

## Plant parasitic nematodes from Canada and abroad, 1973-74

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Nematodes isolated from plants and other material intercepted at ports of entry or detected in surveys are listed.

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L'auteur énumère les types de nematodes isolés de végétaux et d'autres matériels interceptés aux points d'entrée ou décelés à l'occasion d'enquêtes.

Nematodes isolated and identified at the Biosystematics Research Institute from infested plant materials and soil samples include many that are parasitic on native plants and crops. Most samples are from Plant Protection Division (PPD), Agriculture Canada, and comprise material intercepted at ports of entry or detected in surveys of nurseries. Identification services are also provided other government agencies, universities, and individuals. Nematodes identified during 1973-74 and their source are listed below:

### Cyst-forming nematodes

*Heterodera schachtii* Schmidt 1871, sugar beet nematode: leek (*Allium porrum*) 1973 France; plants 1974 California, Netherlands.

*Heterodera cruciferae* Franklin 1945: leek 1973 France.

*Heterodera trifolii* Goffart 1932, clover cyst nematode: leek 1973 France; soil (potato) 1973-74 BC, Que., P.E.I., Alta., N.B.; laurel 1973 Italy; farm machinery 1974 Japan.

*Heterodera avenae* Wollenweber 1924, oat cyst nematode: soil 1973 Ontario soil survey (PPD); *Bromeliada* sp. 1974 Denmark; nurseries 1974 Ontario survey (PPD).

*Heterodera latipons* Franklin 1969: soil (potato) 1973-74 P.E.I.

*Heterodera goettingiana* Liebscher 1892, pea cyst nematode: soil (vehicle) 1973 Japan.

*Heterodera glycines* Ichinohe 1952, soybean cyst nematode: soil (vehicle) 1973 Japan.

*Heterodera punctata* Thorne 1928, grass cyst nematode: soil 1973 Toronto, Ont.; Red Bay and Pinmore, Labrador; nurseries, potato field 1974 B.C., Nfld. survey (PPD).

*Heterodera weissi* Steiner 1949: plants 1974 California, Netherlands.

*Heterodera trifolii* Goffart 1932, clover cyst nematode: leek 1973 France; soil (potato) 1973-74 BC, Que., P.E.I., Alta., N.B.; laurel 1973 Italy; farm machinery 1974 Japan; *Lilium* bulbs 1974 Czechoslovakia; heather 1974 England; vehicle 1974 Germany.

*Globodera rostochiensis* (Wr.) Mulvey & Stone 1976 (*Heterodera rostochiensis* Wollenweber 1923): soil (potato) 1974 Newfoundland.

### Root-knot nematodes

*Meloidogyne hapla* Chitwood 1949, northern root-knot nematode: rose roots 1973 France, Netherlands; celery 1973 Vineland, Ont.; soil (forage) 1973 P.E.I.; rose roots 1974 Tyler, Texas; *Ligustrum* sp. 1974 Tennessee.

*Meloidogyne incognita* (Kofoid & White 1919) Chitwood 1949: tomato 1973 Tyler, Texas; Clifton Georgia; greenhouse 1973 Calgary, Alta.; hoyo roots 1973 Italy; tomato (greenhouse) 1974 Vineland, Ont.; cherry (greenhouse) 1974 Manitoba.

*Meloidogyne* sp. (description in press): turfgrass 1974 southern Ontario golf courses.

### Spiral nematodes

*Helicotylenchus pseudorobustus* (Steiner 1914) Golden 1956: roses 1973 Netherlands.

*Helicotylenchus digonicus* Perry, in Perry et al. 1959: plants (soil) 1974 USSR.

*Helicotylenchus pseudodigonicus* Szczygiel 1970: plants (soil) 1974 USSR.

*Helicotylenchus canadensis* Waseem 1961: carrot (soil) 1974 Bradford, Ont.

*Rotylenchus buxophilus* Golden 1956: peony 1974 Niagara Falls, Ont.

*Rotylenchus fallorobustus* Sher 1965: juniper (soil) 1973 East Germany.

*Rotylenchus quartus* (Andrassy 1958) Sher 1961: plants (soil) 1974 USSR.

*Rotylenchus robustus* (De Man 1976) Filipjev 1936: juniper (soil) 1973 East Germany.

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**Pin nematodes**

***Paratylenchus hamatus*** Thorne & Allen 1950: soil 1973 Vineland Station, Ont.

**Root lesion nematodes**

***Pratylenchus penetrans*** (Cobb 1919), Filipjev & Schwermans-Stekhoven 1941: deciduous shrubs (roots) 1973 East Germany; juniper (roots) 1973 East Germany; rose (roots) 1973 Virgil, Ont.

**Foliage nematodes**

***Aphelenchoides fragariae*** (Ritzenia Bos 1890) Christie 1932: Rieger begonia (leaves) 1974 Ottawa, Harrow, & Beamsville, Ont.; 1973 Harrow, Ont.

*Aphelenchoides saprophilus* **Franklin 1957: Aralia sp. 1973 Belgium; shallots 1973 France.**

**Stunt nematodes**

***Tylenchorhynchus dubius*** (Butschli 1873) Ailipjev 1936: juniper (roots) 1973 East Germany; plant material 1974 USSR.

***Macroposthonica ornata*** (Raski 1958) de Grisse & Loof 1965: **Gardenia** 1973 South Carolina.

***Macroposthonia xenoplax*** (Raski 1952) de Grisse & Loof 1965: soil 1973 Vineland Station, Ont.

***Merlinius brevidens*** (Allen 1955) Siddiqi 1970: **soil** 1973 Vineland Station, Ont.

***Criconemoides*** sp., (undescribed ring nematode): rose (soil) 1973 Holland.

**Other tylenchids**

***Ditylenchus destructor*** Thorne 1945, potato rot nematode: Iris bulbs 1973 Mt. Vernon, Wash., USA.

***Ditylenchus myceliophagus*** Goodey 1958: azalea cuttings 1973 Holland.

***Tylenchus exiguus*** de Man 1921: azalea cuttings, laurel, spurge 1973 Yugoslavia, Holland.

**Dorylaimids**

***Trichodorus porosus*** Allen 1957: gardenia 1973 South Carolina.

***Xiphinema americanum*** Cobb 1913: gardenia 1973 South Carolina.

**Other nematodes**

All of the following nematodes were isolated from mud samples from the MacKenzie River System, North West Territories; survey by Freshwater Institute, Environment Canada, 1973.

***Dorylaimus stagnalis*** Dujardin 1845

***Tripyla*** - several species

***Tobrilus*** - several species

***Enoplia*** - several species

***Gastromermis*** Micoletsky 1925

***Hydromermis*** Corti 1902

***Limnomermis*** Daday 1911

***Lanceimermis*** Artyukhovskiy 1969

***Neomesomermis*** Nickle 1972.