

## Plant-Parasitic Nematodes

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The sugar beet nematode, Heterodera schachtii (Schmidt), continues as an important pest of sugar beets in the Blackwell district of Ont. More attention is now being given to crop rotations in this area, and severe injury should occur less frequently. Surveys in 1950 did not reveal any appreciable spread of the parasite in the Blackwell area although new records were secured. No infestation has been found in the Glencoe area for several years, and the one small field there from which this nematode was originally reported in Canada is now out of beet production. Another small centre of infestation was reported in 1949 from near Jeannette's Creek, Ont. This pest has not been recorded elsewhere in Canada.

The potato-rot nematode, Ditylenchus destructor Thorne, has been studied further in P.E.I. Though this nematode can hardly be classified as a major crop pest, it becomes important when the good reputation of Prince Edward Island seed potatoes is involved. Much of the rather unjustified alarm over this parasite was due to an unfortunate tendency to confuse it with the golden nematode, Heterodera rostochiensis Woll., which has not been reported from Canada. Surveys for the potato-rot nematode in P.E.I. have increased the number of fields known to be infested, but these new findings indicate that infested areas are being progressively revealed as they are cropped with potatoes and not that there has been any recent spread of infestations. Soil fumigation with ethylene dibromide has been rather effective against this nematode, but it is also evident that repeated cropping with potatoes may reduce infestations to the vanishing point.

The oat nematode, Heterodera avenae Lind, Rostrup & Ravn, present in Ont. between Peterborough and Waterloo, continues to cause drop loss of importance in some areas. Surveys for this nematode have not been made for the past eight years and it has no doubt continued its spread. However, many growers are now better informed about this pest and in some cases injury has declined because of suitable crop rotation practices.

The stem nematode, Ditylenchus dipsaci (Kuehn), has been identified from alfalfa sent in from Lethbridge, Alta. The form (species?) attacking alfalfa is capable of causing important injury to this crop, and it has been previously reported from western United States.

The pea cyst-nematode, Heterodera goettingiana Lieb., has been reported from the Lower Fraser Valley and Victoria, B.C.

Meadow nematodes, Pratylenchus pratensis (deMan), have been identified from peach specimens received from Harrow, Ontario. Meadow nematodes are known to infest a wide variety of plants, and it is now considered that this species is a complex that will eventually be separated into several distinct species or varieties.

The records of root-knot nematodes in Canada are rather extensive and this nematode group is now separated into several species (of the genus Meloidogyne). It is very desirable that greater attention be given to cases of root knot to determine the species involved, so that we may know what forms are present in Canada and also meet the need for more information on the host ranges of the various species.

Of interest to zoologists and others is the recent publication of a book by Dr. T. Goodey: "Soil and Freshwater Nematodes".