SOME RECORDS OF PLANT-PARASITIC NEMATODES ENCOUNTERED IN CANADA IN 1960

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Root-knot Nematodes

The northern root-knot nematode, Meloidogyne hapla Chitwood, 1949, was found on intercepted material from the United States, on rose from Texas, Arizona, Iowa, and Michigan. It was intercepted on importations of rose from Denmark, on three importations from Holland, and on importations from Germany, England, and Belgium. This species was found on two interceptions of tomato from Georgia, on Syringa, Lonicera, Ligustrum and Spiraea from Michigan, on pink and red peony roots from Iowa, on Weigelia sp. from New York, on barberry from Pennsylvania, on strawberry from Indiana. and on Viburnum dentatum from Iowa.

The southern root-knot nematode, Meloidogyne incognita incognita (Kofoid & White, 1919) Chitwood, 1949, was intercepted on importations of tomato from Georgia, Sansevieria sp. from Illinois and Florida, Weigelia sp. from Tennessee, and three times on rose from Texas.

The cotton root-knot nematode, Meloidogyne incognita acrita Chitwood, 1949, was found on interceptions of Sansevieria sp. from Florida, and of tomato from Georgia.

The peanut root-knot nematode, Meloidogyne arenaria arenaria (Neal, 1890) Chitwood, 1949, was intercepted on rose from Texas and Holland, on Berberis thunbergii atropurpurea from Holland, and on honeysuckle from Tennessee.

Thames' root-knot nematode, Meloidogyne arenaria thamesi Chitwood, 1949, was found on an importation of rose from Holland,

The Javanese root-knot nematode, Meloidogyne javanica (Treub, 1885) Chitwood, 1949, was intercepted on tomato from Georgia. A root-knot nematode, Meloidogyne sp., was found attacking the roots of rose from the Bowmanville area in Ontario.

Cyst-forming Nematodes

The golden nematode, Heterodera rostochiensis Woll., 1923, was found on the roots of shamrock imported from Ireland.

A recent survey of soils in Prince Edward Island, New Brunswick, and Nova Scotia revealed that the clover cyst nematode, Heterodera trifolii Goffart, 1932, was prevalent in several areas in each of these Provinces.

Root Lesion Nematodes

Pratylenchus penetrans (Cobb, 1917) Filipjev & Schuurmans Stekhoven, 1941 was intercepted on Spiraea from Michigan, and on lilac from New York.

Pratylenchus pratensis (de Man, 1880) Filipjev, 1936 was found on intercepted Forsythia sp. from Michigan. It was found on grass from Richmond and Merivale, Ontario, on strawberry from Prince Edward Island, on white clover from Luskville, Quebec, on oats from the Ottawa area, Russell, Lombardy, St. Albert, and Kilmarr's Corners, Ontario, on grass from Antrim, Finch, Dunrobin, Russell, and Morewood, Ontario, and on alfalfa from Bourget, Ontario.

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Pratylenchus minyus Sher & Allen, 1953 was found on an interception of rose from Hong King, on clover from Richmond, Ontario, and on oats from Metcalfe and Lombardy, Ontario.

Pratylenchus convallariae Seinhorst, 1959 was found on interceptions of lily-of-the-valley pips from Germany, and on pips of Convallaria sp. from Holland.

Tylenchids

A stylet nematode, Tylenchorhynchus maximus Allen, 1955, was found on Coleus from the Ottawa area, on grass from Merivale, Finch, Smiths Falls, Kars, Manotick, and Dunrobin, Ontario, and from Aylmer, Quebec, on violet from Dunrobin, on oats from Kilmarr's Corners, from the Ottawa area and Russell, on alfalfa from Kars, Berwick, and Bourget, and on clover from Russell and Embrun, Ontario.

Tylenchorhynchus nudus Allen, 1955 was found on an interception of Weigelia sp. from Michigan, U. S.A.

Tylenchorhynchus dubius (Buetschli, 1833) Filipjev, 1936 was found on intercepted shamrock from Ireland and on strawberry from Prince Edward Island.

Tylenchorhynchus brevidens Allen, 1955 occurred on alfalfa from Antrim, on clover from Richmond and Antrim, on oats from Metcalfe, and on grass sod from Smiths Falls, Ontario.

Tylenchorhynchus claytoni Steiner, 1933 was found on an interception of Magnolia from England, and on red clover from Russell, Ontario.

Tylenchorhynchus martini Fielding, 1956 occurred on an interception of nursery stock from Hong Kong.

Tylenchorhynchus acti Hopper, 1959 was found in soil from Europe.

Pin Nematodes

A new species of Paratylenchus which is being named and described by Dr. L. Y. Wu, Nematology Section, Entomology Research Institute, Ottawa, was recorded from clover from Smiths Falls and grass from Richmond, Ontario.

Paratylenchus macrophallus (de Man, 1880) Goodey, 1934 was found on interceptions of Dianthus sp. and geranium from Europe.

Hoplolaimids

Scutellonema brachyurum (Steiner, 1938) Andrassy, 1958 was found on an interception of nursery stock from Hong Kong.

Helicotylenchus erythrinae (Zimmermann, 1904) Golden, ,1956was found on grass from Morewood, and on oats from Russell and Embrun, Ontario.

Ring Nematodes

Criconemoides lobatum Raski, 1952 was recorded from grass from Richmond, North Gower, Kars, Manotick, Russell, and Finch, from oats from Kars, Kilmarr's Corners, the Ottawa area, Chrysler, and Embrun, from clover from McLaren's Landing, Richmond, Kars, Russell, Metcalfe, Chestervtlle, Berwick, Casselman, Embrun, Bourget, and Smiths Falls, from cedar seedlings from McLaren's Landing, Ontario, and from wild strawberry from Breckenbridge, Quebec.

Criconemoides curvatum Raski, 1952 occurred on alfalfa from Kars, and on cherry seedlings from Fitaroy Harbour, Ontario.

Aphelenchids

Aphelenchus avenae Bastian, 1865 occurred on importations of shamrock from Ireland, on Caladium from New Jersey, on Lebanon-tree seedlings from Lebanon, on nursery stock from Hong Kong, on Dianthus sp. and geranium from Europe, and on peach seedlings from a nursery, Strathroy, on clover and timothy from Richmond, and on grass from Kars, Ontario.

Aphelenchoides parietinus (Bastian, 1865) Steiner, 1932 was recorded on an importation of pips of Convallaria sp. from Holland, and on Spiraea from Michigan.

Dorylaimids

Xiphinema americanum Cobb, 1913 was found on grass from Manotick, and on cedar seedlings from McLaren's Landing, Ontario.

Longidorus elongatus (de Man, 1876) Thorne & Swanger, 1936 occurred in soil imported from Switzerland.

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BLUEBERRY LEAF SPOT

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Leaf spotting on lowbush blueberry became apparent in commercial plantings within a month after bloom during 1960 and by harvest had caused a 75% defoliation in many areas. Sprout fields were free from leaf spotting until September when a severe infection was observed in many fields in Colchester and Cumberland counties.

Isolations from affected tissues, in the laboratory, have produced several fungi but fruiting of fungi on affected leaves has been extremely sparse, A variety of fungi have been found on fallen leaves but their pathogenicity has not been established.

A leaf spot found on parts of a clone exposed to full sunlight, but not found on parts under partial shade, has been tentatively classified as either a micro-climate or photochemical reaction. Affected tissue has been found to be sterile.

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