

wide in its distribution, and although by some it is thought to have been disseminated from China, the latest investigations seem to indicate that the causative organism is native to many soils, a contention that does not appear to be at all unreasonable.

The first published account of its presence in New Zealand is given by Mr. W. A. Boucher in the Department's annual report for 1900, and relates to a peach-orchard in the Whangarei district. The peach-trees were very severely affected, and the orchard was finally almost completely destroyed, presumably through the effects of the disease. It was contended that the disease owed its origin here to the importation of peach-pits from California, but there is no evidence that the disease can be spread from place to place in this manner. In the 1901 annual report Mr. J. C. Blackmore writes as follows: "A great number of peach-trees have been specially examined in the southern districts, but root-knot has not been observed. Tens of thousands of stocks were raised and transplanted from pits imported through the same agency and from the same place in California as those raised in Auckland. Various forms of root-knot I have, however, occasionally met with on and off for years on the apple, pear, plum, and cherry, also the raspberry. Root-gall is much more prevalent than is generally supposed, but often passes unnoticed."

During the past thirteen years I have each year seen specimens of young trees, mainly apples, on which were galls exactly similar to those described by American investigators as root-knot. In nearly every case these trees consisted of young nursery stock, and were submitted by planters who were anxious to know whether the exceedingly ugly growths on the roots were likely to prove injurious. In comparatively few instances have I seen root-knot *in situ* in established orchards, except in the case of those planted with the Northern Spy apple, where in many instances large knots protruding from the base of the stems near the ground are conspicuous.

AUSTRALIAN NURSERY STOCK AND A CURRENT INVESTIGATION.

The great extension of orchard planting in New Zealand has led to very large annual importations of fruit-trees, mainly apples, from Australia, the States of Victoria and Tasmania being our largest suppliers in this respect. From time to time consignments containing trees having the roots badly galled, often with swellings of very large size, have been shipped, and on arrival here have been condemned for root-knot, which is a scheduled disease under the Orchard and Garden Diseases Act. It has been contended, however, by the Victorian Department of Agriculture that no root-