

Some Records of Nematodes Encountered
on Plant Material in Canada in 1959

A.D. Baker

Nematology Section, Entomology Research Institute, Ottawa

Root t d s

The northern root-knot nematode, Meloidogyne hapla Chitwood, 1949, was found on Japanese barberry from Oakville, Ont., on Clematis tangutica from Toronto, Ont., on Clematis from Michigan, U.S.A., on alfalfa at Ottawa (greenhouse), on Sansevieria from Florida, U.S.A., on tomato from Virginia, U.S.A., on strawberry from Maryland, U.S.A., on rose from British Columbia, from Texas and Michigan, U.S.A., and from Holland, on peony from Michigan, U.S.A., and on barberry from Tennessee, U.S.A.

The peanut root-knot nematode, Meloidogyne arenaria (Neal) Chitwood, 1949, is recorded on rose from Texas, U.S.A., from Denmark, from Belgium, from North Ireland, from Holland, from France, from Toronto, Ont., and from Michigan, U.S.A. It was also found on Clematis from Michigan, U.S.A., on tomato from Georgia, U.S.A., on potato from British Columbia, on Sorbus americana from Holland, on Philadelphus virginialis from France, and on Sansevieria from Florida, U.S.A.

The southern root-knot nematode, Meloidogyne incognita (Kofoid & White) Chitwood, 1949, is recorded on carrot from Holland Marsh, Ont., on fibrous begonia from Toronto, Ont., on rose from Texas, U.S.A., on Ligustrum vulgare from Iowa, U.S.A., on Hoya from St. Laurent, Que., on Sansevieria from Florida, U.S.A., on baby palms from New York (shipping point), and on tomato from Calgary, Alta., and from Georgia, U.S.A.

The cotton root-knot nematode, Meloidogyne incognita acrita Chitwood, 1949, was found on Sansevieria from Florida, U.S.A., and on tomato from Georgia, U.S.A.

The javanese root-knot nematode, Meloidogyne javanica (Treub), was found on tomato from Georgia, U.S.A., and Meloidogyne sp. on Hibiscus from Jamaica, B.W.I.

Root-lesion Nematodes

Pratylenchus penetrans (Cobb, 1919) Filipjev & Stekhoven, 1941, is reported on strawberry from Prince Edward Island, on lily-of-the-valley from France, and in a bulb shipment from England. Pratylenchus pratensis (de Man, 1880) Filipjev, 1936, was found on strawberry from Verdun, Que., on rose and in conifer soil from Holland, on ivy from Belgium, on lily-of-the-valley from

fibrous begonia from Toronto, Ont. Pratylenchus hexincisus Taylor & Jenkins, 1957, was identified on geranium from Poland. Pratylenchus subpenetrans Taylor & Jenkins, 1957, was found on rose from Italy, Pratylenchus minyus Sher & Allen, 1953, was found on alfalfa and white clover from Kars, Ont., on alfalfa from Hearts Desire, Ont., from Belgium, and in a hayfield at Burritt Rapids, Ont., and a possible new species on cactus from France, Pratylenchus spp. were found in a shipment of greenhouse plants from Poland, and on bromeliads from France.

Stunt Nematodes

Tylenchorhynchus maximus Allen, 1955, is reported on wild iris from Galetta, Ont., in a hayfield at Burritt Rapids, in wetch, grass, alfalfa, and timothy sod in Marchurst Township, Ont., on oat from Carp, Ont., on alfalfa from Hearts Desire, Ont., on oak seedlings from Dunrobin, Ont., on white clover from Kars, Ont., and on carnation from England.

Tylenchorhynchus brevidens Allen, 1955, was found in a hayfield at Burritt Rapids, Ont., on alfalfa from Marchurst Township, Ont., from Kars, Ont., and from Hearts Desire, Ont., on white clover from the Ottawa district, and from Kars, Ont., on clover from North Gower, Ont., on apple from Germany, on mint from England, and in some greenhouse plant soil from Poland.

Tylenchorhynchus dubius (Buetschli, 1878) Filipjev, 1936, was taken from strawberry from Prince Edward Island, rose from Holland, apple from Germany, carnation and bulbs from England, ivy from Belgium, Pinus mughus from Belgium, and plant packing from Hungary.

Tylenchorhynchus quadrifer Andrassy, 1954, was found in some shipments from Hungary and from Poland. T. parvus Allen, 1955, is reported on cactus from France, and on apple from Germany. T. macrurus (Goodey, 1932) Filipjev, 1936, was found on carnation from England, and on Chrysanthemum and Cyclamen from the United Kingdom.

Spiral nematodes

Rotylenchus robustus (de Man, 1876) Filipjev, 1936, was found on Pinus mughus from Belgium, on ivy from Belgium, and in a plant shipment from Holland.

Gottholdsteineria goodeyi (Loof & Oostenbrink, 1958) Andrassy, 1958, was found on alfalfa from Kars, Ont. on strawberry from Verdun, Que., on carnation and bulbs from England, on ivy from Belgium, in a shipment of chrysanthemum and Cyclamen from the United Kingdom, in a shipment of geranium, lily and Crassula from Italy, on ox-eye daisy from Kemptville, Ont.,

on wild iris from Galetta, Ont., and in some plant soil from Poland. G., buxophila (Golden, 1956) Andrassy, 1958, was located on rose from Italy, and Gottholdsteineria spp. on mint from England, and on Dracena from Poland,

Helicotylenchus erythrinae (Zirmermann, 1904) Golden, 1956, was found on Thuja from Holland, in conifer soil from Holland, on ivy from Belgium, in a shipment of geranium, lily, and Crassula from Italy, and a shipment of plant material from Poland. Helicotylenchus spp. were noted as follows: in plant washings from France, on Asparagus plumosus from Poland, on bulbs and soil from France, on nursery stock from Holland, on white clover and alfalfa from Kars, Ont., on red clover from the Ottawa district, on alfalfa from Marchurst Township, Ont., from west of Prescott, Ont., and from Hearts Desire, Ont., on alfalfa and clover from North Gower, Ont., on oak seedlings from Dunrobin, Ont., on vetch and grass from Marchurst Township, Ont., on fibrous begonia from Toronto, Ont., on Cyclamen and nursery stock from Brampton, Ont., and on alfalfa and timothy sod from Murphys Side Road, Ont.

Scutellonema brachyurum (Steiner, 1938) Andrassy, 1958, was found on Hoya and African violet from St. Laurent, Que,

Ring Nematodes

Criconemoides lobatum Raski, 1952, was found in bulbs and soil from France, in a hayfield at Burritt Rapids, Ont., on alfalfa from Hearts Desire, Ont., on strawberry from Verdun, Que., on wild iris from Galetta, Ont., and in alfalfa and timothy sod from Murphys Side Road, Ont., C. curvatum Raski, 1952, was located in a shipment of geranium, lily and Crassula from Italy, Criconema sp. was noted on African violet from St. Laurent, Que.

Pin Nematodes

Paratylenchus macrophallus (de Man, 1880) Goodey, 1934, was found on carnation from England, on mint from England, on ivy from Belgium, on Thuja from Holland, on Asparagus plumosus from Poland, on Dracena from Poland, on Fuchsia from the United Kingdom, in a hayfield at Burritt Rapids, Ont., on strawberry from Prince Edward Island, and on ox-eye daisy from Kemptville, Ont. Paratylenchus sp. was encountered on African violet from St. Laurent, Que,

Cyst Nematodes

Eleterodera rostochiensis Wollenweber, 1923, was found on a shipment of shamrock from Ireland, and some cyst remains resembling this species in a shipment of ivy and lavender from England, H. avenae Wollenweber, 1924, was also found in the shipment of ivy and lavender from England, H. trifolii Goffart, 1932, has been found in soil samples from New Brunswick, Nova Scotia, and Prince Edward Island.

Other Tylenchids

Gall nematodes, Anguina spp., have been noted on bentgrass from Oregon, U.S.A., and from British Columbia on Agropyron inerme, and on red top grass. A species of Ditylenchus was noted on a rose plant from Poland.

Aphelenchids

Aphelenchus avenae Bastian, 1865, was found on apple from Germany, on Viburnum lantana, and in conifer soil from Holland, on Rhus from Denmark, on Primula from Ireland, on ivy from Belgium, on Ficus from Poland, and on Lilium bulbs, on rhizome calla, and on glaiolus bulbs from Italy, on gooseberry and currant from Russia, on Fuchsia from the United Kingdom, on bulbs and soil from France, in herbaceous plants from Australia, on strawberry from Prince Edward Island, and in onion soil from Manitoba. Specimens resembling A. macrobolus Steiner, 1942, were noted on gooseberry from Russia. Paraphelenchus pseudoparietinus (Micoletzky, 1922) was found on mushroom from Lennoxville, Que.

Aphelenchoides parietinus (Bastian, 1865) Steiner, 1932, is reported on dahlia and on Viburnum lantana from Holland, and on strawberry from Prince Edward Island and Russia. Forms closely resembling A. fragariae (Ritzema Bqs 1890) were found on strawberry from Russia. Aphelenchoides spp. were noted amongst greenhouse plants from Europe, on currant from Russia, on Fuchsia from the United Kingdom, and on rose from Belgium.

Dorylaimids

Xiphinema americanum Cobb, 1913, is reported from a hayfield at Burritt Rapids, Ont., on clover from Kars, Ont., and on alfalfa from Hearts Desire, Ont. Xiphinema index Thorne & Allen, 1950, was found in a shipment of greenhouse plants from Italy.

Tylencholaimellus striatus Thorne, 1939, has been found on alfalfa from North Gower, Ont., on apple and in timothy sod from Murphys Side Road, Ont., in vetch and grass from Marchurst Township, Ont., and on ox-eye daisy from Kemptville, Ont.