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THE
GENETICAL EXAMINATION
OF
'GRASSLANDS ARIKI'
RYEGRASS

Lolium [(multiflorum x perenne) x perenne]

A thesis presented in partial fulfilment
of the requirements for the degree
of Master of Agricultural Science
in Plant Science.

John Richard Sedcole

1970

Preface.

'Grasslands Ariki' ryegrass - *Lolium* [(*multiflorum* x *perenne*) x *perenne*] - has been established in New Zealand as a successful pasture variety. While some genetic parameters were determined during its breeding programme, no diallel cross analyses have been performed on 'Ariki'. It was for this reason that this particular experiment was suggested to me.

The inclusion of two treatments arose from a cynical remark passed by W. Harris, regarding the failure on the part of plant breeders to use simulated swards. The experiment was designed to determine the levels of genotype-by-environment interaction in 'Ariki' ryegrass.

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