also been modified with the addition of the programme as an extra appendix.
Resume

In March 1991 the Eastwoodhill Plant Management Committee met for the third time to consider aspects of management and development of the collection of plants at the Eastwoodhill Arboretum. These deliberations are subsequent to the second workshop.

The genus *Acer* was given detailed consideration at this workshop. Preliminary surveys established the most important members of the genus at Eastwoodhill, field exercise and subsequent discussion resulted in the formulation of a strategy for the development of this genus at the Arboretum.

The management of Orchard Hill was carefully considered using park evaluation and decision making methods developed at previous workshops. The current plantings in the park were considered in light of the objectives for the park. Individual trees were assessed for a number of factors, the results being used as a planning basis for the park. A long term strategy for the park is proposed.

The Committee was introduced to the 150 acres of land which belongs to the Arboretum but which as yet is unplanted and requires development planning. Important character elements of the present Arboretum, and the principle of key genera, were examined with respect to development of this new area. A method for the formulation and implementation of development plans for this area was proposed.

Following on from an exercise initiated at the second workshop, the committee re-examined the Basinhead area. A full assessment of the area was carried out and the results used as a basis for a management proposal.

This workshop was conducted under the auspices of the Eastwoodhill Arboretum Trust Board.
SUMMARY OF RECOMMENDATIONS

Section One: Issues
- That the renovation of Birch Hill be undertaken in the manner described in section 1.2.5.
- That a landscape architect be appointed as part of the subgroup who are examining the new area.
- That the key genera list, as stated in the report of the second workshop, be reconfirmed.

Section Two: The genus Acer
- That the actions recommended from the Acer field exercise, as outlined in table 2.3.2, be implemented.
- That the genus Acer be developed according to the recommendations in section 2.5.

Section Three: New area development
- That the new area should be of compatible character to the present Arboretum.
- That the incorporation of all, or some, of the elements listed in table 3.3.1.1 into the new area will ensure that it has similar character to the present Arboretum.
- That the incorporation of the elements listed in table 3.3.1.2 is important to the successful development of the new area.
- That the principle of key genera be continued in any development of the new area. This should follow the guidelines described in section 3.3.2.
- That a method for site development be formulated based on the principles outlined in section 3.3.3.
- That the procedure for site development, as outlined in table 3.3.3.1 be implemented.
- That a subcommittee of Mr Clapperton, Mr Jellyman, and Mr Collier be charged with undertaking step one of the method in table 3.3.3.1, in time for consideration at the next workshop.

Section Four: Management of Orchard Hill
- That the development of Orchard Hill follow the themes outlined in section 4.3.
- That the general identity of Orchard Hill should be retained, i.e. spring blossom featuring Malus, Prunus, and Magnolia, with coniferous background of Picea, Abies, and Pinus.
- That the plan of action for Orchard Hill, as outlined in section 4.5.2, be implemented.
- That after recommended trees have been removed from the park, a reconsideration of the plantings should be done.
- That the renovated planting scheme should feature: (i) Spring display and autumn colour highlights, (ii) A range of high impact Malus and Prunus types, (iii) Prunus types that tend towards species rather than cultivars.
- That a proposal for reselected Prunus and Malus species be brought to the committee for consideration at its next meeting.

Section Five: Basinhead
- That the plan of action for Basinhead, as outlined in table 5.4.2, be implemented.
- That a plan for the redevelopment of Basinhead, which takes account of permanent and transitory elements, and spring display, be undertaken.

Section Six: Conclusion
- That the fourth workshop be held in March 1992.
- That the fourth workshop address issues such as suggested in section 6.2.
SECTION ONE: Issues

1.1 Aim
To consider any issues relating to previous workshops, reports, and associated progress at the arboretum. Three issues that arose during the workshop are also reported here.

1.2 Issues discussed
1.2.1 Douglas Cook Centre for Education
Mr Pollock reported on the development of the Douglas Cook Centre for Education. This study centre has been established at the Arboretum over the last year. Community fundraising by the Friends of Eastwoodhill has resulted in a fully funded and constructed centre which contains library, laboratory, herbarium, offices, kitchen, and public facilities. This successful development is exciting progress for the Arboretum. The committee visited the centre and inspected the facilities.

1.2.2 Student activities
Professor Chalmers reported on student activities at the Arboretum. The activities of Massey University students using the Arboretum for educational purposes was described. Mr Clapperton then outlined the activities of the Waikato polytechnic group.

1.2.3 Gondwana development
Mr Clapperton reported on the Gondwana development within the native planting area. Progress to date was outlined. So far the majority of the noxious weeds have largely been eliminated, sheep will now be used to keep the ground tidy. Some information on possible planting regimes for this area will be forthcoming from Mr B. Clarkson D.S.I.R., and a contact in MAF who has a collection of South American plants.

1.2.4 Progress in Pear Park
Mr Clapperton reported on the progress made in Pear Park with respect to the recommendations from last year's report. The committee visited the park and were acquainted with the developments. The Waikato polytechnic group had done much of the work as part of their annual exercises. The area of the old nursery site had been substantially cleaned out and much seedling material removed. Major work had been undertaken in the area of *Quercus ludoviciana* with trees targeted for removal now gone. The fence between this area and the sheep yards has been removed and a large branch removed from a red oak, substantially altering the appearance of this area.

1.2.5 Birch Hill
The question of the renovation of the Birch grove on Birch Hill was raised. The current species is *B. pubescens* which is not suited to the site and has done poorly. Many of the trees are in poor condition and the overall quality of the hill is in decline. On examination of the Hill it was agreed that Douglas Cook's intentions were quite clear, i.e. a planting of one species for trunk effect. It was also agreed that to achieve unity one clone should be selected and used for the whole Hill. After discussion it was agreed that the following procedure be followed:

1. Remove crowding trees immediately.
2. Replant the whole Hill when a suitable number of trees have been obtained.
3. Use a clone of a white bark birch, *B. papyrifera* is suggested.
4. The removal of the shoulder off the edge of Birch Hill, on the pond side, would draw attention to the space and make it more open.

5. The use of copper bark birch on the flat area on top would add interest.

It was agreed that more information on a suitable clone and its availability was needed. A number of species were considered for the site. *B. costata* has a good trunk but was considered too broad in its shape. *B. x fetisowii* was thought to be too upright. *B. pendula* is too short lived. *B. papyrifera* was considered suitable because it has a slim shape and a good trunk.

1.2.6 Landscape architect

The incorporation of a landscape architect into the workshop group was discussed, particularly with respect to the new area. It was agreed that a landscape architect should be appointed to the subgroup that is working on the new area development.

1.2.7 Key genera

The key genera list, as listed in the second workshop report, was reconfirmed.

Summary of recommendations:

That the renovation of Birch Hill be undertaken in the manner described in section 1.2.5.

That a landscape architect be appointed as part of the subgroup who are examining the new area.

That the key genera list be reconfirmed.
SECTION TWO: Development of the collection - The genus Acer

2.1 Aim
To consider in detail the genus Acer at Eastwoodhill and formulate a development plan for the genus within the collection.

2.2 Background information and field exercise
The background information for this exercise was considered (Appendix Tables 2.1-2.8). The current Eastwoodhill collection contains 131 species and cultivars of Acer. This represents about 6% of the total species and cultivars in the collection. In addition another 45 species and cultivars were purchased by Mr Cook, but are no longer in the collection (Appendix Table 2.6).

In the overall assessment of the collection Acer ranked 3rd in terms of overall importance, Magnolia and Tetracentron were higher. Of the key genera Acer falls into the highest bracket of importance with an Average score of 9.2. In terms of number of species and cultivars at Eastwoodhill Acer is the leading genus. As a representation of the genus Eastwoodhill holds about 51% of the species within the genus (77 species present in the Arboretum).

The information on extent of the genus in New Zealand was examined (Appendix Table 2.7). In fact there are very few types present in New Zealand that are not represented at Eastwoodhill. The only species in New Zealand but not at Eastwoodhill are A.franchettii, A.ningapense, A.sieboldianum var. macrophyllum and A.tartaricum. In addition there are three A.platanoides cultivars and two A.pseudoplatanus cultivars.

The information on the subgroups within the genus was examined. Table 2.2.1 illustrates the divisions of the genus. Eastwoodhill has species from nearly all groups. Bill Sykes reports that of those which Eastwoodhill does not have, 70% are Chinese and most of the others are of Russian origin.

The preliminary assessment results for the genus were then considered (Appendix Tables 2.1-2.4). It is notable that the majority of the plants which ranked highly are represented by only one example. Many of the important species are generally poorly represented throughout New Zealand.

A field exercise to assess the quality of the actual plants on site was undertaken. Species for consideration were those that ranked highly in one or both of the preliminary assessments. In the field exercise individual examples were rated for health and as an example of the species. Rating scales can be found in Appendix Three.

2.3 Results
The results of the field exercise were calculated and discussed. It was agreed that a health score below 3.5 was unacceptable, and an ‘example of species’ score below 3.0 was unacceptable. Taking these levels into account, the recommendations from the field exercise were made. Table 2.3.1 contains the preliminary and field results for the species considered.
Table 2.2.1  Divisions within the genus Acer


Distribution of Acer

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<tr>
<th>Specie(s)</th>
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<td>14 (0)</td>
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<td>13 (3)</td>
<td>11 (1)</td>
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<td>Japan (117)</td>
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<td>16</td>
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I Section Pseudioxa Koidzumi

Series Pseudoflua

Acer nippunicum Ilara

Series Diagila Murray

Acer distylum Sieb. & Zucc.

Series Cauctor Pax

Acer spicatum Lam.

Acer caudatum Wallich ssp. caudatum

Acer caudatum ssp. kurnandoense (Taut. & Meyer)

De Jong 1989 (Comb. nov.)

Acer caudatum ssp. multiformum (Max.)

De Jong 1989 (Comb. nov.)

Series Caudata Pax

Acer calcaratum Gagn.

Acer cambelii Hook. f. & Thomson ssp. cambelii

Acer cambelii ssp. flavellatum (Rehd.) Murr.

Acer cambelii ssp. ununea (Pax) De Jong 1988 (Comb. nov.)

Acer cambelii ssp. wilsonii (Rehd.) De Jong 1988 (Comb. nov.)

Acer chapaense Gagnepain

Acer confertifolium Merrill & Metcalf

Acer eleganterum Fang & Chiu

Acer erianthum Scherwin

Acer fenzelianum Hand.-Mazz.

Acer kwangfang Fang & Fang f.

Acer lingosense Fang & Chiu

Acer mapinense Fang

Acer olivaceum Fang & Chiu

Acer olivaceanum Pax ssp. olivaceanum

Acer olivaceanum ssp. formosanum (Koidz.) Murr.

Acer olivaceanum Pax & Hoffm.

Acer shagaceous Fang & Soong

Acer szechuanense Fang & Fang f.

Acer taipeense Fang

Acer tibetense Lecomte

Acer tibetensis Dutthie

Acer twuynense Fang & Wu

Acer yunnanense Fang

Series Penninervia Metcalf

Acer cardatum Pax

Acer crassum Hu & Cheng

Acer eliptopyroides Fang & Wu

Acer fabri Hance

Acer kainanense Chun & Fang

Acer laotianum Wall.

Acer lucidum Metcalf

Acer oligocarpum Fang & Hu

Acer sino-oblongum Metcalf

Acer yunnunii Fang

IV Section Macrantha Pax

Acer capillipes Maxim.

Acer caudatofolium Ilay.

Acer crosaefolium Sich. & Zucc.

Acer davidii Franch. ssp. davidii

Acer davidii ssp. grosseri (Pax) De Jong 1988 (Comb. nov.)

Acer lauanense Fang & Hu

Acer miracanthum Sieb. & Zucc.

Acer monolobium Koidzumi

Acer pectinatum Wall. ssp. pectinatum

Acer pectinatum ssp. forrestii (Dietz) Murr.

Acer pectinatum ssp. laxiflorum (Pax) Murr.

Acer pectinatum ssp. maximucaezii (Pax) Murr.

Acer pectinatum ssp. totonacense (Hand.-Mazz.) Murr.

Acer pseurolanicum L.

Acer rubescens Ilay.

Acer rubescens Sich. & Zucc.

Acer sikkimensis Niquel ssp. sikkimensis

Acer sikkimensis ssp. metcalfii (Rehd.) De Jong 1988 (Comb. nov.)

Acer stemonastrum Maxim.

Acer taconashki Maxim. ssp. taconashki

Acer taconashki ssp. koreanum Murr.

V Section Glaabra Pax

Series Glaabra

Acer glabrum Torrey ssp. glabrum

Acer glabrum ssp. diffusum (Greene) Murr.

Acer glabrum ssp. douglasii (Hooker) Wesm.

Acer glabrum ssp. neomexicanum (Greene) Murr.

Acer glabrum ssp. sibiliosum Murr.

Series Arguta Rehd.

Acer acuminatum Wall. ex Don

Acer argutum Maxim.

Acer barbinerve Maxim.

Acer stachyophyllum Ehrh. ssp. stachyophyllum

Acer stachyophyllum ssp. brundifolium (Maxim.) De Jong 1988 (Comb. nov.)

VI Section Negundo Maxim.

Series Negundo Maxim.

Acer negundo L. ssp. negundo

Acer negundo ssp. boreale Murr.

Acer negundo ssp. californicum (Torre & Gray) Wesm.

Acer negundo ssp. intera (Britton & A. & D. Lee)

Acer negundo ssp. mexicanum (DC) Wesm.

Series Confolia (Koidz.) Pojarova

Acer crenatulum (Sieb. & Zucc.) Koch

Acer henryi Pax

III Section Wardiana De Jong

Acer wardii W. W. Smith

IV Section Macrantha Pax

Acer capillipes Maxim.

Acer caudatofolium Ilay.

Acer crosaefolium Sich. & Zucc.

Acer davidii Franch. ssp. davidii

Acer davidii ssp. grosseri (Pax) De Jong 1988 (Comb. nov.)

Acer lauanense Fang & Hu

Acer miracanthum Sieb. & Zucc.

Acer monolobium Koidzumi

Acer pectinatum Wall. ssp. pectinatum

Acer pectinatum ssp. forrestii (Dietz) Murr.

Acer pectinatum ssp. laxiflorum (Pax) Murr.

Acer pectinatum ssp. maximucaezii (Pax) Murr.

Acer pectinatum ssp. totonacense (Hand.-Mazz.) Murr.

Acer pseurolanicum L.

Acer rubescens Ilay.

Acer rubescens Sich. & Zucc.

Acer sikkimensis Niquel ssp. sikkimensis

Acer sikkimensis ssp. metcalfii (Rehd.) De Jong 1988 (Comb. nov.)

Acer stemonastrum Maxim.

Acer taconashki Maxim. ssp. taconashki

Acer taconashki ssp. koreanum Murr.

V Section Glaabra Pax

Series Glaabra

Acer glabrum Torrey ssp. glabrum

Acer glabrum ssp. diffusum (Greene) Murr.

Acer glabrum ssp. douglasii (Hooker) Wesm.

Acer glabrum ssp. neomexicanum (Greene) Murr.

Acer glabrum ssp. sibiliosum Murr.

Series Arguta Rehd.

Acer acuminatum Wall. ex Don

Acer argutum Maxim.

Acer barbinerve Maxim.

Acer stachyophyllum Ehrh. ssp. stachyophyllum

Acer stachyophyllum ssp. brundifolium (Maxim.) De Jong 1988 (Comb. nov.)

VI Section Negundo Maxim.

Series Negundo Maxim.

Acer negundo L. ssp. negundo

Acer negundo ssp. boreale Murr.

Acer negundo ssp. californicum (Torre & Gray) Wesm.

Acer negundo ssp. intera (Britton & A. & D. Lee)

Acer negundo ssp. mexicanum (DC) Wesm.

Series Confolia (Koidz.) Pojarova

Acer crenatulum (Sieb. & Zucc.) Koch

Acer henryi Pax

III Section Wardiana De Jong

Acer wardii W. W. Smith
Table 2.2.1 continued

VII Section Indivisa Pax
  Acer carpintibulum Sieb. & Zucc.

VIII Section Acer
  Series Acer
    Acer caesium Wall. ex Brandis ssp. caesium
    Acer caesium ssp. grossii (Pax) Murr.
    Acer heldreichii Boiss ssp. heldreichii
    Acer heldreichii ssp. raunesis (Medv.) Murr.
    Acer poniloplanoza L.
    Acer velutinum Boiss.

  Series Monspelusana Pojarkova
    Acer hyrcanum Fisch. & Meyer ssp. hyrcanum
    Acer hyrcanum ssp. intermedium Borrn. Yaltirik
    Acer hyrcanum ssp. keckanum (Pax) Yaltirik
    Acer megaloxylon ssp. reginae-albae (Orph. & Boiss.) De Jong 1988
    Acer hyrcanum ssp. sphaericapsum Yalt. Murr.
    Acer hyrcanum ssp. tauriculum (Boiss. & Balansa) Yaltirik
    Acer monspelusana L. ssp. monspelusana
    Acer monspelusana ssp. austriacam (Pojark.) Rech.
    Acer monspelusana ssp. conostacum (Boiss.) Yaltirik
    Acer monspelusana ssp. microphyllum (Boiss.) bornm.
    Acer monspelusana ssp. oksalum Yaltirik
    Acer monspelusana ssp. persicum (Pojark.) Rech.
    Acer monspelusana ssp. turcicum (Pojark.) Murr.
    Acer obntaoleum Sib. & Smith
    Acer ophalus Muller ssp. ophalus
    Acer ophalus ssp. hispanicum (Pourt.) Murr.
    Acer ophalus ssp. oksulatum (Willd.; Gams
    Acer sempervirens L.

  Series Saccharostylophon (Ref.) Murr.
    Acer saccharum Marsh. ssp. saccharum
    Acer saccharum ssp. floridanum (Chapm.) Desm.
    Acer saccharum ssp. grandidentatum (Tort. & Gray) Desm.
    Acer saccharum ssp. leucoderme (Small) Desm.
    Acer saccharum ssp. nigrum (Michx f) Desm.
    Acer saccharum ssp. ozarkanum Murr.
    Acer saccharum var. rugelii (Pax) Rehd.
    Acer saccharum var. schnekhi Rehd.
    Acer saccharum var. simosum (Rehd.) Sarg.
    Acer saccharum ssp. shuchii (Rehd. Murr.

IX Section Penrophylla (Hu & Cheng); De Jong
  Series Penrophylla
    Acer penrophyllum Diels
  Series Trifida Pax
    Acer buergerianum Miquel ssp. buergerianum
    Acer buergerianum ssp. fargesianum (Hayata) Murr. & Lauterec
    Acer buergerianum ssp. minaporum (Hance) Murr.
    Acer corticeolusum Lev. Murr.
    Acer discolor Maxim. Murr.
    Acer fengii Murr.
    Acer oblongum Wall. ex DC.
    Acer patti Franch.
    Acer shihousi Chun & Fang
    Acer syacoptoides Chun
    Acer tawangchi Fang. ssp. tawangchi
    Acer yuanchi Fang

X Section Trifoliata Pax
  Series Giusca Pojark
    Acer griseum (Franch.) Pax
    Acer griseum ssp. flavescens Franch.
    Acer trilobatum Kum.
  Series Mandshurica Pojark.
    Acer mandshuricae Maxim.

XI Section Lithocarpus Pax
  Series Lithocarpus
    Acer diabolicum Blume ex Koch
    Acer sinucrum Maxim. Cheng
    Acer strobileicum Wall. ssp. strobileicum
    Acer strobileicum ssp. fargesianum (Pax.) Murr.
    Acer strobileicum ssp. xinjiangensi (Miq.) Murr.
  Series Macrophylla Pojark.
    Acer macrophyllum Pursh.

XII Section Platanoides Pax.
  Acer campestre L. ssp. campestre
  Acer campestre ssp. leucocarpum (Wallr.) Pax
  Acer campestre ssp. marcinus (Guss.) Hayek
  Acer cappadociicum Gled. ssp. cappadociicum
  Acer cappadociicum ssp. divergens (Pax) Murr.
  Acer cappadociicum ssp. labelii (ten.) De Jong 1988 (Comb. nov.)
  Acer cappadociicum var. tristisculum (Rehd.) Rehd.
  Acer cappadociicum ssp. sinicum (Rehd.) Hand-Mazz.
  Acer elongatae Franch ssp. elongatae
  Acer elongatae ssp. amplexa (Rehd.) De Jong 1988 (Comb. nov.)
  Acer elongatae ssp. caiophloium (Rehd.) De Jong 1988 (Comb. nov.)
  Acer elongatae ssp. sinicoides (Cheng ex Fang) De Jong 1986 (Comb. nov.)
  Acer mayurei Maxim ssp. mayurei
  Acer mayurei ssp. misaiiense (Tsoong) Murr.
  Acer mono Maxim. ssp. mono
  Acer mono ssp. ambiguum (Pax) Rehd.
  Acer mono var. mayi (Schwein.) Nakai
  Acer mono ssp. crenatoannum (Nakai) De Jong 1988 (Comb. nov.)
  Acer mayurei Franch.
  Acer platanoides L. ssp. platanoides
  Acer platanoides ssp. turkestanicum (Pax) De Jong 1986 (Comb. nov.)
  Acer sibaei Pax
  Acer tibetensis Fang
  Acer truncatum Bunge

XIII Section Pseudocampturus De Jong 1986
  Acer peniculicarpum Stew. ex Brandis
  Acer pilosum Maxim.

XIV Section Ginnala Nakai
  Acer tataricum L. ssp. tataricum
  Acer tataricum ssp. davidii (Franch.) De Jong 1988 (Comb. nov.)
  Acer tataricum ssp. ginnalae (Maxim.) Wesm.
  Acer tataricum ssp. semenovii (Reg. & Herd.) Pax

XV Section Rubra Pax
  Acer pseudomartum Koch
  Acer rubrum L.
  Acer saccharatum L.

XVI Section Hypocarpha Fang
  Acer garrettii Craib
  Acer laurinum Hasskarl
## Appendix 7: Workshop Three report

### Table 2.3.1: Preliminary and field assessments for selected members of the genus *Acer*

<table>
<thead>
<tr>
<th>Species</th>
<th>Reference</th>
<th>Preliminary assessment</th>
<th>Field assessment</th>
<th>Action status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Botanic score</td>
<td>Aesthetic Score</td>
<td>Average score</td>
</tr>
<tr>
<td><em>A. macrophyllum</em></td>
<td>BHill Pond</td>
<td>8.5</td>
<td>7.8</td>
<td>8.1</td>
</tr>
<tr>
<td><em>A. pseudosieboldianum</em></td>
<td>BHill Pond</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td><em>A. fargesii</em></td>
<td>Blackwater</td>
<td>8.7</td>
<td>7.8</td>
<td>8.3</td>
</tr>
<tr>
<td><em>A. sterculiaceum</em></td>
<td>Blackwater</td>
<td>9.0</td>
<td>8.0</td>
<td>8.5</td>
</tr>
<tr>
<td><em>A. x zeoeschense</em></td>
<td>Blackwater</td>
<td>6.6</td>
<td>6.7</td>
<td>9.1</td>
</tr>
<tr>
<td><em>A. nikoense</em> (upper)</td>
<td>Birch Hill</td>
<td>8.7</td>
<td>9.2</td>
<td>9.0</td>
</tr>
<tr>
<td><em>A. nikoense</em> (lower)</td>
<td>Birch Hill</td>
<td>8.7</td>
<td>9.2</td>
<td>9.0</td>
</tr>
<tr>
<td><em>A. campbellii</em></td>
<td>Circus</td>
<td>8.5</td>
<td>7.9</td>
<td>8.2</td>
</tr>
<tr>
<td><em>A. cappadocium ssp. lobelii</em></td>
<td>Circus</td>
<td>8.2</td>
<td>7.6</td>
<td>7.9</td>
</tr>
<tr>
<td><em>A. carpinifolium</em></td>
<td>Circus</td>
<td>8.4</td>
<td>8.1</td>
<td>8.3</td>
</tr>
<tr>
<td><em>A. grosseri var. hersii</em></td>
<td>Circus</td>
<td>7.9</td>
<td>8.3</td>
<td>8.1</td>
</tr>
<tr>
<td><em>A. henryi</em></td>
<td>Circus</td>
<td>8.7</td>
<td>9.0</td>
<td>8.9</td>
</tr>
<tr>
<td><em>A. hookeri</em></td>
<td>Circus</td>
<td>8.2</td>
<td>8.8</td>
<td>8.5</td>
</tr>
<tr>
<td><em>A. platanoides</em> ‘Palmatifidum’</td>
<td>Circus</td>
<td>5.7</td>
<td>8.4</td>
<td>7.1</td>
</tr>
<tr>
<td>*A. plat. ‘Goldworth Purple’</td>
<td>Circus</td>
<td>6.0</td>
<td>8.9</td>
<td>7.4</td>
</tr>
<tr>
<td><em>A. rufinerve f. albolimbatum</em></td>
<td>Circus</td>
<td>6.7</td>
<td>9.0</td>
<td>7.8</td>
</tr>
<tr>
<td><em>A. saccharinum</em> ‘Fasigiatum’</td>
<td>Circus</td>
<td>5.3</td>
<td>7.7</td>
<td>6.5</td>
</tr>
<tr>
<td><em>A. velutinum</em> var. vanvolxemi</td>
<td>Circus</td>
<td>5.8</td>
<td>7.2</td>
<td>6.5</td>
</tr>
<tr>
<td><em>A. diabolicum</em></td>
<td>Circus cmr</td>
<td>8.8</td>
<td>7.8</td>
<td>8.3</td>
</tr>
<tr>
<td><em>A. miyabei</em></td>
<td>Circus cmr</td>
<td>8.4</td>
<td>7.1</td>
<td>7.8</td>
</tr>
<tr>
<td><em>A. rubrum</em></td>
<td>Circus cmr</td>
<td>7.5</td>
<td>8.2</td>
<td>7.8</td>
</tr>
<tr>
<td><em>A. saccharum</em> ssp. nigrum</td>
<td>Circus cmr</td>
<td>7.8</td>
<td>7.0</td>
<td>7.4</td>
</tr>
<tr>
<td><em>A. buergerianum</em></td>
<td>Priestleys</td>
<td>6.6</td>
<td>7.5</td>
<td>7.1</td>
</tr>
<tr>
<td><em>A. saccharum</em></td>
<td>Corner P.</td>
<td>8.0</td>
<td>7.9</td>
<td>8.0</td>
</tr>
<tr>
<td><em>A. circinatum</em></td>
<td>Pear Park</td>
<td>7.4</td>
<td>7.9</td>
<td>7.7</td>
</tr>
<tr>
<td><em>A. diabolicum f. purpureascens</em></td>
<td>Pear Park</td>
<td>8.0</td>
<td>8.5</td>
<td>8.3</td>
</tr>
<tr>
<td><em>A. monspessulanum</em></td>
<td>Pear Park</td>
<td>7.2</td>
<td>6.1</td>
<td>6.7</td>
</tr>
<tr>
<td><em>A. rubrum</em> ‘Brilliant’</td>
<td>Pear Park</td>
<td>6.4</td>
<td>9.0</td>
<td>7.7</td>
</tr>
<tr>
<td><em>A. saccharum</em> Arnold Arb.form</td>
<td>Pear Park</td>
<td>8.0</td>
<td>8.7</td>
<td>8.3</td>
</tr>
<tr>
<td><em>A. wilsoni</em></td>
<td>Pear Park</td>
<td>8.1</td>
<td>7.8</td>
<td>8.0</td>
</tr>
</tbody>
</table>
Table 2.3.2: Acer field exercise - Recommendations

A. macrophyllum All scores acceptable. No action necessary.

A. pseudosieboldianum This was the highest rated of the maples in the initial assessment, however the actual specimen is not particularly notable. The growth is not marked and the tree appears to be suffering from borer. The health rating is below the acceptable level. This example also seems to be the only one of its type in the country so it is important that it should be propagated. The tree will need to be propagated from itself, preferably grafted onto its own seedlings and then several trees planted out.

A. fargesii This tree has suffered serious suppression and dieback due to insect attack. Several limbs have been ringbarked and have died about the point of attack, however strong new growths have occurred and the tree is capable of making good recovery if appropriately managed. The tree should be dead wooded again and then reshaped from the new vigorous growths.

A. sterculiaceum Both health and example scores are below the acceptable level. This tree urgently needs propagating and replanting onto a wetter site. It is particularly sensitive to dry and drops its leaves during dry periods. This tree also has some propagation difficulties and should be tried on A. macrophyllum as stock. Propagation should also be done from the tree at Hackfalls and the two types of material planted together.

A x zoeschense The tree is spindly and unthrifty. Both field scores are below the acceptable level. Other examples should be obtained and planted into other sites.

A. griseum All scores acceptable. No action necessary.

A. nikoense There are two trees at the site near Birch Hill. The lower tree, nearer the stream, has an unacceptable health level and requires some action. Both trees should be left. The surrounding trees should be trimmed to give better light to these two maples. Specifically the Rhododendrons should be pruned back and the apples tidied up. The Japanese maples should be selectively pruned away from the Nikko maples. The maple grouping was favoured ahead of the Rhododendrons for this area. The birches on the other side of the track should be thinned to give the maples more room and light. These maples are small for their age, probably due to the poor pumice soil on the site.

A. campbellii The identity of this tree is debatable as it does not fit all the characteristics expected of the type. No fruits are produced and it could possibly be a hybrid. Material should be sent to van Gelderen for identification. Health is below par and some action is necessary. It has been propagated by Peter Cave but is very weak.

A. cappadocicum ssp. lobelli An excellent example. No action necessary.

......continued
A. *carpinifolium* This tree is not growing well as it likes a wetter site. At present both field scores are below the acceptable level. This tree has been seriously suppressed by a conifer behind it which has since been removed. Subsequent to the removal of the suppressing tree this acer is recovering strongly. It should be tidied up. New seed material of Chinese origin has been supplied by Peter Cave.

A. *grossei var. hersi* Field scores acceptable. No action necessary.

A. *henryi* Field scores acceptable. No action necessary.

A. *hookeri* This tree is quite crowded at the back and is suffering from some dieback and poor branches within the crown. At the same time, however, it is making strong recovery growth and therefore achieves a good health score. The dieback and twiggy branches should be removed. The crowding Rowan should be removed.

A. *platanoides ‘Palmatifidum’* An excellent example. No action needed.

A. *platanoides ‘Goldsworth Purple’* An excellent example. No action needed.

A. *saccharinum ‘Fastigiatum’* An excellent example. No action needed.

A. *velutinum var. vanvolxemi* Both ratings satisfactory. No action needed.

A. *diabolicum* Both ratings unacceptable. This tree is rather crowded and appears in poor condition. However a *Cornus* has been removed which was strongly impinging on this tree and therefore the tree may make some improvement in the future. The tree should be tidied up and retained until another example is established.

A. *miyabei* Both ratings satisfactory. No action needed.

A. *rubrum* Excellent example. No action needed.

A. *saccharum ssp. nigrum* Both ratings satisfactory. No action needed.

A. *buergarianum* Excellent example. No action needed.

A. *saccharum*. This tree is in poor condition with both field ratings below par. Although this tree is more important than the surrounding *Liquidambert*, which are quite healthy, it was felt that the *Liquidambert* should be retained and some action taken on the *Acer*. Wild source seed should be obtained and the species replanted. This particular genetic source should be retained by propagating from this tree as well. The specimen examined should be removed once a new plant is established.

...continued
A. circinatum Although this tree is growing in a situation that might be considered typical for its type, the specific tree is not a good example of the species. Both ratings are below acceptable levels. The surrounding Buddleia should be rejuvenated to allow more light into the maple, and a branch lifted on the overtopping Quercus mongolica. In addition new wild source material should be obtained, it is readily available in the wild and it is not difficult to import seed. New Zealand material has a much more lobed leaf that this example and it is likely that the New Zealand types are hybrids with A. palmatum, this material should therefore be avoided.

A. diabolicum f. purpureascens Both ratings were satisfactory for this tree. There is a difficulty in the propagation of this species in that there is no suitable rootstock for grafting. It was suggested that A. macrophyllum might be tried as this is in the same series.

A. monspessulanum Both ratings acceptable. No action needed.

A. rubrum 'Brilliant' Excellent example. No action needed.

A. saccharum (Arnold Arboretum form) Excellent example. No action needed.

A. wilsoni Both ratings good. No action needed.

2.5 Development plan for the genus Acer at Eastwoodhill
The general discussion will be presented as a development plan.

Recommendations on the current collection.
• Types originally imported should be retained where possible. If a tree is declining then propagation should be carried out.
• Those special to Eastwoodhill, or rare in New Zealand, should be represented by more than one example.

Recommendation on the criteria for acquisition.
• Using the same criteria as were established for Magnolia; the policy should follow the following guidelines:
  • Concentrate on species. Try everything. If a species will not grow, then a herbarium specimen should be kept.
  • There is an obligation to hold unusual types for reference and educational purposes.
  • Any plant acquisition should pay attention to good form, climatic range, climatic suitability, site selection.

Recommendation of the acquisition of actual species and expansion of the genus
• Those species that are in New Zealand should be obtained. Efforts should be made to ensure that obtained material is true to type. Seed grown material should be approached with caution as hybrids are very likely. Preferably material should be vegetatively propagated from true stock. If seed material is obtained then herbarium material should also be obtained for verification purposes.
Any other species that become available should be obtained. The expedition to China later this year may make some new species available to New Zealand and Eastwoodhill. A list of the species not at Eastwoodhill should be forwarded to those on the China expedition.

- Wild source seed material should be obtained where possible.
- Where wild source seed is obtained several trees should ultimately be planted so that a true seed source can be generated. It is likely that wild source seed will become more difficult to obtain in the future so the development of a New Zealand seed source is useful. If this device is used then closely related species should be separated to try and avoid hybridization.

Recommendation on growth and siting of maples.

- Generally moister sites should be chosen for *Acer*. The area at the base of the new pinetum may be suitable for its richer and moister soil.
- Clay based soils should be chosen for *Acer* plantings. Some species such as *A. nikoense* and *A. griseum* are very poor on the pumice soils, and as a general observation the maples do not like the pumice soils. It is possible that the difficulties on pumice soils are fertility problems.
- Species that do not do well at Eastwoodhill should be repeated at Hackfalls to take advantage of the cooler climate.
- The incorporation of a shade canopy may be an advantage for many plantings. For example, the snakebarks in the Circus may improve if a tall canopy is planted on the sunny side. Equally the *Acer* on IDS ridge may benefit from a tall canopy.
- *Acer* as a genus seems to be environmentally sensitive for the Gisborne area. Most maples come from areas of moist summers. Information should be developed on those which will tolerate dry, moist, cool conditions etc.
- Climatic suitability must be the most important siting criterion. More data is needed on habitat.

### 2.6 Conclusions
There are some difficulties associated with the culture of the genus *Acer* at Eastwoodhill. This relates mostly to environmental sensitivity. Field results show that, even though some species are sensitive, others have performed very well. Careful siting, and further research into habitat and tolerances can overcome many of these problems.

### Summary of recommendations:
That the actions recommended from the *Acer* field exercise, as outlined in table 2.3.2, be implemented.

That the genus *Acer* be developed according to the recommendations in section 2.5
SECTION THREE: Development of the collection - the next 150 acres

3.1 Aim
To develop a general philosophy and objectives for the development of the unplanted land at the Arboretum.

3.2 Background information and site visit
The background information was reviewed (Appendix Tables 3.1-3.5). First, the objectives for the Arboretum, as stated by Douglas Cook, were examined. Although Mr Cook never implicitly stated objectives, his writing contains statements that outline his intentions, (Appendix Table 3.1). Further to this information, the objectives as set out in the previous workshops were considered, (Appendix Table 3.2).

Next, the important physical characteristics were considered. The nature of the landscape elements that border the new area were listed, (Appendix Table 3.4). Generally there is a notable portion of coniferous material along the boundaries of the existing Arboretum, with some mixed deciduous elements.

After the initial briefing a site visit was made. (Readers of this thesis refer to Figure 1.4 in Volume I.) Mr Clapperton explained developments to date. Some planting has been done on the unstable slope which slipped in 1985, a DSIR poplar trial has been used to stabilise this ground (Wickhman Hill). Adjacent and above the poplars is a planting of Cupressus lusitanica which will hold the hard dry slope behind. Because of the steepness of the site a pattern of planting was proposed. On the upper portions of the slopes, where it is too steep for easy pedestrian access, the coniferous backdrop plantings would be installed. Once the upper land is stabilised then deciduous highlights can be interplanted. The lower slopes would then be used for 'arboretum' planting. (The poplar trial is visible in the top left of Figure 5.1 in Volume I.)

It was proposed that the method described above be used on the western slopes and the central basin and slopes. The far 50 acres (Big Hill) must be treated differently. This area poses a considerable problem because the whole area is moving. A DSIR proposal for stabilisation of this ground should be received shortly. The priority for this area is deep stabilisation which must be achieved before any arboretum planting can be carried out.

A small area of remnant native vegetation was pointed out (Centre top of Figure 5.1 in Volume I). It is planned that this area be left to regenerate into the vegetation of the area. This will be an asset to the region as there are very few places where local lowland vegetation is accessible to the public. It will also be of scientific interest.

The climatic features of the site were outlined. The basin is generally sheltered and shady. The western areas are windy.

3.3 Discussion
Following the site visit the development of the new area was debated at some length. Clearly any development will have to consider aspect, soil type, and slope and relate planting to those factors. There are, however, a number of issues that must be resolved before planting can be considered. These are the
development of the character of the site, the continuation of key genera, and the formulation of a method through which details of site development can be addressed. Each of these is considered below.

3.3.1 Aspects of arboretum character
In the current Arboretum there are a number of elements that give it a particular character.

In the first instance the principle of compatibility must be discussed. Should the new area have the same character as the present Arboretum, or should it be of quite different character? If the new planting is to blend in with the existing Arboretum, then it is important that these character elements be repeated in the new area. On the other hand if contrast is desirable then quite different elements would be used. After discussion it was agreed that the character should be similar in both areas.

**Recommendation:** That the new area should be of compatible character to the present Arboretum

If this principle is to be employed the elements that make up that character must be determined so that they may be utilised in the new plantings. Group discussion identified the following elements as being important in the present Arboretum.

**Table 3.3.1.1** Character elements important in the present Arboretum

| • Repeated evergreen elements, e.g. Cedrus atlantica, Magnolia grandiflora, Magnolia delavayi |
| • Conifer backdrop with deciduous highlights. |
| • Conifers on ridgetops. |
| • Varying concentration of conifers in each park. |
| • Features of particular evergreen plantings in some areas, e.g. the patula pines, pencil cypress. |
| • Backbone of red oaks. |
| • 'Forests' such as the beech wood, Black forest, the oak wood, and the maple forest. |
| • Planting groups with high impact, e.g. Magnolia and Malus, colourful plantings around the lakes. |
| • Specific special elements, such as the daffodil patch and miniature conifers. |
| • Open space areas such as the daffodil patch, the creation of small flat areas. |
| • Loosely clustered genera plantings, e.g. Tilia, Ilex Abies, Picea, contrasted with other spread plantings. |
| • Occasional symmetrical elements within the park, e.g. fountain, shaleos. |
| • Presence of lakes in valley bottoms. |
| • Lookout points and high tracks. |
| • Tracks which follow contour rather than cut across contour. |

**Recommendation:** That the incorporation of all, or some, of the elements listed in table 3.3.1.1 into the new area will ensure that it has similar character to the present Arboretum.

Having derived this list, discussion was held on the elements that were most desirable for the new area. The following were determined to be the factors most needed in the new area, stated in order of highest vote.
Table 3.3.1.2  Character elements that should be given priority in the development of the new area.

- Vistas and open space.
- Conifer backbone.
- Genera plantings.
- Demonstration areas where plant material for various uses can be grown, e.g. shelter trees, specimen trees, use of unusual species for woodlots, trees suitable for the district etc.
- 'Forests'.
- Red oak and cedar backbone.
- Theme elements.

**Recommendation:** That the incorporation of the elements listed in table 3.3.1.2 is important to the successful development of the new area.

It is important that the distinction between the two lists above is noted. The first list gives a range of elements that could, and probably should, be employed to give the new area a similar look to the old area. The second list gives those elements that must be given careful consideration in the development of any plan for the new area, as these elements are seen as either lacking in the present Arboretum and/or important to successful development of the new area.

### 3.3.2  Key genera

The important issue here is whether or not the principle of key genera should be continued in the new area. If so, which key genera are most appropriate to develop. If not, then what other genera should be used.

Some discussion ensued. It was considered that there might be some pressure to deviate from the principle of key genera. First, there will be large quantities of new material coming into New Zealand from seed collecting expeditions and the interest in new material may not be compatible with the key genera principle. Second, it was felt that demonstration areas should not be constrained by the necessity of using key genera. However after some discussion it was agreed that the key genera should be continued.

**Recommendation:** That the principle of key genera be continued in any development of the new area.

Each genus was then considered individually and the following points made:

- **Acer**  
  It is feasible to extend this genus, seed is readily available.

- **Alnus**  
  This genus should be extended.

- **Aesculus**  
  This genus should be extended.

- **Betula**  
  This genus should be extended.

- **Camellia**  
  This genus can be expanded but it can not be expected that all types can be collected. Many are too tropical for this area and would not be suitable. This genus could be extended quite soon as the material is available.

- **Cedrus**  
  Continue with this genus.
Crataegus This is a very large genus and most would grow here. It is not feasible to collect all though, so outstanding examples only should be acquired. Eastwoodhill is on the warmer end of the *Crataegus* range. This is an important small tree genus, which can fill an important visual role in the arboretum.

Cupressus This genus should be extended, all species should be sought.

Fagus This genus should be extended, all species should be sought.

Ilex Many of this genus are tropical and will not grow here, so we could not expect to acquire any large portion of the genus.

Juniperus This genus should be continued, but better sites chosen.

Malus Continue with this genus.

Magnolia This genus should be extended. *Magnolia* relatives should be acquired.

Pinus Continue with this genus.

Populus Continue with this genus.

Prunus This genus is very difficult to import to New Zealand because of quarantine restrictions, it is therefore not feasible to extend this genus beyond what can be obtained in NZ.

Quercus Continue with this genus.

Tilia Continue with this genus.

**Recommendation:** That the key genera be continued into the new area in the manner described in section 3.3.2.

### 3.3.3 The formulation of a method for site development.

The committee discussed at length the mechanisms for site development. Mr. Jellyman suggested that the brief that directed site development should show shelter planting, space definition, access, water features, and key spaces. It was not necessary to show specific planting sites. Essentially the main structure of the site must be correctly developed, and then the development of detail will follow.

It was agreed that a method must be formulated for site development. The method should:

1. Ensure that main structure and concepts are developed first, thus broad areas are defined.
2. Develop detail only after broad areas have been defined, then each subarea can be considered in detail. This step should consider the components and capabilities of each area, and look at habitat opportunities.
3. Utilise the combined skills of the committee to provide input into the planning of site development.

**Recommendation:** That a method for site development be formulated based on the principles outlined in section 3.3.3.

Recognising that such a procedure is desirable, it was proposed that the method outlined in Table 3.3.3.1 be followed. This method has a number of advantages. It sets broad guidelines for the whole area, and then more particular guidelines for each subarea. At the same time it does not constrain the curator by producing detail down to the planting location of a particular tree, neither does it constrain activities by having to wait for committee input before a particular tree can be planted.

Using this method means that a number of possibilities for each area can be explored, and the options fully discussed by the expert group. Group input should ensure that the best possible solution is reached and
justified. The guidelines developed will allow progress to be made in the periods between committee workshops.

**Recommendation:** That the procedure for site development, as outlined in table 3.3.1 be implemented.

**Recommendation:** That a subcommittee of Mr Clapperton, Mr Jellyman, and Mr Collier be charged with undertaking step one of the method in table 3.3.1, in time for consideration at the next workshop.

### Table 3.3.1 Method for site development for the new area

<table>
<thead>
<tr>
<th>Concept development#</th>
<th>Step</th>
<th>Committee inputs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Assessment of whole area.</td>
<td>1</td>
<td>(i) Examine area in question.</td>
</tr>
<tr>
<td>(ii) Identify a number of concepts for each subarea.</td>
<td></td>
<td>(ii) Select concept.</td>
</tr>
<tr>
<td>(iii) Identify plant list for each concept, (categorise into dominant, understorey, focal).</td>
<td></td>
<td>(iii) Evaluate planting proposal.</td>
</tr>
<tr>
<td>(iv) Select plants to be used (dominant, theme, understorey).</td>
<td></td>
<td>(iv) Select plants to be used (dominant, theme, understorey).</td>
</tr>
<tr>
<td>(v) Identify action plan for planting.</td>
<td></td>
<td>(v) Identify action plan for planting.</td>
</tr>
<tr>
<td>(i) Implement selected plan.</td>
<td>2</td>
<td>(i) Implement selected plan.</td>
</tr>
<tr>
<td>(ii) Identify any issues.</td>
<td></td>
<td>(ii) Implement selected plan.</td>
</tr>
<tr>
<td>Implementation.</td>
<td>3</td>
<td>(iii) Discuss and resolve.</td>
</tr>
</tbody>
</table>

* Concept development stages to be done by a subcommittee of Mr Clapperton, Mr Jellyman, and Mr Collier.

* Full committee input during workshop sessions.

### Conclusion

The development of the new area is an exciting but complex part of Arboretum development. To ensure that the activities undertaken always make a positive contribution to that development it is suggested that the recommendations outlined below be followed.

**Summary of recommendations:**

That the new area should be of compatible character to the present arboretum.

That the incorporation of all, or some, of the elements listed in table 3.3.1 into the new area will ensure that it has similar character to the present arboretum.
That the incorporation of the elements listed in table 3.3.1.2 is important to the successful development of the new area.

That the principle of key genera be continued in any development of the new area. This should follow the guidelines described in section 3.3.2.

That a method for site development be formulated based on the principles outlined in section 3.3.3.

That the procedure for site development, as outlined in table 3.3.3.1 be implemented.

That a subcommittee of Mr Clapperton, Mr Jellyman, and Mr Collier be charged with undertaking step one of the method in table 3.3.3.1, in time for consideration at the next workshop.
SECTION FOUR: Park Management for Orchard Hill

4.1 Aim
The aim of this section was to develop a management strategy for Orchard Hill.

4.2 Description
Orchard Hill is on the eastern side of the arboretum facing Hihiroa Road. It is on a steep eastern facing slope with a basin at the bottom. The highest point within the Arboretum is at the top of the hill. The difficulties of terrain and the current state of the planting mean that the park is little visited, however there is some significant plant material on the site. Similarly, because Orchard Hill is the interface between the present Arboretum and the new area, the importance of this park will increase as the new area of the Arboretum is developed.

At approximately 5ha Orchard Hill is a relatively small park within the Arboretum. It is accessed from the main walk to Douglas Park and has three main walking tracks cut into the hill face. The ground is unstable in places and has slipped a number of times, Orchard Hill is not conducive to pedestrian access unless tracks are formed. The site is cool and shaded compared with the rest of the arboretum as it receives only morning sun. The soil is very poor where the underlying rock is close to the surface, however, there are some areas of rich soils. The soils of the hill have been modified by slipping action.

The coolness and part shade of the site influenced Mr Cook to plant cool loving species there, e.g. Ilex, Picea and Abies. Planting on Orchard Hill began in the late 1950s. The current planting includes the main sites of Spruce, Fir and Pine within the Arboretum. Malus, Prunus and Magnolia are present in some concentration. The lower basin is presently not planted although it was the original site of Mr Cook’s orchard and cherry plantings.

Plants currently in the park are illustrated by the park plans, sheets 16-17 of the arboretum set, and by the part plans A-D attached to this report. (Plans A-D are not included in this version of the report. Readers of this thesis should refer to the plans in thesis Appendix Two.) Plants that have been in the park, but which are no longer present are outlined in Appendix Table 4.8.

Because of the large number of Malus and Prunus on Orchard Hill, a large portion of the planting is reaching the end of its useful life. On the other hand, there are many trees which will continue to be viable for many years. As with other parts of the Arboretum, much of the planting is crowded. To ensure that the park as a whole is viable in the long term, management planning must be undertaken.

4.3 Objectives and theme for Orchard Hill
First, the reader is reminded of the relevant objectives for the Arboretum, as resolved at the first workshop: 'The theme of the Arboretum was that of temperate and warm temperate flora, focussing on the key genera plant groups that have already been identified', and that the role of the Arboretum is: 'To maintain and further the collection of Douglas Cook.'
Appendix 7: Workshop Three report

With these objectives in mind the case of Orchard Hill can be examined. The manuscript 'Hollies at Eastwoodhill' (Appendix Table 4.1) illustrates that Douglas Cook had a number of objectives for this park. Mr Cook saw this park as a suitable site for Magnolia, Ilex, Picea, Abies, and Pinus. He intended that it should be formed with an evergreen background high on the Hill, interspersed with seasonal highlights such as Prunus campanulata and Eucalyptus ficifolia. Abies, Picea and Pinus were incorporated into the evergreen background, while Ilex and Magnolia were part of the 'arboretum' plantings on the lower part of the slope.

Much of Cook's intended outcome is apparent in Orchard Hill today. The following are important to the theme of this park:

1. Structurally, the evergreen background with seasonal highlights, and 'arboretum' plantings below is characteristic of this park.
2. Visually, the element of spring display is important in this park.
3. The park is the key site for Abies, Picea and Pinus collections, which form an important element of the evergreen belt.
4. The bulk of the Ilex collection for the whole arboretum is found here.
5. The park is a suitable site for Magnolia.
6. Orchard Hill holds a large portion of the Malus and Prunus collections at the arboretum, these contributing significantly to the spring display.

Recommendation: That the development of Orchard Hill should follow the themes outlined in section 4.3.

4.4 Park Evaluation - Method

To evaluate the park the following procedure was followed:

1. Consideration of the current composition of the park and the background information relating to that composition.
2. Definition of permanent and transitory elements.
3. Field exercise.
4. Discussion of results and development of consensus on park management.

Background Information

The composition of plant material on Orchard Hill was examined. The list of current plant material can be seen in Table 4.5.1, with the list of additional plants that were previously on the Hill found in Appendix Table 4.8.

Examination of these lists shows that 14 out of 19 key genera are represented on Orchard Hill. This park is an important site in the Arboretum for Ilex (47% on OH), Pinus (28% on OH), Prunus (19% on OH), and Fagus (17% on OH).

The distribution of other genera on Orchard Hill was considered. Orchard Hill is an important site for Abies (37% on OH), Berberis (42% on OH), and Picea (35% on OH). These figures clearly reflect Douglas Cook's intentions as stated in the previously mentioned manuscript.

The genera existing in greatest number today are Prunus, Pinus, Abies, and Ilex, (in descending order). Referring to the information on previous plantings, and rates of survival, (Appendix Tables 4.8, 4.9) shows that Magnolia, Acer, Abies and Euonymus once existed in greater numbers than are present today.
The ratings of the plants on Orchard Hill for botanical and aesthetic merit were considered (Appendix Tables 4.2-4.6). It is notable that the highest ranking plants included a number of *Picea, Abies,* and *Magnolia,* this pattern is repeated for botanical score. Of the 25 highest rating plants overall, only 8 were key genera. This trend is repeated for botanical score, suggesting that key genera are not the most important group in this park. When aesthetic score is considered the pattern changes as the *Prunus* assume high positions and, being a key genus, do not continue the previous trend.

**Permanent and transitory elements**

Permanent elements are described as those that, when in an acceptable situation, are sufficiently long lived to be considered permanent. Transitory elements are described as those that are not long lived and will require regular replacement in relation to the permanent elements.

The discussion at the second workshop highlights the importance of the definition of permanent and transitory elements. The definition of elements in this way allows the manager to distinguish those that will need regular attention and replacement from those that will not need such replacement. It is desirable that the framework of the park be formed from permanent elements, thus the framework of the park is always retained and is not disturbed by the need to recycle short lived material. The definition of the genera in this way does not necessarily mean that any will be removed from the park, it simply means that the transitional groups will need more intensive management to keep them at their best at all times.

With respect to Orchard Hill a plan of the park was examined and the pattern of permanent (long lived) plantings was highlighted. The permanent elements were agreed to be: *Abies, Acer, Castanea, Fagus, Fraxinus, Juniperus, Magnolia, Picea, Pinus, Pseudotsuga, Quercus.* The transitory elements were agreed to be: *Crataegus, Ilex, Malus, Prunus,* and all other genera.

Generally the pattern shows that most of the upper plantings are of a permanent nature, while the majority of those on the lower slope are transitory (short lived).

**Field exercise**

Having considered the background information the trees were examined in the field. For each tree information on botanical and aesthetic score, height index, and number of individuals at Eastwoodhill was provided. The group then assessed each tree according to health, example of species, and contribution to scene. The rating scales for each of these indices is found in Appendix Three.

**4.5 Park evaluation - Results**

The results of the field exercise are reported in table 4.5.1. The overall results of the park evaluation can be found in table 4.5.2 and shown in areas A-F, which should be referred to concurrently. (Areas A-F are indicated on page 726, detail can be seen in plans in thesis Appendix Two).

The consensus of the committee was that if a plant rated below 3.0 for field scores, then it should be removed, unless its botanical rating required that it be retained. A score of 4 or 5 is satisfactory. Field ratings have been summed and then an action category for each plant indicated. Field scores have been converted to a mark out of 10 for analysis. Using the levels just indicated the total scores were treated as follows:
Appendix 7: Workshop Three report

(i) average of field scores less than 2.0 (4.0) - urgent action required.
(ii) average of field scores less than 3.0 (6.0) - action required in 0-5 years.
(iii) average of field scores 3.0 to 4.0 (6.0-8.0) - okay, no immediate action required.
(iv) average of field scores 4.0 (8.0) or more - tree excellent, no action required.

Table 4.5.1: Results sheet for field exercise

The Hollies and Abies: Area A

<table>
<thead>
<tr>
<th>Plant</th>
<th>Ref. no.</th>
<th>Preliminary assessment</th>
<th>Field assessment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rank for Av. score</td>
<td>Botan. score</td>
<td>Aesth. score</td>
</tr>
<tr>
<td>Magnolia veitchii</td>
<td>OH652</td>
<td>-</td>
<td>5.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Poiothyrsus sinensis</td>
<td>OH617</td>
<td>8=</td>
<td>9.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Malus</td>
<td>OH618</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Broussonetia papyrifera</td>
<td>OH653</td>
<td>36=</td>
<td>8.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Ilex corallina</td>
<td>OH620</td>
<td>36=</td>
<td>7.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Ilex cornuta</td>
<td>OH621</td>
<td>-</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Ilex 622</td>
<td>OH622</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ilex wilsoni</td>
<td>OH630</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ilex casine</td>
<td>OH623</td>
<td>-</td>
<td>7.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Ilex fargesii</td>
<td>OH624</td>
<td>68=</td>
<td>6.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Ilex 625</td>
<td>OH625</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ilex platyphylla</td>
<td>OH626</td>
<td>40=</td>
<td>7.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Ilex insignis</td>
<td>OH627</td>
<td>17=</td>
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<td>8.2</td>
</tr>
<tr>
<td>Ilex latifolia</td>
<td>OH628</td>
<td>40=</td>
<td>7.6</td>
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</tr>
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<td>OH632</td>
<td>40=</td>
<td>7.1</td>
<td>8.0</td>
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<tr>
<td>Glochidion sp.</td>
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<td>-</td>
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<td>5.4</td>
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<td>Abies cephalonica</td>
<td>OH631</td>
<td>-</td>
<td>7.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Abies bracteata</td>
<td>OH637</td>
<td>31=</td>
<td>8.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Abies firma</td>
<td>OH636</td>
<td>40=</td>
<td>7.1</td>
<td>7.8</td>
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<tr>
<td>Abies concolor ‘Glauc’</td>
<td>OH635</td>
<td>21=</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Abies veitchii</td>
<td>OH634</td>
<td>10=</td>
<td>8.0</td>
<td>8.8</td>
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<tr>
<td>Abies 633</td>
<td>OH633</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Abies holophylla</td>
<td>OH668</td>
<td>21=</td>
<td>9.2</td>
<td>7.0</td>
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<tr>
<td>Abies amabilis</td>
<td>OH667</td>
<td>21=</td>
<td>8.0</td>
<td>7.8</td>
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<tr>
<td>Abies numidica</td>
<td>OH669</td>
<td>59=</td>
<td>8.0</td>
<td>6.4</td>
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<tr>
<td>Abies concolor</td>
<td>OH670</td>
<td>40=</td>
<td>7.1</td>
<td>8.0</td>
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<tr>
<td>Abies spect. var. brevifolia</td>
<td>OH671</td>
<td>14=</td>
<td>8.0</td>
<td>8.5</td>
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<tr>
<td>Abies georgii</td>
<td>OH672</td>
<td>68=</td>
<td>8.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

( ) indicates a score from workshop one.

...continued
Table 4.5.1 continued

Picea group: Area B

<table>
<thead>
<tr>
<th>Plant</th>
<th>Ref. no.</th>
<th>Preliminary assessment</th>
<th>Field assessment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td>Rank for Av. score</td>
<td>Botan. score</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aesth. score</td>
<td>Example of species</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Height index</td>
<td>Status at EWH</td>
<td></td>
</tr>
<tr>
<td>Picea obovata</td>
<td>OH640</td>
<td>17=</td>
<td>9.6</td>
<td>1/1</td>
</tr>
<tr>
<td>Picea bicolor</td>
<td>OH642</td>
<td>40=</td>
<td>9.0</td>
<td>1/1</td>
</tr>
<tr>
<td>Picea brachyphyla</td>
<td>OH639</td>
<td>53=</td>
<td>7.4</td>
<td>2.5</td>
</tr>
<tr>
<td>P. compl. f. latisquamae</td>
<td>OH644</td>
<td>21=</td>
<td>9.0</td>
<td>-</td>
</tr>
<tr>
<td>Picea wilsoni</td>
<td>OH646</td>
<td>-</td>
<td>8.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Cupressus douglaisiana</td>
<td>OH663</td>
<td>66=</td>
<td>7.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Juglans cinerea</td>
<td>OH707</td>
<td>-</td>
<td>6.6</td>
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<tr>
<td>Picea morrisonicola</td>
<td>OH643</td>
<td>14=</td>
<td>9.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Picea stichensis</td>
<td>OH673</td>
<td>-</td>
<td>6.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Picea spinulosa</td>
<td>OH645</td>
<td>10=</td>
<td>8.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

( ) indicates a score from workshop one

Notes on Picea and Abies component as assessed at workshop one.

Decisions at that time were:

1. Urgent.
   - Remove OH633
   - Obtain new stock of Abies amabilis.
   - Retain Abies numidica
   - Remove Abies wilsoni.
   - Propagate Picea obovata.

2. Action
   - Obtain new stock of Abies spectabilis var. brevifolia.
   - Obtain new stock of Abies georgiana.

3. Other
   - Remove the Douglas Fir from above Picea bicolor.
   - Remove the pine above Picea morrisonicola.
   - Remove the Douglas Fir in association with Picea spinulosa.
   - Remove the smaller Picea sutchuenensis.

....continued
The Pines: Area C

<table>
<thead>
<tr>
<th>Plant</th>
<th>Ref. no.</th>
<th>Preliminary assessment</th>
<th>Field assessment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Rank for Av. score</td>
<td>Botan. score</td>
<td>Aesth. score</td>
</tr>
<tr>
<td>Rhamnus californica</td>
<td>OH575</td>
<td>-</td>
<td>6.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Picea koyami</td>
<td>OH674</td>
<td>10=</td>
<td>9.4</td>
<td>7.4</td>
</tr>
<tr>
<td>Pinus rigida</td>
<td>OH584</td>
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<td>7.0</td>
<td>6.2</td>
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<tr>
<td>Picea orientalis</td>
<td>OH576</td>
<td>31=</td>
<td>7.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Pinus tab. yunnanensis</td>
<td>OH676</td>
<td>53=</td>
<td>7.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Pinus sp. f. argentea</td>
<td>OH675</td>
<td>-</td>
<td>6.6</td>
<td>6.8</td>
</tr>
<tr>
<td>Juniperus ‘Blauw’</td>
<td>-</td>
<td>5.0</td>
<td>5.8</td>
<td>-</td>
</tr>
<tr>
<td>Juniperus ‘Meyeri’</td>
<td>-</td>
<td>5.0</td>
<td>6.4</td>
<td>-</td>
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<tr>
<td>Pin. mon. var. uncinata</td>
<td>53=</td>
<td>7.6</td>
<td>6.8</td>
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<tr>
<td>Juniperus chinensis</td>
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<td>5.6</td>
<td>-</td>
</tr>
<tr>
<td>J. chin. ‘Pyramidalis’</td>
<td>OH664</td>
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<tr>
<td>Pinus canariensis</td>
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( ) indicates a score from workshop one
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Far end below track: Area D

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### Table 4.5.1: Workshops Three report

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<td>Prunus serr. 'Kanzan'</td>
<td>OH527</td>
<td>- 5.2 6.6 2.0 1/2</td>
<td>2.0 2.3 2.4 2.2</td>
<td>Action</td>
</tr>
<tr>
<td>Mag. kobus var. borealis</td>
<td>OH544</td>
<td>- 6.0 7.0 2.0 1/2</td>
<td>4.2 4.0 4.7 4.3</td>
<td>Exc.</td>
</tr>
<tr>
<td>Pr. cerasoides var. rubea</td>
<td>OH687</td>
<td>7 8.0 9.0 2.0 1/3</td>
<td>3.3 3.0 3.9 3.4</td>
<td>Okay</td>
</tr>
<tr>
<td>Philadelphus pubescens</td>
<td>OH548</td>
<td>- 6.4 6.6 3.5 1/1</td>
<td>3.2 3.0 2.6 2.9</td>
<td>Action</td>
</tr>
<tr>
<td>Olea europaea</td>
<td>OH657</td>
<td>- - - - 1/1</td>
<td>2.7 1.7 1.5 2.0</td>
<td>Action</td>
</tr>
<tr>
<td>Prunus serrula</td>
<td>OH551</td>
<td>36= 6.8 8.4 1.5 1/1</td>
<td>3.2 3.0 3.5 3.2</td>
<td>Okay</td>
</tr>
<tr>
<td>Prunus 'Pandorea'</td>
<td>OH531</td>
<td>- - - - 1/2</td>
<td>3.8 3.5 3.5 3.6</td>
<td>Okay</td>
</tr>
<tr>
<td>Malus 'Mammoth'</td>
<td>OH549</td>
<td>- 4.4 6.2 - 1/1</td>
<td>4.3 3.0 3.7 3.7</td>
<td>Okay</td>
</tr>
<tr>
<td>Philadelphus</td>
<td>OH656</td>
<td>- - - - 1/1</td>
<td>2.5 1.7 1.7 2.0</td>
<td>Action</td>
</tr>
<tr>
<td>Prunus serr. 'Tai Haku'</td>
<td>OH688</td>
<td>- 6.0 7.8 3.0 1/many</td>
<td>3.7 3.7 4.5 4.0</td>
<td>Exc.</td>
</tr>
<tr>
<td>Eucryphia moorei</td>
<td>OH533</td>
<td>36= 7.6 7.6 3.0 1/2</td>
<td>3.8 3.7 4.3 3.9</td>
<td>Okay</td>
</tr>
<tr>
<td>Cornus nutallii</td>
<td>OH552</td>
<td>17= 7.2 9.0 1.6 1/6</td>
<td>3.8 3.5 4.5 3.9</td>
<td>Okay</td>
</tr>
</tbody>
</table>
Appendix 7: Workshop Three report

Segment of the arboretum plan showing the location of Orchard Hill.

Orchard Hill showing the location of the areas referred to in the results. Refer to the plans in thesis appendix two for detail.
After consideration of the field exercise it was agreed that if a tree rates below 3.0 (6.0) for field scores, then it should be removed, unless the botanical rating suggests otherwise. The recommendations below have taken this consensus into consideration.

<table>
<thead>
<tr>
<th>Table 4.5.2 Results Orchard Hill exercise - Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a plant is not mentioned specifically in the recommendations then no immediate action is required.</td>
</tr>
<tr>
<td><strong>The Hollies and Abies (See area A.)</strong></td>
</tr>
<tr>
<td>Urgent action required according to field results</td>
</tr>
<tr>
<td><em>Broussonetia papyfera</em> (OH653), average of field scores 2.0</td>
</tr>
<tr>
<td>Action required according to field results</td>
</tr>
<tr>
<td><em>Ilex</em> comuta, (OH621) average of field scores 2.9</td>
</tr>
<tr>
<td><em>Ilex</em> (OH622) average of field scores 2.3</td>
</tr>
<tr>
<td><em>Ilex casine</em>, (OH623), average of field scores 2.9</td>
</tr>
<tr>
<td><em>Ilex latifolia</em>, (OH628) average of field scores 2.5</td>
</tr>
<tr>
<td>Recommendations - urgent.</td>
</tr>
<tr>
<td>1. Lift the branches of the overshadowing oak to give more light to the hollies. This should improve the situation of <em>I. latifolia</em>, (OH628).</td>
</tr>
<tr>
<td>2. Re-site the three small Hollies to a more spacious site. (OH615, 616,619). These bushes are relatively easily moved, and if left will make the current overcrowding worse.</td>
</tr>
<tr>
<td>Recommendations 0-5 years</td>
</tr>
<tr>
<td>1. Propagate and eventually remove the three centre hollies, (OH623, 622, 621). This will open out the centre of the group and give more room to the remaining plants.</td>
</tr>
<tr>
<td>2. The empty valley above the hollies should be used to replant species that need resiting from the existing group.</td>
</tr>
<tr>
<td>3. Propagate and resite the <em>Glochidion</em> (OH629).</td>
</tr>
<tr>
<td>4. Propagate <em>Broussonetia papyfera</em> (OH653), to generate another of this sex in the arboretum.</td>
</tr>
<tr>
<td>Recommendations 5-10 years</td>
</tr>
<tr>
<td>1. Propagate <em>I. platyphylfa</em> and <em>I. insignis</em> (OH626,627) to anticipate the need for eventual re-siting when they outgrow this site.</td>
</tr>
<tr>
<td>Comments</td>
</tr>
<tr>
<td>In general it was agreed that the Hollies are very healthy and are growing in an understorey situation that is suitable for this genus. However they are crowded and need to be propagated and the group as a whole given more room.</td>
</tr>
<tr>
<td><strong>The Picea group (See area B)</strong></td>
</tr>
<tr>
<td>This area was examined in 1989. It was not considered in need of further assessment as yet. Recommendations made for this area, at workshop one, are listed in table 4.5.1.</td>
</tr>
</tbody>
</table>
The Pines (See area C)

Urgent action required according to field scores

Pinus montana var. uncinata, average of field scores 0.8

Action required according to field scores

Pinus sylvestris 'Argentea' (OH675), average of field scores 2.9
Pinus nigra var. caramanica, (OH600), average of field scores 2.7
Pinus nigra var. coriscana, (OH503), average of field scores 2.8
Pinus densiflora, (OH504), average of field scores 2.4
Pinus densiflora 'Umbraculifera', (OH502), average of field scores 2.7
Pinus halepensis, (OH501), average of field scores 2.7
Pinus parviflora, (OH505), average of field scores 2.7

Recommendations - urgent

1. Remove Pinus montana var. uncinata.

2. Propagate Rhamnus califomica (OH575), in anticipation of removing it from its current position which blocks the track.

Recommendations 0-5 years.

1. Actions for complete removal of the species.
   (i) Remove, without replacement, Pinus montana var. uncinata, and Pinus densiflora (OH504).
   (ii) Remove from the upper slope Juniperus x media 'Blaauw', Juniperus squamata 'Meyeri', Juniperus chinensis, and Juniperus chinensis 'Pyramidalis'.

2. Actions for eventual replacement of the species, but removal of the existing specimen.
   (i) Propagate, for replacement, Pinus tabuliformis (OH577), Pinus densiflora 'Umbraculifera' (OH502).
   Remove existing specimens once propagating material is established.

3. Actions needed on species to be retained
   (i) Propagate Pinus koraiensis (OH580) to generate a better example as the existing tree has lost its top.
   (ii) Propagate, or obtain new stock of, Pinus sylvestris 'Argentea' (OH675) for eventual replacement, as the existing specimen is a poor example.
   (iii) Undertake cleanup arboricultural work on Pinus nigra var. corsicana (OH503), Pinus nigra var. caramanica (OH600).

Far end below track (See area D)

Urgent action required according to field scores

Chamaecyparis lawsoniana 'Naberi', (OH662) average of field scores 0.8
Picea, (OH682) average of field scores 1.5
Juniperus 'Meyeri', average of field scores 1.9
Metasequoia glyptostroboides, average of field scores 1.9

Action required according to field scores

Ligustrum lucidum, (OH586), average of field scores 2.9

......continued
Ligustrum sinensis, (OH585), average of field scores 2.9
Aesculus hippocastanum 'Pumilum', (OH573), average of field scores 2.2
Crataegus missouriensis, (OH602), average of field scores 2.0
Photinia villosa var. laevis, (OH606), average of field scores 2.5
Berberis species

Recommendations - urgent
1. Send propagating material of Chamaecyparis lawsoniana 'Naberi' (OH662) to Sampsons in New Plymouth and then remove the tree.
2. Remove Juniperus 'Meyeri'.
3. Propagate and resite Crataegus missouriensis (OH602).
4. Propagate, for eventual re-siting, all other Crataegus species.
5. Propagate the unknown Picea (OH682).
6. Propagate all Berberis in anticipation of eventual removal. (This action has already been taken.)

Recommendations 0-5 years.
1. Remove Ligustrum lucidum (OH586), Ligustrum sinensis (OH585), and seedling Gleditsia.
2. Propagate Ligustrum confusum (OH592), and then remove when new material is established.
3. Propagate and resite Aesculus hippocastanum 'Pumilum' (OH573), and Photinia villosa var. laevis (OH606).
4. Repair weak crotch on Gleditsia triacanthos (OH595).
5. Take action over Metasequoia glyptostroboides.
6. Remove Berberis and Crataegus when new material is established.
7. Undertake arboricultural work on Betula platyphylla var. japonica (OH677), to improve structure.
8. Remove the Ginkgo.

Between the tracks - lower portion (See area E)
Urgent action required according to field scores

Dichotomanthes tristaniicarpa, (OH647), average of field scores 1.8
Fagus grandifolia, (OH567), average of field scores 1.9
Emmenopterys henryi, average of field scores 1.3

Action required according to field scores

Prunus serrulata 'Hisakura', (OH683), average of field scores 2.1
Fagus lucida, (OH570), average of field scores 2.7
Azara integrifolia, (OH650), average of field scores 2.5
Prunus campanulata Formosa form, (OH559), average of field scores 2.4

Recommendations - urgent
1. Propagate Dichotomanthes tristaniicarpa (OH647), Fagus grandifolia (OH567), Fagus lucida (OH570), Prunus campanulata 'Formosa form' (OH559), Azara integrifolia (OH650).
2. Remove Emmenopterys henryi.

....continued
Appendix 7: Workshop Three report

Recommendations 0-5 years

1. Re-site new material of those propagated in 1 above.
2. Propagate *Acer henryi* (OH556), to generate another female plant at the arboretum.
3. Monitor the state of *Acer henryi* as its health rating falls below the acceptable limit.
4. Remove *Prunus serrulata* 'Hisakura' (OH683), as it scores below the agreed limit.
5. Investigate the possible removal of *Magnolia kobus* (OH649), as it rates below the acceptable limit for both 'example of species', and 'contribution to scene'.

Comments

A number of issues were raised in relation to this area and the following area. Comments applying to both are included after the next section.

Between the tracks upper (See area F)

Urgent action required according to field scores

- *Prunus campanulata* 'Plena', (OH546), average of field scores 1.4
- *Malus* 'Gibbs Golden Gem', (OH524), average of field scores 1.9
- *Arbutus unedo*, (OH506), average of field scores 1.7
- *Prunus subhirtella* 'Fukubana', (OH508), average of field scores 0.7
- *Prunus subhirtella* 'Ascendens', (OH513), average of field scores 1.8
- *Parasyringa sempervirens*, (OH542), average of field scores 1.9

Action required according to field scores

- *Malus spectabilis* 'Flore Plena', (OH523), average of field scores 2.3
- *Malus* 'Red Tip', (OH522), average of field scores 2.0
- *Malus glaucescens*, (OH519), average of field scores 2.1
- *Malus sylvarii*, (OH517), average of field scores 2.7
- *Malus prunifolia* 'Fastigiata', (OH518), average of field scores 2.0
- *Ligustrum sinensis*, (OH651), average of field scores 2.5
- *Prunus yedoensis hybrid*, (OH511), average of field scores 2.5
- *Prunus serrulata* 'Asano', (OH507), average of field scores 2.6
- *Prunus dulcis* 'IXL', (OH521), average of field scores 2.1
- *Olea verrucosa*, (OH537), average of field scores 2.7
- *Prunus dulcis* 'Monovale', (OH525), average of field scores 2.1
- *Prunus serrulata* 'Kanzan', (OH527), average of field scores 2.2
- *Philadelphus pubescens*, (OH548), average of field scores 2.9
- *Olea europaea*, (OH657), average of field scores 2.0
- *Philadelphus*, (OH656), average of field scores 2.0

Recommendations - urgent

1. Propagate *Prunus campanulata* 'Plena', *Parasyringa sempervirens*, *Malus* 'Gibbs Golden Gem', *Prunus subhirtella* 'Fukubana'. Hold for possible replanting. .....continued
Appendix 7: Workshop Three report

2. Propagate all other Malus and Prunus listed above for action or urgent action.
3. Propagate for re-siting, both Philadelphus.

Recommendations 0-5 years.
1. Propagate, or obtain new stock of, those plants which while not below the acceptable average score at present, do have one field rating below 3.0. This includes Prunus subhirtella ‘Pendula’, Prunus x juddii, and Crataegus OH543.
2. The committee should undertake a reselection of Prunus and Malus species to generate an approved list of these genera to be used on Orchard Hill.
3. The approved list should be used to generate a replanting plan for Prunus and Malus.
4. Gradually remove selected old Prunus and Malus specimens, and replant with newly chosen material according to the approved list.

Recommendation: That the plan of action for Orchard Hill, outlined in table 4.5.2 be implemented.

4.6 Park evaluation - discussion

Some discussion ensued on the way in which Orchard Hill should be treated. The two areas between the tracks, which contain a large body of Prunus and Malus, were the focus of this discussion.

On the visual qualities of the Hill it was agreed that spring blossom is most important to the character of the park. Although many of the existing trees must be removed because they are at the end of their life, it is important that this element be returned. Generally the Hill is a high impact viewing area, especially from the main lawn, and this should be taken to its full potential. Mr Clapperton suggested that the park had both spring blossom and autumn colour highlights.

On the composition of this part of the Hill the following points were raised. It was agreed that the Malus and Prunus were most important to the flowering composition. Mr Cave and Mr McKean favoured a trend towards more Magnolia planting because 1) this moves towards Douglas Cook’s objective of a Magnolia area, and 2) while Malus are attractive in flower, they are not particularly aesthetic when not in flower, Magnolia is a superior genus in this regard. Mr Sykes suggested that the P.serrulata cultivars were of low importance to the hill, and that generally they should be removed and the flowering character be replaced with something else.

It was generally agreed that a major clean-up is required through the Malus and Prunus genera on Orchard Hill. The species of these genera should then be reselected to achieve best results for both the botanical aspects of the collection and its visual impact in this park.

It was also agreed that once the clean-up and reselection process is complete, that a slightly different planting arrangement should be made. At present permanent elements tend to be at the top of the Hill, with transitory elements lower down. Similarly those of high visual impact tend to be on the lower portion, with few highlights amongst the evergreen belt higher up. The effect of this situation is that Orchard Hill has two distinct bands, one evergreen and permanent, the other deciduous and transitory. Ideally this situation needs to be rectified in the long term development of the park. Therefore, when replanting of Prunus, Malus and
Magnolia is done these elements should be interlaced into the plantings high on the Hill as well as moving further down the Hill. Thus both autumn colour and spring blossom highlights will occur more evenly over the whole of the vista.

**Recommendation:** That the general identity of Orchard Hill should be retained, i.e. Spring blossom featuring *Malus, Prunus, and Magnolia*, with coniferous background of *Picea, Abies and Pinus*.

**Recommendation:** That after recommended trees have been removed from the park a reconsideration of the plantings should be done.

**Recommendation:** That the renovated planting scheme should feature: (i) spring display and autumn colour highlights, (ii) a range of high impact *Prunus and Malus* types, (iii) *Prunus* types that tend towards species rather than cultivars.

**Recommendation:** That a proposal for the reselected *Prunus* and *Malus* species be brought to the committee at its next meeting for consideration.

### 4.7 Conclusion

The key problems on Orchard Hill are those associated with the *Prunus and Malus* types on the Hill, and their present degeneration due to old age. Associated with this is the need to better organise the permanent and transitory elements of the Hill, and to improve the visual effect of the display plantings by blending these further up the Hill.

The recommendations in this report call for the removal of the least important and poorest quality plants, and a major reconsideration of the arrangement of transitory plantings on the Hill. Subsequent workshops will deliberate on the proposed new plant list for these plantings, and the arrangement thereof.

**Summary of recommendations**

That the development of Orchard Hill should follow the themes outlined in section 4.3.

That the plan of action for Orchard Hill, outlined in table 4.5.2 be implemented.

That the general identity of Orchard Hill should be retained, i.e. Spring blossom featuring *Malus, Prunus, and Magnolia*, with coniferous background of *Picea, Abies and Pinus*.

That after recommended trees have been removed from the park a reconsideration of the plantings should be done.

That the renovated planting scheme should feature: (i) Spring display and autumn colour highlights, (ii) A range of high impact *Malus and Prunus* types, (iii) *Prunus* types should tend towards species rather than cultivars.

That a proposal for the reselected *Prunus* and *Malus* species be brought to the committee for consideration at its next meeting.
SECTION FIVE: Basinhead

5.1 Aim
To resolve management problems at Basinhead. This consideration is subsequent to an initial investigation of this area at the second workshop.

5.2 Background information
Basinhead is a small area within Douglas Park and is on the main thoroughfare when on Douglas Cook walk. It is a small basin with a flat centre surrounded by small ridges and open at the south end. The plantings are set around the perimeter of what was, prior to 1985, a small pond. In 1985 a severe rainstorm set in motion a deep slip on the farmland above Basinhead which resulted in the pond being completely filled in, the basin being covered in 1-2m of clay and several trees being surrounded by slip debris. A number of trees died as a result of this inundation. This, and the loss of the pond, have reduced the visual appeal of the area making improvement necessary. (Readers of this thesis are referred to plan 6 of thesis Appendix Two for a map of the area.)

At the second workshop an initial examination of this area was made. At this time important features of the area were identified and a number of ideas for the renovation of the area were put forward. The important features identified were:

1. An important physical feature was the ridge on the western side that separates Basinhead from the adjacent area. This is an open slope with scattered Eucalyptus leucocylon ‘Rosea’. This piece of ground was considered very visually appealing and should be enhanced.

2. A example of Pinus durangensis at the lower end of Basinhead is an important specimen tree (Later identified as P. montezume). Equally, the specimen of Populus deltoides ‘Carolin’ at the upper end of Basinhead is an important example.

3. Other plantings of note include a fine white trunked birch, (species unknown), several blue atlas cedar, Acer macrophyllum, and a bunya pine which is recovering from top loss. A series of poplars, (identity not confirmed), run along the fence line at the back of Basinhead.

4. A number of more transitory elements are included in the planting. There are some Prunus, (plums peaches and cherries), and a selection of lilacs.

The ideas put forward at the second workshop for renovation of Basinhead were:

1. With respect to the sloping ridge with the Eucalyptus:
   - Leave the area alone but remove the poorer trees.
   - Underplant with shrubby material.
   - Install a low planting across the lower slope, and remove the poorer trees.
   - Enhance the ridge top by selectively pruning up the douglas fir, thereby emphasizing the smooth ridge top.

2. With respect to the basin itself:
   - The area is important as an open space, of which there are few in this part of the Arboretum.
   - The margins of the basin appear suitable for mollis azaleas, a planting of azalea about the margin of the basin would enhance the spring display.
   - The central grassy area should be smoothed off.
3. With respect to the view through the basin to the farmland beyond:
   • The fenceline across the rear of Basinhead should be planted with small material in order to hide the fence, but allow for the view into the hillside beyond.

4. With respect to plant material:
   • *Populus deltoides* 'Carolin' should be pruned of broken branches, but otherwise be left as is.
   • The various flowering plum cultivars be removed, along with the dying conifers, to give a better view of the poplar.
   • The planting along the Pepper flat side of the basin be rearranged in order to take better advantage of microclimate. At present many smaller plants are heavily overshadowed by larger plants along the side of the track, relocating the smaller plants into the edge of the basin (rather than along the track) would ensure better growth and display.
   • The yellow plum be removed
   • The cherries along the track should be repropagated

It was agreed at the second workshop that a full assessment of the area should be carried out. The results of this assessment should be used in combination with the ideas outlined above to resolve development issues for Basinhead.

Botanical and aesthetic assessment of the plants in Basinhead can be found in Appendix Tables 5.2-5.4. The most botanically important species was *Zelkova cretica*, with *Acer macrophyllum* and *Fraxinus latifolia* also rating highly. Aesthetically, the *Prunus* species were important. *Araucaria bidwillii* was, on average, the most important plant in Basinhead. *Populus deltoides* 'Carolin' did not rank for either botanical or aesthetic score. While this is notable given the high visual impact of the tree, it is also notable because the cut-off point for significance was lowered to 6.0, whereas normally it is 7.0. (This was done due to the comparatively low scores for this assessment.)

Permanent and transitory elements were examined. Permanent and transitory elements are as defined in section four for the Orchard Hill exercise. For Basinhead permanent elements were decided to be *Abies, Acer, Araucaria, Cedrus, Fraxinus, Pimus, Quercus, Zelkova (?)*. Transitory elements were *Alnus, Betula, Forsythia, Populus, Prunus, Pyrus, Syringa*. Using this definition it is now apparent that Basinhead is largely composed of transitory elements. There are a few permanent elements around the edge of the track, but generally these are few in number. The lack of permanent trees is a serious problem in that the area will be rendered practically empty once all the short lived material dies. On the other hand, this very fact, if well planned for, presents a useful opportunity for the renovation of Basinhead.

There is no specific information on Douglas Cook's intentions for Basinhead. Mr Gordon reported at the second workshop that it was his understanding that this area should be the site of a lilac cultivar collection. This collection was installed, and the remnants of it are still present, however Eastwoodhill is not generally suitable for *Syringa vulgaris* and the specimens have mostly died out. No other information on Basinhead is known.
5.3 Field exercise
Having considered the background information the field exercise was conducted. Each tree was examined for 'health', 'example of species', and 'contribution to scene'. Rating scales for field assessment can be found in Appendix Three.

5.4 Results
The results of the field exercise can be found in table 5.4.1. The recommendations from the field exercise can be found in table 5.4.2. As a general rule it was agreed that it was necessary to provide space for high scoring species. Species that are repeated elsewhere should be given lower priority. Actions are outlined below, according to the field scores given for each plant. Combination of this information, and the suggestions from the second workshop, are discussed in the discussion section.

5.5 Discussion
The results of the field assessment for plants in Basinhead support the ideas put forward in the second workshop in all respects but one. Assessment supports the retention of the *Prunus cerasifera var. diversifolia*, rather than its removal as previously suggested. None of the other ideas previously put forward are at variance with the assessment results.

A number of plants within the Basinhead area have been targeted for immediate removal. Others have been tagged for propagation and then removal. Once these actions have been undertaken the rearrangement of the area can be started. It is apparent that the notion of spring display will play an important role in Basinhead. The number of *Prunus* already present in the area, plus the previous comments of the committee on spring display, support this direction. The *Prunus*, and other spring flowering elements are an important inclusion for this area.

In planning the rearrangement of Basinhead it is important that the distribution of permanent elements is carefully considered. Similarly, in the absence of any statement of firm objectives by Douglas Cook, objectives for the development of this area must be clearly elucidated.

5.6 Conclusion
The assessment of the plant material in Basinhead indicates which plants should be either removed or propagated and re-sited in the immediate future. The present arrangement of Basinhead clearly needs renovation, given the high quantity of transitory material, and the difficulties caused by the slip in 1985. A plan for redevelopment should be initiated once the action from this exercise have been carried out.

**Recommendation:** That the plan of action for Basinhead, as outlined in table 5.4.2, be implemented.

**Recommendation:** That a plan for the redevelopment of Basinhead, which takes account of the arrangement of permanent and transitory elements, and spring display, be undertaken.
### Table 5.4.1: Preliminary and field assessment of plants in Basinhead

<table>
<thead>
<tr>
<th>Plant</th>
<th>Ref. no.</th>
<th>Preliminary assessment</th>
<th>Field assessment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rank</strong></td>
<td><strong>Botan.</strong></td>
<td><strong>Aesth.</strong></td>
<td><strong>Status at EWH</strong></td>
<td><strong>Health</strong></td>
</tr>
<tr>
<td>Abies pinsapo 1st</td>
<td>BH33</td>
<td>9= 6.0 6.8 1/many</td>
<td>4.6 2.2 4.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Abies pinsapo 2nd</td>
<td>BH34</td>
<td>9= 6.0 6.8 1/many</td>
<td>4.3 3.0 3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Abies pinsapo 3rd</td>
<td>BH35</td>
<td>9= 6.0 6.8 1/many</td>
<td>4.5 3.8 3.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Abies pinsapo 4th</td>
<td>BH36</td>
<td>9= 6.0 6.8 1/many</td>
<td>3.8 3.0 3.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Acer buergerianum 1st</td>
<td>BH43</td>
<td>- 6.2 6.4 1/many</td>
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### Plant Ref Preliminary assessment | Field assessment | Status
---|---|---
| Ref. no. | | |
| | Rank for Av. score | Botan. score | Aesth. score | Status at EWH | Health | Example of species | Scene | Field average |
| | | | | | | |
| Prunus x bleirana | BH54 | - | 5.8 | 7.0 | 1/many | 3.0 | 2.3 | 2.2 | 2.5 | Action |
| Pr. cerasif. diversifolia | BH37 | - | 4.8 | 5.0 | 1/many | 3.8 | 3.3 | 2.8 | 3.3 | Okay |
| Pr. cerasif. 'Pissardi' | BH51 | - | 5.4 | 6.0 | 1/many | 3.2 | 2.0 | 2.5 | 2.6 | Action |
| Pr. cerasif. 'Thundercl.' | BH50 | - | - | - | - | 2.7 | 2.3 | 2.6 | 2.5 | Action |
| Prunus mume ‘Dawn’ | BH42 | - | 5.8 | 6.8 | 1/2 | 3.4 | 3.3 | 3.7 | 3.5 | Okay |
| Pr. mume ‘Peggy Clark’ | BH26 | 14= | 5.8 | 7.2 | 1/2 | 3.3 | 2.8 | 3.1 | 3.1 | Okay |
| Pr. mume ‘The Geisha’ | BH24 | 14= | 5.8 | 7.2 | 1/2 | 2.3 | 2.0 | 1.6 | 2.0 | Urgent |
| Fr. pers. ‘Helen Borcher’ | BH13 | - | 5.2 | 7.2 | 1/2 | 2.0 | 2.0 | 1.7 | 1.9 | Urgent |
| Prunus serr. ‘AshiBotan’ | BH40 | - | 5.4 | 7.2 | 1/2 | 3.6 | 2.8 | 3.5 | 3.3 | Okay |
| Prunus serr. ‘Kanzan’ | BH61 | 9= | 5.4 | 8.0 | 1/many | 3.5 | 3.0 | 3.8 | 3.4 | Okay |
| Prunus serr. ‘Kofugen’ | BH62 | - | 5.4 | 7.2 | 1/2 | 3.8 | 2.0 | 3.3 | 3.0 | Okay |
| Prunus serr. ‘Mt Fuji’ | BH38 | 14= | 5.4 | 7.6 | 1/many | 3.5 | 3.0 | 2.3 | 2.9 | Action |
| Pr.serr. ‘Rosea FlorePl’ | BH27 | - | - | - | - | 3.4 | 3.3 | 3.4 | 3.4 | Okay |
| Pr. sorr. ‘YedoZakura’ | BH39 | - | 5.4 | 7.2 | 1/2 | 2.8 | 2.8 | 2.3 | 2.6 | Action |
| Prunus serr. ‘Yukon’ | BH44 | 14= | 5.4 | 7.6 | 1/2 | 3.5 | 2.8 | 2.8 | 3.0 | Okay |
| Prunus serr. ‘Yukon’ | BH46 | 14= | 5.4 | 7.6 | 1/2 | 3.0 | 3.3 | 2.9 | 3.1 | Okay |
| Pyrus pashia | BH14 | - | 6.2 | 6.4 | 1/many | 4.5 | 4.0 | 4.0 | 4.2 | Exc. |
| Pyrus pashia | BH15 | - | 6.2 | 6.4 | 1/many | 4.1 | 3.0 | 3.2 | 3.4 | Exc. |
| Pyrus pashia | BH16 | - | 6.2 | 6.4 | 1/many | 4.0 | 3.5 | 3.6 | 3.8 | Okay |
| Stachyurus praecox | 8 | 6.2 | 7.4 | 1/2 | 1.5 | 1.3 | 1.3 | 1.4 | Urgent |
| Syringa ‘Buffon’ | - | 5.4 | 7.0 | 1/1 | 3.5 | - | 2.5 | - | - |
| Syringa ‘Edith Cavell’ | - | 5.4 | 7.4 | 1/1 | 2.5 | - | 3.0 | - | - |
| Syringa ‘Mme Lemonie’ | 14= | 5.8 | 7.2 | 1/1 | - | - | - | - | - |
| Syr. ‘Sv. AliceHarding’ | 14= | 5.8 | 7.2 | 1/1 | - | - | - | - | - |
| Viburnum ‘Bodnant’ | 4= | 6.2 | 7.8 | 1/2 | 2.0 | 1.5 | 1.2 | 1.6 | Urgent |
| Zelkova cretica | BH3 | 14= | 7.8 | 5.2 | 1/1 | 3.8 | 2.8 | 3.4 | 3.3 | Okay |

Table 5.4.2: Recommendations from field exercise for Basinhead

**Recommendations - urgent**

1. Propagate, for eventual resiting, *Buddleia alternifolia* (BH1).
2. *Fraxinus latifolia* (BH6,47,49). Grow seed from the tree to produce rootstock, then graft. Eventually remove. In the meantime prune out dead and dangerous wood to preserve the specimen while waiting for new material to come on.
3. Propagate, for eventual removal and resiting, *Stachyurus praecox, Viburnum ‘Bodnant’, and the three Forsythia*. These species to be replanted along the lower side of the planting where they will get more sun.
4. Propagate and remove *Prunus mume* ‘The Geisha’ (BH24), and *Prunus persica* ‘Helen Borcher’ (BH31,32).
Appendix 7: Workshop Three report

Recommendations 0-5 years

1. *Pyrus pashia* (BH15) to be removed.
2. *Pyrus pashia* (BH16) to be reshaped after the removal of BH15.
3. Remove 2nd *Acer buergerianum* (BH45).
4. Reduce the cluster of *Prunus cerasifera var. diversifolia* (BH37), to one plant.
5. Remove *Magnolia kobus* (BH9).
6. *Grevillea robusta* nearest *Araucaria* should be removed to allow more room for the *Araucaria*.
7. Remove *Chamaecyparis pisifera* ‘Plumosa’ (BH20) and *Chamaecyparis pisifera* ‘Squarrosa’ (BH21). Leave *Chamaecyparis pisifera* ‘Squarrosa’ (BH22) until it begins to encroach on the *Araucaria*, and then remove it.
8. Propagate or obtain new stock of *Betula ermannii* (BH41).
9. Remove *Prunus cerasifera* ‘Thundercloud’ (BH50), *Prunus cerasifera* ‘Pissardi’ (BH51), and *Prunus* ‘Bleirana’ (BH54).
11. Propagate for eventual removal, all *Syringa* cultivars.
12. Propagate, for eventual re-siting, all *Prunus serrulata* cultivars.

Comments

1. *Prunus serrulata* ‘Mt Fuji’ is in need of action, however its situation should improve with the thinning of the adjacent *Prunus cerasifera var. diversifolia*.
2. Discussion was held on the possible removal of one or two of the *Cedrus atlantica f. glauca* in favour of the poplar at the back. Consensus was not reached. Field scores show all three *Cedrus* to have a total that is ‘okay’ and requires no action.
3. Discussion was held on the removal of all the *Prunus* except the *P. serrulata* types. This has only been recommended where the field ratings required some action to be taken.
4. *Syringa* cultivars were generally not rated by participants in the field exercise. The recommendation above is based on the increasing age of the plants in question.
5. The *Acer negundo* form, (BH5), is a three foliate form that is not typical. The type exists in two other trees at the Arboretum, neither of which is healthy. The strain should be retained through one of the other trees, or by propagation.
SECTION SIX: Conclusions

At the end of the workshop a concluding discussion was held. The business of the workshop over the previous two days was reconfirmed. Two other matters were raised.

6.1 Information

It was agreed that where a workshop member provided information relevant to the functioning of the workshop, it should be included in the official documents.

6.2 Next workshop

It was agreed that the next workshop should be timed so that decisions made could be implemented that season. It was proposed that the meeting be regularly held in March of any one year. The possibility of a second meeting should be considered. The fourth workshop should comprise one day on the development of the new area, and one day on the review of a park and/or genus. Specific issues that should be raised at the fourth workshop are:

- Cabin Park, Black Forest.
- A genus study, probably *Quercus*.
- Orchard Hill proposals for *Malus* and *Prunus* reselection.
- Basinhead proposals for new concepts
- New area, deliberations on initial concepts as proposed by the subgroup working on this issue.

**Recommendation:** That the fourth workshop be held in March 1992.

**Recommendation:** That the fourth workshop address issues such as suggested in section 6.2.
APPENDIX ONE: Programme

Programme for the third Eastwoodhill Arboretum workshop
To be held at Eastwoodhill on 16-17 March 1991

Saturday 16 March

8.30am Welcome
8.45-9.45 Introduction and review
   Issues from previous reports
   Progress reports
   Update on Gondwana
10.15-12.15 Key genus study - Acer
   Introduction
   Field exercise

1.15-2.15 Key genus study - Acer
   Discussion and conclusion
2.45-5.00 New developments - new area
5.00 Viewing of Douglas Cook Centre for Education

Sunday 17 March

8.30-10.30 Park Management - Orchard Hill
   Introduction
   Field exercise
11.30-12.30 Park Management - Orchard Hill
   Discussion

1.30-2.30 Basinhead exercise
2.30-3.30 Black Forest walk
3.30-4.30 Issues and conclusions
APPENDIX TWO: Tables referred to in the text

SECTION TWO: ACER

Table 2.1: Preliminary assessment for the genus Acer

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<tr>
<td><em>Acer henryi</em></td>
<td>8.7</td>
<td>17=</td>
</tr>
<tr>
<td><em>Acer cappadocicum f. tricaudatum</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer cissifolium</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td>*Acer mono var. <em>mayrii</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer erianthum</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer platanoidea</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer sempervirens</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer triflorum</em></td>
<td>8.6</td>
<td>22=</td>
</tr>
<tr>
<td><em>Acer campbellii</em></td>
<td>8.5</td>
<td>29=</td>
</tr>
<tr>
<td><em>Acer macrophyllum</em></td>
<td>8.5</td>
<td>29=</td>
</tr>
<tr>
<td><em>Acer caesium</em></td>
<td>8.5</td>
<td>29=</td>
</tr>
<tr>
<td><em>Acer griseum</em></td>
<td>8.5</td>
<td>29=</td>
</tr>
<tr>
<td><em>Acer carpinifolium</em></td>
<td>8.4</td>
<td>33=</td>
</tr>
<tr>
<td><em>Acer miyabei</em></td>
<td>8.4</td>
<td>33=</td>
</tr>
<tr>
<td><em>Acer sieboldianum</em></td>
<td>8.4</td>
<td>33=</td>
</tr>
<tr>
<td><em>Acer hycanum</em></td>
<td>8.4</td>
<td>33=</td>
</tr>
<tr>
<td><em>Acer cappadocicum sp. divergens</em></td>
<td>8.3</td>
<td>37</td>
</tr>
<tr>
<td><em>Acer davidii</em> ‘George Forrest’</td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer rufinerve</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer spicatum</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer hookeri</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer cappadocicum sp. lobelii</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer glabrum</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer mono</em></td>
<td>8.2</td>
<td>38=</td>
</tr>
<tr>
<td><em>Acer amplum</em></td>
<td>8.1</td>
<td>45=</td>
</tr>
<tr>
<td><em>Acer wilsoni</em></td>
<td>8.1</td>
<td>45=</td>
</tr>
<tr>
<td><em>Acer diabolicum f. purpureascens</em></td>
<td>8.0</td>
<td>47=</td>
</tr>
<tr>
<td><em>Acer japonicum</em></td>
<td>8.0</td>
<td>47=</td>
</tr>
<tr>
<td><em>Acer saccharum</em></td>
<td>8.0</td>
<td>47=</td>
</tr>
<tr>
<td><em>Acer saccharum</em> Arnold form</td>
<td>8.0</td>
<td>47=</td>
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</table>
### Table 2A: Ranking of Acer for aesthetic score

<table>
<thead>
<tr>
<th>Species</th>
<th>Aesthetic score</th>
<th>Rank</th>
<th>Species</th>
<th>Aesthetic score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer mono var. mayrii</td>
<td>10.0</td>
<td>1</td>
<td>Acer davidiis</td>
<td>8.3</td>
<td>41–</td>
</tr>
<tr>
<td>Acer griseum</td>
<td>9.7</td>
<td>2</td>
<td>Acer japonicum ‘Aureum’</td>
<td>8.3</td>
<td>41–</td>
</tr>
<tr>
<td>Acer palmatum ‘Osakasuki’</td>
<td>9.5</td>
<td>3–</td>
<td>Acer caudatifolium</td>
<td>8.3</td>
<td>41–</td>
</tr>
<tr>
<td>Acer serrulatum</td>
<td>9.5</td>
<td>3–</td>
<td>Acer saccharinum</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer pseudosieboldianum</td>
<td>9.4</td>
<td>5</td>
<td>Acer saccharinum ‘Laciniatum’</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer nikoense</td>
<td>9.2</td>
<td>6</td>
<td>Acer palmatum ‘Lutescens’</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer corticofolium</td>
<td>9.0</td>
<td>7–</td>
<td>Acer rubrum</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer henryi</td>
<td>9.0</td>
<td>7–</td>
<td>Acer platanoides ‘Schwedleri’</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer pentaphyllum</td>
<td>9.0</td>
<td>7–</td>
<td>Acer paixii</td>
<td>8.2</td>
<td>47–</td>
</tr>
<tr>
<td>Acer rubrum ‘Brilliant’</td>
<td>9.0</td>
<td>7–</td>
<td>Acer carpophiloide</td>
<td>8.1</td>
<td>54–</td>
</tr>
<tr>
<td>Acer ruinerve f. albolimbatae</td>
<td>9.0</td>
<td>7–</td>
<td>Acer forrestii</td>
<td>8.1</td>
<td>54–</td>
</tr>
<tr>
<td>Acer sikkimense</td>
<td>9.0</td>
<td>7–</td>
<td>Acer palmatum ‘Crips’i</td>
<td>8.1</td>
<td>54–</td>
</tr>
<tr>
<td>Acer tegmentosum</td>
<td>9.0</td>
<td>7–</td>
<td>Acer pseud. ‘Prince Handjerg’</td>
<td>8.1</td>
<td>54–</td>
</tr>
<tr>
<td>Acer palm. ‘Dissectum Atropurpureum’</td>
<td>8.9</td>
<td>14–</td>
<td>Acer pseudoplatales ‘Worleli’</td>
<td>8.1</td>
<td>54–</td>
</tr>
<tr>
<td>Acer platanoides ‘Goldsworth Purple’</td>
<td>8.9</td>
<td>14–</td>
<td>Acer cappadocicum ‘Rubrum’</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Sango Kaku’</td>
<td>8.9</td>
<td>14–</td>
<td>Acer cappad. ssp. divergens</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Septemlub Rubr’</td>
<td>8.8</td>
<td>17–</td>
<td>Acer cappad. f. tricadatum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer hookeri</td>
<td>8.8</td>
<td>17–</td>
<td>Acer cissifolium</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer japonicum</td>
<td>8.8</td>
<td>17–</td>
<td>Acer laxiflorum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer platanoides ‘Crimson King’</td>
<td>8.8</td>
<td>17–</td>
<td>Acer palmatum var. coreanum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer cappadocicum var. sinicum</td>
<td>8.7</td>
<td>21–</td>
<td>Acer palmatum ‘Koshimino’</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Dissectum’</td>
<td>8.7</td>
<td>21–</td>
<td>Acer palmatum ‘Seigan’</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Atropurpureum’</td>
<td>8.7</td>
<td>21–</td>
<td>Acer plat. ‘Reitenbachii’</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer pseudovinicium ‘Erythrocarpum’</td>
<td>8.7</td>
<td>21–</td>
<td>Acer plat. sp. turkestanicum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer saccharinum Arnold form</td>
<td>8.7</td>
<td>21–</td>
<td>Acer pseudosieb. var. takesimense</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum</td>
<td>8.6</td>
<td>26–</td>
<td>Acer spicatum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Shishigashira’</td>
<td>8.6</td>
<td>26–</td>
<td>Acer sterculiaceum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Rubrum’</td>
<td>8.6</td>
<td>26–</td>
<td>Acer truncatum</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer davidii ‘George Forrest’</td>
<td>8.5</td>
<td>29–</td>
<td>Acer diabolicum f. purpurescens</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer diabolicum f. purpurescens</td>
<td>8.5</td>
<td>29–</td>
<td>Acer palmatum ‘Hillieri’</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer palmatum ‘Nigrum’</td>
<td>8.5</td>
<td>29–</td>
<td>Acer palmatum ‘Oshio Beni’</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer palmatum ‘Oshto Beni’</td>
<td>8.5</td>
<td>29–</td>
<td>Acer palm. ‘Septemlub Superb’</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer rubrum ‘October Glory’</td>
<td>8.5</td>
<td>29–</td>
<td>Acer negundo var. violaceum</td>
<td>8.4</td>
<td>36–</td>
</tr>
<tr>
<td>Acer palmatum ‘Septemlub’</td>
<td>8.4</td>
<td>36–</td>
<td>Acer palmatum ‘Septemlub’</td>
<td>8.4</td>
<td>36–</td>
</tr>
<tr>
<td>Acer triflora</td>
<td>8.4</td>
<td>36–</td>
<td>Acer davidii ‘George Forrest’</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer japonicum ‘Vitifolium’</td>
<td>8.4</td>
<td>36–</td>
<td>Acer diabolicum f. purpurescens</td>
<td>8.5</td>
<td>29–</td>
</tr>
<tr>
<td>Acer platanoides ‘Palmatifidum’</td>
<td>8.4</td>
<td>36–</td>
<td>Acer ginnala</td>
<td>8.3</td>
<td>41–</td>
</tr>
<tr>
<td>Acer grosseri var. hersi</td>
<td>8.3</td>
<td>41–</td>
<td>Acer palmatum ‘Koshimino’</td>
<td>8.0</td>
<td>59–</td>
</tr>
<tr>
<td>Acer palmatum ‘Koshimino’</td>
<td>8.0</td>
<td>59–</td>
<td>Acer palmatum var. coreanum</td>
<td>8.0</td>
<td>59–</td>
</tr>
</tbody>
</table>

**Note:** Rank indicates the position in the aesthetic score ranking.
Table 2.5 List of current species and cultivars at Eastwoodhill.
Current list of species can be found in Table 2.1, {and in thesis Appendix One}.

Table 2.6: List of Acer species previously held at Eastwoodhill

{Sources of these previous plants can be found in thesis Appendix Three, the previous collection.}

Acer palmatum 'Dissectum Flavescens'
Acer distylum
Acer divergens quinquelandum ?
Acer hersii sp1183
Acer hookerianum hillier ?
Acer laevigatum
Acer palmatum 'Lutescens'
Acer mandshuricum
Acer maximowiczii
Acer micranthum
Acer negundo 'Albo Variegatum'
   'Aureo Variegata'
   'Crispum'
   'Elegantissimum'
Acer oblongum
Acer omansoni
Acer palmatum
   'Bicolor'
   'Dissectum Rubrum'
   'Dissectum Washi-mo-o'
   'Elegans Purpurea'
   'Luteum'
   'Nigricans'
   'Roseum'
   'Sanguineum Chishio'
   'Sanguineum Seigan'
   'Septemlobum Atropurpureum'
   'Septemlobum Elegans Purpureum'
   'Swaminagashi'
   'Tsumigaki'
Acer pseudoplatanus
   f. purpureum spathii
   reticulatum
   violaceum
Acer purpureascens
Acer quinquelandum
Acer x rotundilobum
Acer saccharum ssp. schneckii.
Acer sikkimense
Acer syriacum
Acer tarongense
Acer tartaricum
Acer tenellum

Table 2.7: Other species of Acer held in IDS collections

Acer circinatum x palmatum
Acer franchetti
Acer micranthum
Acer nikoense x griseum
Acer ningapense
Acer palmatum several varieties
Acer platanoides 'Lacinatum'
Acer platanoides 'Rubrum'
Acer platanoides 'Waldereeii'
Acer pseudoplatanus 'Prince Handjerg'
Acer pseudoplatanus 'Victoria'
Acer rubrum 'Seanlon'
Acer sieboldianum var. macrophyllum
Acer tartaricum
SECTION THREE: NEW AREA

Table 3.1: Statements of intent for Eastwoodhill, extracted from the writing of William Douglas Cook

<table>
<thead>
<tr>
<th>Statements</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“During the war I stayed in several beautiful country homes in Britain and this left me with a growing desire to create something worthwhile in New Zealand”</td>
<td>Cook, 1948</td>
</tr>
<tr>
<td>“I loved the country scene in England and its beautiful parks and wondered how far I could get in the creation of a park in one lifetime. I determined to make a start”</td>
<td>Cook, 1949</td>
</tr>
<tr>
<td>“Eastwoodhill is very young but has made a good start and my ambition is to grow every worthwhile tree and shrub which will grow in our conditions”</td>
<td>Cook, 1949</td>
</tr>
<tr>
<td>“Our work goes to make New Zealand more beautiful and future New Zealanders’ happier. I’m not working for myself - I’m working for my country and its people whom I love”</td>
<td>Cook, 1963</td>
</tr>
<tr>
<td>“I’d got the idea after staying with wealthy relatives and their friends that I too could have lovely surroundings even if I could never have a fine home and live as they did. That was the start of the park”</td>
<td>Cook, 1963</td>
</tr>
<tr>
<td>“I first got everything the New Zealand catalogues had to offer and then searched England for new material”</td>
<td>Cook, undated b</td>
</tr>
<tr>
<td>“We hope in the near future to be growing at Eastwoodhill practically every tree and shrub available in Britain”</td>
<td>Cook, 1949</td>
</tr>
<tr>
<td>“Very large numbers of Acers are doing well here and also a great many species and varieties of Aesculus, Betula, Fagus, Fraxinus, Buddleia, Euonymus, Juniperus, Larix, Nothofagus and many other genera. We hope shortly to be growing almost all that is available in Britain in trees and shrubs and in such things as Camellias a very large collection, which you do not grow”</td>
<td>Cook, 1949</td>
</tr>
<tr>
<td>“I insist that it is an arboretum pure and simple, and a sanctuary for quiet living people and birds”</td>
<td>Cook, 1964b</td>
</tr>
<tr>
<td>“I’ve suffered all the setbacks any man could. Poor food living alone, depression through lack of money and at times through ill health through worry. I’ve never squandered money but I’ve always been in debt. I always felt I had lots of security if not money and the family motto being “Forward”. I’ve always gone forward - I’d never let it done. If to be poor is to prove oneself a failure then I’ve failed but I’ve left a heritage behind me for future generations of New Zealanders’ to enjoy”</td>
<td>Cook, 1963</td>
</tr>
</tbody>
</table>

Table 3.2 Objectives for Eastwoodhill as proposed at the first workshop

(In the third workshop report the relevant statements were extracted from the first workshop report and repeated in Table 3.2. The reader of this thesis can refer to the report of Workshop One.)
Table 3.4 Elements bordering the new area

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Kings</td>
<td>Conifer backdrop with deciduous mix in front.</td>
</tr>
<tr>
<td>Orchard Hill</td>
<td>Conifer ridgetop, <em>Chamaecyparis lawsoniana</em>.</td>
</tr>
<tr>
<td>Outlook</td>
<td>Conifers with flowering gums, <em>Pinus pinea</em>, <em>Cupressus macrocarpa</em>, <em>Pinus patula</em>, <em>Eucalyptus leucoclyon</em>.</td>
</tr>
<tr>
<td>Blackwater</td>
<td><em>Chamaecyparis lawsoniana</em> and mixed deciduous material</td>
</tr>
<tr>
<td>Oregon Flat</td>
<td>Conifers, Douglas fir and Lawson cypress</td>
</tr>
<tr>
<td>Pepper Flat</td>
<td>Conifers, Lawson cypress</td>
</tr>
<tr>
<td>Basinhead</td>
<td>Poplars along existing fence line, then Douglas fir</td>
</tr>
<tr>
<td>China Corner</td>
<td>Taxodium, some pine, some deciduous, then <em>Cedrus deodara</em> and <em>Cedrus atlantica</em> below the tank.</td>
</tr>
<tr>
<td>Cook’s Corner</td>
<td>The upper portion of Cook’s corner which borders the new area is largely open with very little planting.</td>
</tr>
<tr>
<td>Mexico Corner</td>
<td>Young planting, mixed deciduous.</td>
</tr>
</tbody>
</table>

Table 3.5 Proportion of each key genus represented at Eastwoodhill

<table>
<thead>
<tr>
<th>Genus</th>
<th>No. of species at Eastwoodhill</th>
<th>Number in genus</th>
<th>Proportion represented</th>
<th>Concentrated plantings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Acer</em></td>
<td>77</td>
<td>150</td>
<td>51%</td>
<td>Circus, Pear Park</td>
</tr>
<tr>
<td><em>Aesculus</em></td>
<td>16</td>
<td>13</td>
<td>most?</td>
<td>Glen Douglas</td>
</tr>
<tr>
<td><em>Alnus</em></td>
<td>24</td>
<td>35</td>
<td>68%</td>
<td>Glen Douglas</td>
</tr>
<tr>
<td><em>Betula</em></td>
<td>37</td>
<td>60</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td><em>Camellia</em></td>
<td>19</td>
<td>82</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td><em>Cedrus</em></td>
<td>4</td>
<td>4</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td><em>Crateagus</em></td>
<td>29</td>
<td>100-200</td>
<td>13-29%</td>
<td>Pear Park</td>
</tr>
<tr>
<td><em>Cupressus</em></td>
<td>12</td>
<td>20</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td><em>Fagus</em></td>
<td>5</td>
<td>10</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td><em>Fraxinus</em></td>
<td>27</td>
<td>65</td>
<td>41%</td>
<td>Pear Park</td>
</tr>
<tr>
<td><em>Ilex</em></td>
<td>16</td>
<td>400</td>
<td>4%</td>
<td>Orchard Hill</td>
</tr>
<tr>
<td><em>Juniperus</em></td>
<td>22</td>
<td>60</td>
<td>36%</td>
<td>Pear Park</td>
</tr>
<tr>
<td><em>Malus</em></td>
<td>35</td>
<td>35</td>
<td>most?</td>
<td></td>
</tr>
<tr>
<td><em>Magnolia</em></td>
<td>38</td>
<td>80</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td><em>Pinus</em></td>
<td>60</td>
<td>100</td>
<td>60%</td>
<td>Orchard Hill</td>
</tr>
<tr>
<td><em>Populus</em></td>
<td>1</td>
<td>35</td>
<td>37%</td>
<td></td>
</tr>
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<td><em>Prunus</em></td>
<td>43</td>
<td>430</td>
<td>10%</td>
<td></td>
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<td><em>Pyrus</em></td>
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<td>30</td>
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<td><em>Quercus</em></td>
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<td>450</td>
<td>18%</td>
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<tr>
<td><em>Tilia</em></td>
<td>16</td>
<td>50</td>
<td>32%</td>
<td>Circus, Pear Park</td>
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</tbody>
</table>

Notes
1. Species only considered for this comparison. Number in genus taken according to Krussman.
2. Figures should be taken as a guide only. The inclusion, or otherwise, of hybrids as species rank may distort some of the figures.
SECTION FOUR: ORCHARD HILL

Table 4.1 Known information on Douglas Cook’s objectives for Orchard Hill

Hollies at Eastwoodhill: A manuscript written by Douglas Cook in 1957

“At last we have got round to the planting of our new material. The Southerly and South Easterly slopes of Orchard Hill have been fenced in and the paths, made some years ago, are now consolidated. Many more slips will no doubt occur but they can be cleared by hand. The upper two acres of the hill are extremely steep and what soil there is sits almost on rock. This upper area has been planted mostly in Douglas Fir with a few wattles for winter colour and a couple of dozen scarlet gum (Eucalyptus ficifolia) to brighten the dark background in summer. A block of silver birch were planted where the soil was very thin on the rock and just a few Douglas Firs divided them from a small block of perhaps a dozen scarlet oaks (Q. coccinea) from seed, then another break of firs and an irregular straggle wherever the soil was a little better. Liquidambar styraciflua..... above a small rock face we have planted Vitis ‘Ailcanthe Bouchet’ to festoon over the rock. On the far dry ridge running north east we had to resort to Pinus radiata to cut off the Westerly gales from the rock.

When the steeper slopes were planted we came to a cold ridge facing south which I thought should suit hollies as I had never seen them doing better than in cold situations, so holes were dug 20ft apart and our hollies planted in an inverted V with the blunt end to the view point. There are over 100 species and varieties of holly but we had only 20 to put out, others common in New Zealand being in other parts of the grounds. Ilex aquifolium gave us three. We started with the rather coarse looking I. ‘Camelliaeolia’ with its large glossy dark green almost spineless leaves from 5 inches long by 2 inches wide. It is said to be one of the finest berrying hollies. I. aquifolium ‘Ferox Aurea’ extremely thorny with a yellow centre to the leaf and green spines and edge. I. aquifolium ‘Regina Golden Queen’ has a margin of gold and a green centre to the leaf, but being a male plant not much good for berry. Why not Golden King? This is said to be the finest of the golden hollies.

I. corallina is an interesting looking species from China with lanceolate wavy spiny leaves and said to bear red berries. It is too new for much to be known about it but it is said to grow 25ft. I. cornuta is very old having been found in China by Fortune in 1846 but is a recent arrival in New Zealand. It is an evergreen growing only 8-10ft high and will stand remarkable dryness I find. Its leaves are very plain but have three spines. Its scarlet fruits are not generously borne.

I. dipyrena is the Himalayan holly growing into a 40ft tree with large red berries sparsely borne. It strikes me as being just another evergreen and not by any means a ‘must have’. I. fargesii is another Chinese evergreen up to 20ft with red berries but I think its long narrow leaves might make it a rather attractive tree. I. fragilis, I. franchettii, I. forrestii and I. insignis must be very new judging by their ...... but little can be found about them in books. I. insignis comes from the Sikkim Himalayas and is certainly tender here in the young stages. If it likes its new home it should make a handsome tree. I. latifolia must be one of the largest growers as it attains a height of 60ft in Japan where it is said to be one of their handsomest evergreens. Its leaves are large but not spiny and its large berries are borne in great numbers. I. pernyi is another evergreen with red berries.
from western and central China which bids fair claim to our attention in the future as a good evergreen for small gardens.

*L. platyphylla var. maderensis* is a soft evergreen from Madeira is called *L. perado* in Madeira and has dark red, almost black berries. *L. serrata* hails from Japan, is deciduous, bears quantities of red berries, branches of which are much used in Tokyo for decoration as the berries hang on well. *L. verticillata* was introduced into New Zealand by Stevens of Bulls in 1938. It is another deciduous holly from the eastern states where it is known as the black alder. It grows 6-10ft high but has a spreading habit. It is said to be the most ornamental of deciduous American hollies its glossy scarlet berries being well coloured before the leaves fall. *I. wilsoni* was discovered by Wilson in China but little is yet known about it. It has scarlet berries here. *I. rosmarinifolia* has foliage like rosemary.

In the open centre of the V up the hill was planted three *Prunus campanulata* which with their mid July rich coloured flowers should make a splash against such a sombre background. In front of these quite a large space is left for other genus as this is rather a special view point. It may later go into Magnolias. Next to the hollies a long shallow depression runs down the hill face almost due south and is in full view from the house terrace ten chains away. Here we decided to place our collection of 36 *Abies* leaving the view up the glade open so that each tree can be seen from the distance. Most *Abies* are tall rather than broad but I think even in 50 years time there may still be beauty here for, though a tree grows 150ft high it may not be more than 50ft of that in 50 years and I would expect less of most. The open glade will be left in grass and planted in daffodils.

*Abies* have not been much planted in New Zealand and less now than formerly because it has been found that so many are subject to bug diseases particularly in the north island. It is for that reason that I have chosen the coldest spot in the garden for them, lying steeply away from the sun and in fair (can’t read last word). The few which have been commonly offered in New Zealand have, for the most part, been unsatisfactory and those I know are mostly half starved and of little beauty. *Abies pinsapo* in the north island seems happy and healthy and does well in the dry atmosphere at Eastwoodhill. *Picea smithiana* also thrives and makes graceful specimens but *Picea abies* is diseased as are *Picea sitchensis* and *Abies nordmanniana*. Quite probably these would be happier in the cold wet districts of our country as they hail from such climates. *Picea abies* the Norway spruce, *Picea sitchensis* largely from the western coast of Canada and *Abies nordmanniana* from the Caucasus. These we have not bothered with but are trying such things as: "....." (list follows here)

In summary from this manuscript I propose that the objectives for Orchard Hill were:

- evergreen background with seasonal highlights, (*Prunus campanulata*, *Eucalyptus ficifolia*).
- suitable site for a holly collection.
- the most suitable site on the arboretum for *Picea* and *Abies*.
- pine collection forming part of evergreen background.
- potential site for *Magnolia*.
Table 4.3 Ranking of plants on Orchard Hill according to Average score

<table>
<thead>
<tr>
<th>Plant</th>
<th>Average score</th>
<th>Rank</th>
<th>Plant</th>
<th>Average score</th>
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* Key genus
### Table 4.4: Ranking of plants on Orchard Hill according to Botanical score

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</tr>
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<td>Abies spect. var. brevifolia</td>
<td>8.0</td>
<td>25</td>
<td>8.5</td>
<td>Photinia villosa var. laevis</td>
<td>7.0</td>
<td>67</td>
<td>6.4</td>
</tr>
<tr>
<td>Abies veitchii</td>
<td>8.0</td>
<td>25</td>
<td>8.8</td>
<td>Pinus rigida</td>
<td>7.0</td>
<td>67</td>
<td>6.2</td>
</tr>
<tr>
<td>Ilex insignis</td>
<td>8.0</td>
<td>25</td>
<td>8.0</td>
<td>Pistacia chinensis</td>
<td>7.0</td>
<td>67</td>
<td>8.0</td>
</tr>
<tr>
<td>Prunus ilicifolia</td>
<td>8.0</td>
<td>25</td>
<td>6.4</td>
<td>Prunus campanulata</td>
<td>7.0</td>
<td>67</td>
<td>8.4</td>
</tr>
<tr>
<td>Prunus hygini</td>
<td>8.0</td>
<td>25</td>
<td>6.0</td>
<td>Quercus cocc. splendidens</td>
<td>7.0</td>
<td>67</td>
<td>8.8</td>
</tr>
<tr>
<td>Picea wilsonii</td>
<td>8.0</td>
<td>25</td>
<td>6.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picea spinulosa</td>
<td>8.0</td>
<td>25</td>
<td>8.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinus parviflora</td>
<td>8.0</td>
<td>25</td>
<td>7.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpinus japonica</td>
<td>7.8</td>
<td>39</td>
<td>7.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fagus lucida</td>
<td>7.8</td>
<td>39</td>
<td>7.0</td>
<td></td>
<td></td>
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</table>
### Table 4.5: Ranking of plants on Orchard Hill according to Aesthetic score

<table>
<thead>
<tr>
<th>Plant</th>
<th>Aesthetic score</th>
<th>Rank</th>
<th>Botanical score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies concolor 'Candicans'</td>
<td>9.8</td>
<td>1=9.1</td>
<td></td>
</tr>
<tr>
<td>Magnolia sargentiana var. robusta</td>
<td>9.8</td>
<td>1=8.6</td>
<td></td>
</tr>
<tr>
<td>Magnolia sprengeri var. diva</td>
<td>9.8</td>
<td>1=8.8</td>
<td></td>
</tr>
<tr>
<td>Acer henryi</td>
<td>9.2</td>
<td>4=9.2</td>
<td></td>
</tr>
<tr>
<td>Metasequoia glyptostroboides</td>
<td>9.2</td>
<td>4=9.0</td>
<td></td>
</tr>
<tr>
<td>Prunus camp. formosa f.</td>
<td>9.2</td>
<td>4=7.6</td>
<td></td>
</tr>
<tr>
<td>Prunus cerasoides var. rubra</td>
<td>9.2</td>
<td>4=8.0</td>
<td></td>
</tr>
<tr>
<td>Acer rub. f. albomarginatum</td>
<td>9.0</td>
<td>8=7.0</td>
<td></td>
</tr>
<tr>
<td>Abelia grandiflora</td>
<td>9.0</td>
<td>8=5.2</td>
<td></td>
</tr>
<tr>
<td>Cornus nutallii</td>
<td>9.0</td>
<td>8=7.2</td>
<td></td>
</tr>
<tr>
<td>Magnolia dawsoniana</td>
<td>9.0</td>
<td>8=8.4</td>
<td></td>
</tr>
<tr>
<td>Prunus sargentiana</td>
<td>9.0</td>
<td>8=7.4</td>
<td></td>
</tr>
<tr>
<td>Abies veitchii</td>
<td>8.8</td>
<td>13=8.0</td>
<td></td>
</tr>
<tr>
<td>Picea spinulosa</td>
<td>8.8</td>
<td>13=8.0</td>
<td></td>
</tr>
<tr>
<td>Quercus cocinea splendens</td>
<td>8.8</td>
<td>13=7.0</td>
<td></td>
</tr>
<tr>
<td>Abies spect. var. brevifolia</td>
<td>8.5</td>
<td>16=8.0</td>
<td></td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>8.4</td>
<td>17=7.8</td>
<td></td>
</tr>
<tr>
<td>Prunus campanulata</td>
<td>8.4</td>
<td>17=7.0</td>
<td></td>
</tr>
<tr>
<td>Prunus serrula</td>
<td>8.4</td>
<td>17=6.8</td>
<td></td>
</tr>
<tr>
<td>Betula plat. var. japonica</td>
<td>8.2</td>
<td>20=7.4</td>
<td></td>
</tr>
<tr>
<td>Ilex insigne</td>
<td>8.2</td>
<td>20=8.0</td>
<td></td>
</tr>
<tr>
<td>Prunus sub. 'Ascendens'</td>
<td>8.2</td>
<td>20=6.2</td>
<td></td>
</tr>
<tr>
<td>Prunus campanulata 'Plena'</td>
<td>8.2</td>
<td>20=6.8</td>
<td></td>
</tr>
<tr>
<td>Abies amabilis</td>
<td>8.0</td>
<td>20=8.0</td>
<td></td>
</tr>
<tr>
<td>Abies concolor</td>
<td>8.0</td>
<td>20=7.1</td>
<td></td>
</tr>
<tr>
<td>Abies concolor 'Glauc'a</td>
<td>8.0</td>
<td>20=8.0</td>
<td></td>
</tr>
<tr>
<td>Abies firma</td>
<td>8.0</td>
<td>20=7.1</td>
<td></td>
</tr>
<tr>
<td>Ilex corallina</td>
<td>8.0</td>
<td>20=7.2</td>
<td></td>
</tr>
<tr>
<td>Picea orientalis</td>
<td>8.0</td>
<td>20=7.4</td>
<td></td>
</tr>
<tr>
<td>Prunus subhirtella 'Pendula'</td>
<td>8.0</td>
<td>20=5.8</td>
<td></td>
</tr>
<tr>
<td>Prunus yedoensis hyd</td>
<td>8.0</td>
<td>20=5.6</td>
<td></td>
</tr>
<tr>
<td>Pistacia chinensis</td>
<td>8.0</td>
<td>20=7.0</td>
<td></td>
</tr>
<tr>
<td>Poliophyris sinensis</td>
<td>8.0</td>
<td>20=9.0</td>
<td></td>
</tr>
<tr>
<td>Carpinus japonica</td>
<td>7.8</td>
<td>34=7.8</td>
<td></td>
</tr>
<tr>
<td>Ebrezia macrophylla</td>
<td>7.8</td>
<td>34=9.2</td>
<td></td>
</tr>
<tr>
<td>Fagus sylvatica 'Rohanni'</td>
<td>7.8</td>
<td>34=6.2</td>
<td></td>
</tr>
<tr>
<td>Magnolia veitchii</td>
<td>7.8</td>
<td>34=5.2</td>
<td></td>
</tr>
<tr>
<td>Prunus serrulata 'Tai Haku'</td>
<td>7.8</td>
<td>34=6.0</td>
<td></td>
</tr>
<tr>
<td>Eucriphiya moorei</td>
<td>7.6</td>
<td>39=7.6</td>
<td></td>
</tr>
<tr>
<td>Photinia s. 'Robusta'</td>
<td>7.6</td>
<td>39=6.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.6: Arboretum key genera in Orchard Hill

<table>
<thead>
<tr>
<th>Key genus</th>
<th>Present</th>
<th>Number of species and cultivars on OH</th>
<th>Number of species and cultivars on OH as % of number of species and cultivars at Eastwoodhill</th>
<th>Are the plants sole examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer</td>
<td>Yes</td>
<td>5</td>
<td>3%</td>
<td>Yes</td>
</tr>
<tr>
<td>Aesculus</td>
<td>Yes</td>
<td>1</td>
<td>4%</td>
<td>Yes</td>
</tr>
<tr>
<td>Alnus</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Betula</td>
<td>Yes</td>
<td>1</td>
<td>2%</td>
<td>Yes</td>
</tr>
<tr>
<td>Camellia</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cedrus</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Crataegus</td>
<td>Yes</td>
<td>5</td>
<td>13%</td>
<td>Yes</td>
</tr>
<tr>
<td>Cupressus</td>
<td>Yes</td>
<td>2</td>
<td>11%</td>
<td>Yes</td>
</tr>
<tr>
<td>Fagus</td>
<td>Yes</td>
<td>3</td>
<td>17%</td>
<td>Yes</td>
</tr>
<tr>
<td>Fraxinus</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ilex</td>
<td>Yes</td>
<td>11</td>
<td>47%</td>
<td>Yes</td>
</tr>
<tr>
<td>Juniperus</td>
<td>Yes</td>
<td>4</td>
<td>13%</td>
<td>No</td>
</tr>
<tr>
<td>Magnolia</td>
<td>Yes</td>
<td>8</td>
<td>13%</td>
<td>Yes</td>
</tr>
<tr>
<td>Malus</td>
<td>Yes</td>
<td>8</td>
<td>13%</td>
<td>Yes</td>
</tr>
<tr>
<td>Pinus</td>
<td>Yes</td>
<td>17</td>
<td>28%</td>
<td>Yes</td>
</tr>
<tr>
<td>Populus</td>
<td>Yes</td>
<td>1</td>
<td>3%</td>
<td>No</td>
</tr>
<tr>
<td>Prunus</td>
<td>Yes</td>
<td>21</td>
<td>19%</td>
<td>Yes</td>
</tr>
<tr>
<td>Pyrus</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Quercus</td>
<td>Yes</td>
<td>5</td>
<td>5%</td>
<td>Yes</td>
</tr>
<tr>
<td>Tilia</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

In terms of number represented the most important key genera are *Prunus, Pinus, Ilex*. In terms of percentage representation the most important key genera are, *Ilex, Pinus, Prunus, Fagus, Juniperus, Magnolia, Malus, Crataegus*.

Table 4.7: Park key genera for Orchard Hill

<table>
<thead>
<tr>
<th>Genus</th>
<th>Average score</th>
<th>No. of species and cultivars on OH (N)</th>
<th>N as a percentage of number of species and cultivars of that genus in current collection</th>
<th>Are the plants sole examples?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies</td>
<td>8.20</td>
<td>14</td>
<td>37%</td>
<td>Yes</td>
</tr>
<tr>
<td>Berberis</td>
<td>6.40</td>
<td>8</td>
<td>42%</td>
<td>Yes</td>
</tr>
<tr>
<td>Picea</td>
<td>7.89</td>
<td>10</td>
<td>35%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

In terms of number the most important genera (arboretum and park) are, *Prunus 21, Pinus 17, Abies 14, Ilex 11, Picea 10, Magnolia 8, Malus 8, Berberis 8*.

In terms of percentage the most important genera (arboretum and park) are: *Ilex 47%, Berberis 42%, Abies 37%, Picea 35%, Pinus 28%, Prunus 19%, Fagus 17%*. 
Table 4.8: List of plants previously existing on Orchard Hill

Cross path Dawson’s walk to Sargents walk
(Q.coccinea splendens to Pistachia). Starting at Q. coccinea end, downhill side of this path only.
Source: notebook six.

(Existing Quercus coccinea splendens)
Euonymus latifolius
Euonymus oxyphyllus
Acer campbellii
(Existing Quercus baetica)
Pyrus communisae ‘Semi Plena’ - dead according to Cook
Euonymus planipes sachalinensis ?
(Existing Betula platyphylla)
Betula albosinensis - dead according to Cook
Betula schmidtii - dead according to Cook
Betula populifolia - dead according to Cook
Meliosma pendens
Quercus lamellosa
(Existing Gleditsia japonica)
Pinus peuce?
Pinus lambertiana
Vitis sp.

Dawson’s walk starting from tank end, and then up the cross path, uphill side
Source: notebook six.

Magnolia mollicomata
(Existing Acer amplum)
Malus prunifolia ‘Hornet’
Acer hersii
Acer crataegifolium
Acer pensylvanicum
Acer davidii ‘Horizontalis’
(Existing Laburnum ‘Latest and Longest’)
Acer laevigatum
Ginkgo biloba ‘Pendula’
(Existing Euonymus tingens)
Euonymus oxyphyllus
Malus coronaria ‘Charlottae’
Malus soulandii
Orixa japonica
Osmanthus fragrans
(Existing Photinia robusta)

Pyrus KW7746
Euonymus planipes
Ailus incana ‘Ramuilis Coccineis’
Sorbus vilmoriniana
(Existing Magnolia sargentiana var. robusta)
Dipelta ventricosa
Acer pictum
Prunus fasiculata
Prunus ambigua
(Existing Prunus hillieri)
Stachyurus hisalicaus
Fagus ferruginea
Prunus campanulata ‘Plena’
Sophora secundiflora
Prunus canescens
(Existing Lardizabala)
Myrica pensylvanica
Acer grandidentatum
Acer tenellum
2 Carpinus japonica
(Existing Fagus lucida)
Cercis sinensis
(Existing Fagus ‘Rohanni’)

Dawson’s walk, uphill side, between it and spruce end, starting from tank end
Source: notebook six.

(Existing Prunus ilicifolia)
Magnolia campbellii
Myrica cerifera
Magnolia mollicomata ‘Fastigiata’
(Existing Magnolia cordata)
Magnolia wilsoni
Hartia sinensis
Diervilla
Philadelphus sargentianus
Magnolia glauca
Drymis winteri
(Existing Malus ‘Mammoth’)
Magnolia liliflora
Magnolia Highdownensis - dead
Magnolia parviiflora -dead
Magnolia officinalis
Magnolia hypoleuca
Prunus campanulata 'Plena'
Prunus serrulata f. longipes
Philadelphus sericanthus
Prunus pudum
(Existing Magnolia kobus var. borealis)
Prunus padus 'Albertii'
(Existing Magnolia dawsoniana)
Malus glaucescens
Cleyera fortunei - dead
Eriobotrya prinoides - dead
(Existing Ehretia)
Magnolia salicifolia

Additional pines that were planted among the group at the end of the hill
Pinus edulis, P. montana, P. sinensis, P. strobus,
P. flexilis, P. cembra

Plants that were uphill of the spruce end track, starting far end and moving towards the tank.
Source: notebook six.
Picea group
Taxodium distichum
Carya pecan
Picea breweriana

Abies group
Abies kawakamii
Abies squamata
Abies concolor 'Compacta'
Abies lasiocarpa var. arizonica
Abies recurvata
Picea pungens 'Moerheimii'
Abies sutchuenensis alpine form
Abies koreana
Abies forrestii
Abies nobilis 'Clauca'
A. balsamea -dead
Abies grandis
Abies lasiocarpa
Abies gamblei

Holly group
Ilex forrestii
Ilex species Yu
Ilex wilsoni
Table 4.9: Genera on Orchard Hill, taking into account previous plantings

<table>
<thead>
<tr>
<th>Genus</th>
<th>Currently existing</th>
<th>Previously existing</th>
<th>Current number on OH</th>
<th>Previous number on OH</th>
<th>% survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies</td>
<td>Yes</td>
<td>Yes</td>
<td>14</td>
<td>14+12=26</td>
<td>53</td>
</tr>
<tr>
<td>Acer</td>
<td>Yes</td>
<td>Yes</td>
<td>5</td>
<td>5+9=14</td>
<td>35</td>
</tr>
<tr>
<td>Aesculus</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Alnus</td>
<td>No</td>
<td>Yes</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Berberis</td>
<td>Yes</td>
<td>Yes</td>
<td>8</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Betula</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>1+3=4</td>
<td>25</td>
</tr>
<tr>
<td>Camellia</td>
<td>No</td>
<td>No</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Cedrus</td>
<td>No</td>
<td>Yes</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Crataegus</td>
<td>Yes</td>
<td>Yes</td>
<td>5</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Cupressus</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Euonymus</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>1+5=6</td>
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</tr>
<tr>
<td>Fagus</td>
<td>Yes</td>
<td>Yes</td>
<td>3</td>
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</tr>
<tr>
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<td>Yes</td>
<td>Yes</td>
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<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Ilex</td>
<td>Yes</td>
<td>Yes</td>
<td>11</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>Juniperus</td>
<td>Yes</td>
<td>Yes</td>
<td>4</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Magnolia</td>
<td>Yes</td>
<td>Yes</td>
<td>8</td>
<td>8+11=19</td>
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</tr>
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<td>Malus</td>
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<td>Yes</td>
<td>8</td>
<td>8+3=11</td>
<td>72</td>
</tr>
<tr>
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<td>Yes</td>
<td>Yes</td>
<td>10</td>
<td>10+1=11</td>
<td>90</td>
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<tr>
<td>Pinus</td>
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<td>17</td>
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<td>89</td>
</tr>
<tr>
<td>Populus</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Prunus</td>
<td>Yes</td>
<td>Yes</td>
<td>21</td>
<td>21+9=30</td>
<td>70</td>
</tr>
<tr>
<td>Pyrus</td>
<td>No</td>
<td>Yes</td>
<td>0</td>
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</tr>
<tr>
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<td>Yes</td>
<td>Yes</td>
<td>5</td>
<td>5+1=6</td>
<td>83</td>
</tr>
<tr>
<td>Tilia</td>
<td>No</td>
<td>No</td>
<td>0</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Notes.
1. This table does not include the birch belt.
2. Prunus results are debatable due to the number of unidentified Prunus.

In terms of number the most important genera are,
Present: Prunus 21, Pinus 17, Abies 14, Ilex 11, Picea 10, Magnolia 8, Malus 8, Berberis 8,
Previous: Prunus 30, Abies 26, Magnolia 19, Pinus 19, Acer 14, Picea 11, Ilex 11, Malus 11,

In terms of percentage survival the most successful of these genera are:
Ilex 100%, Picea 90%, Pinus 89%, Malus 72%, Prunus 70%, Abies 53%, Magnolia 42%, Acer 35%

It is notable that Euonymus survived poorly while Crataegus did well even though both could be classed as short lived groups.
### Table 4.10: Actual heights and expected heights of tree on Orchard Hill

<table>
<thead>
<tr>
<th>Plant</th>
<th>Reference number</th>
<th>Botanical score</th>
<th>Aesthetic score</th>
<th>Actual height</th>
<th>Expected height</th>
<th>Height index</th>
</tr>
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<tbody>
<tr>
<td>Abelia grandiflora</td>
<td>OH667</td>
<td>8.0</td>
<td>7.8</td>
<td>11.4m</td>
<td>70m, 76m, 24-46m</td>
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<tr>
<td>Abies amabilis</td>
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<tr>
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<td>8.0</td>
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<tr>
<td>Abies concolor</td>
<td>OH670</td>
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<td>12.5m</td>
<td>21-50m, 12-15m</td>
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<td>Abies concolor 'Candicans'</td>
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<td>9.8</td>
<td>13.5m</td>
<td>see species</td>
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<td>6.4</td>
<td>7.5m</td>
<td>15-20m, 13-18m</td>
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<td>5-10m</td>
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<td>Berberis panlanensis</td>
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<td>2.2m</td>
<td>0.3-0.4m</td>
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<td>1.5m, 1.5m</td>
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<td>20m, 6-11-30m</td>
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<td>15m, 2-4-10m</td>
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<td>Botanical score</td>
<td>Aesthetic score</td>
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<td>Height index</td>
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<td>9m, 6-9m</td>
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<td>10m</td>
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<tr>
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<td>3.8m</td>
<td>6m</td>
<td>2.0</td>
</tr>
<tr>
<td>Distylum racemosum</td>
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<td>6.2</td>
<td>6.3m</td>
<td>18m</td>
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<td>5-6m</td>
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<td>5.8</td>
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<tr>
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<td>Glochidion sp.</td>
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<td>-</td>
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</tr>
<tr>
<td>Ilex</td>
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<td>Ilex wilsoni</td>
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<tr>
<td>Juniperus chinensis</td>
<td>OH664</td>
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<td>5.8</td>
<td>-</td>
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<td>5.8</td>
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<td>6.4</td>
<td>-</td>
<td>5-6m, 3m, 8m</td>
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<td>6-10m, 7-12m,7-12</td>
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<td>13.6m</td>
<td>25m, 21m</td>
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</tr>
<tr>
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<td>Reference number</td>
<td>Reference score</td>
<td>Botanical score</td>
<td>Aesthetic score</td>
<td>Actual height</td>
<td>Expected height</td>
</tr>
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### Plant Reference number Botanical score Aesthetic score Actual height Expected height Height index

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<th>Aesthetic score</th>
<th>Actual height</th>
<th>Expected height</th>
<th>Height index</th>
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**Note**

1. *Abies* and *Picea* scores are from workshop one, *Magnolia* scores from workshop two, the rest from workshop three.
2. Expected heights are taken from referenced sources on the arboretum database.
### SECTION FIVE: BASINHEAD

**Table 5.2: Plants in Basinhead ranked for average score**

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<td>4=</td>
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<td>8</td>
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<td>9</td>
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</tr>
<tr>
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<td><em>Syringa 'Souvenir de Alice Harding'</em></td>
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**Table 5.3: Ranking of plants in Basinhead for botanical score**

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<td>Prunus mume ‘The Geisha’</td>
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<td>22=</td>
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Table 5.5: Plants previously found in Basinhead

Start from bottom point, anticlockwise, just below track.
Telopea oreades
Prunus tenella
Prostanthera rotundifolia
Pomaderris elliptica
Cercis chinensis

Start from bottom point, anticlockwise, along edge of old pond
Magnolia soulangeana 'Alexandrina'
Stewartia ovata
Magnolia soulangeana 'Lennei'
Prunus 'Pink Perfection'
Chimonanthus fragrans
Malus coronaria
Prunus 'Takasago'
Magnolia sieboldii
Magnolia campbellii f. alba
Neiliia opulifolia
Magnolia soulangeana 'Rustica Rubra'
Magnolia sinensis
Buddleia colvillei
Magnolia sargentiana var. robusta
Alnus arguta
Magnolia campbellii
Magnolia sprengerii var. diva

From pepper flat junction, anticlockwise, below track
Prunus persica 'Rose Brilliant'
Magnolia delavayi
Prunus cerasifera 'Nigra'
Prunus cerasifera 'Thundercloud'
Prunus 'Pollardi'
Magnolia sinensis
Prunus 'Pink Cloud'
Populus lasiocarpa
Prunus persica 'Iceberg'
Prunus 'Rose Brilliant'
Prunus cerasoides

Near the existing Grevillea robusta
Magnolia sieboldii

Magnolia watsonii
Prunus sanguinea 'Plena'
Magnolia campbellii
Prunus mume 'Charles Abraham'

Road on west side (can't tell if above or below the track)
Stewartia pseudocamellia
Melia azedarach
Acer japonicum
Paulownia tomentosa
Magnolia loebneri
Magnolia soulangiana 'Lennei'
Magnolia soulangiana 'Alexandrina'

Pepper flat
Calliandra portoricensis
Cedronella triphylla
Schinus dependens
APPENDIX: Rating scales used in field exercises

HEALTH
1 Unlikely to survive
2 Alive, poorly furnished, signs of stress, dying back
3 Fully furnished, signs of stress, not growing
4 Well furnished, healthy, no stress signs, growing slowly.
5 Well furnished, healthy, no stress signs, growing vigorously.

AS AN EXAMPLE OF THE SPECIES
1 Not representative of the species, all factors unsatisfactory
2 Poor example of the species, three factors unsatisfactory
3 Identifiable example of the species, two factors unsatisfactory.
4 Good example of the species, only one factor unsatisfactory
5 Excellent, all factors good.

Factors: health, association with other trees, form (shape), form (structure).

GROWTH PHASE
1 Senescent - not growing, declining canopy.
2 Mature - adult features, growth regenerative
3 Immature vigorous - adult features, growth vigorous
4 Juvenile vigorous - established, in rapid growth, juvenile features
5 Establishment - Plant still establishing, not yet growing

CONTRIBUTION TO SCENE
1 Insignificant tree in this scene
2 Noticeable tree, but part of the general canopy.
3 Average visual impact on the area, tree stands out as an individual
4 Major contributor to this scene
5 Dominant feature of the area.

HEIGHT INDEX
0.5 Has made less than 10% of expected height
1.0 Has made about 20% of expected height
1.5 Has made about 40% of expected height
2.0 Has made about 60% of expected height
2.5 Has made about 80% of expected height
3.0 Is in expected height range
3.5 Has grown 30% more than expected height
4.0 Has grown 50% more than expected height
4.5 Has grown 80% more than expected height
5.0 Has grown 100% or more than expected height
APPENDIX: List of participants

Participants in the third workshop

Mr Bob Berry, Plantsman and Farmer, Hackfalls Arboretum, Gisborne.
Mr Spencer Bush, Arboretum Supervisor, Gisborne.
Mr Peter Cave, Nurseryman, Cambridge.
Professor David Chalmers, Deputy Vice Chancellor, Charles Sturt University, Wagga Wagga, Australia.
Mr Garry Clapperton, Curator, Eastwoodhill.
Mr Gordon Collier, Consultant and Plantsman, Taihape.
Mr Rodney Faulkner, Farmer and Arboretum Trust Board, Gisborne.
Mr Ron Gordon, Farmer and Plantsman, Taihape. (Surveys only)
Mr Michael Hudson, Plantsman and Farmer, Hawkes Bay.
Mr Allan Jellyman, Community Services Director, New Plymouth.
Mrs Marion MacKay, Department of Horticultural Science, Massey University.
Mr Ian McKean, Farmer and Plantsman, Rangiwahea.
Mr Paul Pollock, Nurseryman and Arboretum Trust Board, Gisborne.
Dr W R Sykes, Botanist, D.S.I.R. Land Resources Division, Christchurch.
Appendix 8

Collection assessment data

Collection assessment data

Codes for each column

1. For botanical, aesthetic and average scores. No. is the number of observations that contributed to each score. Score is the mean of the observations on a scale from 1-10. These scores were done for the current collection only. Genera in the current collection that were not included in the scoring exercise at the time, and have no data, are marked '-'.

2. Cat. indicates whether the genus is a tree, shrub or climber genus. T=tree, C=climber, S=shrub, SI=intermediate between tree and shrub.

3. Current, previous and total collections. S+C=N. Species + Cultivars = Number of representatives of that genus at Eastwoodhill. The total collection = current collection + previous collection.

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<tr>
<th>Genus</th>
<th>Botanical score</th>
<th>Aesthetic score</th>
<th>Average score</th>
<th>Cat.</th>
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<th>Previous collection</th>
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### Appendix 8: Collection assessment data

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Current collection 36.6% cultivars, 63.4% species
Previous collection 51.1% cultivars, 48.9% species
Total collection 56% cultivars, 44% species