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AN ECOLOGICAL STUDY OF SOME
NEMATODES ASSOCIATED WITH APPLE
TREES IN A GRASSED ORCHARD

A THESIS

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by

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INTRODUCTION

Plant nematology appears to have been studied in New Zealand for the past 68 years, during which period a number of publications have accumulated on this subject (Kirk, 1899; Reid & Cottier, 1935; Jacks, 1944; Cottier, 1956; Stanton, 1956; Atkinson, Brien, Chamberlain, Cottier, Jacks, Reid & Taylor, 1949; Blair & Morrison, 1949; Morrison, 1957; Clark, 1964). However until 1961 when Clark returned to New Zealand from the United Kingdom, there was no trained nematologist in this field and most of the earlier identifications were done either through the disease symptoms or by overseas authorities. Hence, there is no record of specific ecological studies for this country.

The first attempt to study the New Zealand soil nematode ecology was made by Clark at the commencement of his Ph.D. studies, but because of the high endemism encountered, which presented an absorbing taxonomic problem, he ended up merely opening the gate to this field by describing a vast number of the hitherto undescribed species. This work is the second attempt made, and it aims, not only to venture into the yet untouched ecological realm, but also to investigate some of the possible relationships of nematodes and apple trees in this primarily agricultural country.