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A LIST OF PLANT PARASITIC NEMATODES IN CYPRUS

by

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Previous work in Cyprus revealed the presence of *Anguina tritici* Steinbuch on cereals and *Heterodera marioni* (Cornu, 1879) (now known as *Meloidogyne* spp.) attacking vegetables (Natrass, 1933, 1937). Georgiou (1957) published an account of the host range of *Meloidogyne javanica* (Treub) Chitw., *Meloidogyne arenaria* (Neal) Chitw., and *Meloidogyne* sp. He also mentioned the citrus nematode, *Tylenchulus semipenetrans* Cobb, and *Anguina tritici* Steinbuch. Taylor in 1965 reported the occurrence of 12 plant nematode species.

An island-wide survey carried out in Cyprus and reported here revealed the presence of 58 species of nematodes, 36 of which were identified to species and 22 to genus; 44 of them are being reported for the first time. The nematodes found were associated with 46 host plants.

Soil and root samples were taken from various locations on the island. Nematodes were extracted from soil by the sieving and Baermann funnel method and endoparasitic ones from the roots by a combination of the Waring Blender and the Baermann funnel method. The nematodes were killed by placing them in a small vial stood in water at 65°C for three minutes; they were then fixed in 3% formalin.

The following is a list of plant nematodes found in the rhizosphere of various host plants, in Cyprus, during the course of the

survey, together with all previous records from Taylor (1965) and Georgiou (1957).

AGLENCHUS COSTATUS (de Man) Meyl / *Prunus armeniaca* L., *Vitis vinifera* L., *Phaseolus vulgaris* L., A. THORNEI (Andrássy) Meyl / *P. vulgaris* L.; AGLENCHUS sp. / *Daucus carota* L., *Medicago sativa* L.; ANGUINA TRITICI (Steinbuch) Chitwood / *Triticum vulgare* L.; APHELENCHOIDES BLASTOPHTHORUS Franklin / *D. carota*; A. HAMATUS Thorne *et* Malek / *D. carota*; A. NONVEILLERI Andrássy / *P. vulgaris*; APHELENCHOIDES sp. / *Prunus cerasus* L., *V. vinifera, D. carota, M. sativa, P. vulgaris*; APHELENCHUS AVENAE Bastian / *Apium graveolens* L., *D. carota, V. vinifera*; APRATYLENCHOIDES sp. / *P. vulgaris*; BASIROIDES sp. / *V. vinifera, D. carota*; BASIRIA sp. / *M. sativa, D. carota, P. vulgaris*; BOLEODORUS THYLACTUS Thorne / *Citrus paradisi* Macf., *V. vinifera, P. vulgaris*; BOLEODORUS sp. / *M. sativa*; MACROPOSTHONIA ANTIPOLITANA (de Guiran) de Grisse *et* Loof / *Pr. armeniaca*; M. XENOPLAX (Raski) de Grisse *et* Loof / *Ficus carica* L., *Pr. armeniaca*; CRICONEMOIDES sp. / *Pr. domestica* L., *Pr. persica* var. *nectarina* Maxim, *F. carica*; DITYLENCHUS DESTRUCTOR Thorne / *D. carota*; D. DIPSACI (Kühn) Filipjev / *Vicia faba* L., *Cucurbita pepo* L., *P. vulgaris*; DITYLENCHUS sp. / *D. carota, P. vulgaris, V. vinifera, M. sativa*; HELICOTYLENCHUS DIHYSTERA (Cobb) Sher / *Olea europaea* L.; H. DIGONICUS Perry, in Perry, Darling *et* Thorne / *O. europaea, V. vinifera, Pr. persica*; H. MULTICINCTUS (Cobb) Golden / *Musa cavendishii* Lambert.; HELICOTYLENCHUS sp. / *Pr. persica, C. aurantium* L., *V. vinifera, Malus communis* L., *M. sativa*; HETERODERA CAROTAE Jones / *D. carota*, H. ROSTOCHIENSIS Wollenweber / *Solanum tuberosum* L.; HETERODERA sp. / *Cucumis sativus* L.; LONGIDORUS SIDDIQII Aboul-Eid / *Pr. domestica*; MELOIDOGYNE JAVANICA (Treub) Chitwood / *Beta vulgaris* L., *C. sativus, Cheiranthus cheiri* L., *Brassica oleracea* var. *Botrytis* L., *Acacia cyanophylla* Lindl., *P. vulgaris, Fumaria officinalis* L., *Malva* sp., *Pr. amygdalus, Pr. persica, Solanum melongena* L., *Lycopersicon esculentum* Mill, *A. graveolens, Coriandrum sativum* L., *D. carota, M. cavendishii, F. carica, Vigna sinensis* Endl, *Citrullus vulgaris* Schrad, *C. melo, Hibiscus esculentus* L., *Nicotiana tabacum* L., *Solanum nigrum* L., *Chenopodium* sp., *C. pepo, V. vinifera*; M. ARENARIA (Neal) Chitwood / *S. tuberosum, V. sinensis, Pr. persica*; M. INCOGNITA (Kofoid *et* White) Chitwood / *S. tuberosum*; MELOIDOGYNE sp. / *Antirrhinum majus* L., *S. nigrum, Capsicum* sp., *Mercurialis annua* L., *H. esculentus, C. vulgaris, Passiflora* sp., *F. ca-*

rica, Morus alba L., *Pr. domestica, Pr. cerasus, O. europaea, P. vulgaris, M. sativa*; MERLINIUS BREVIDENS (Allen) Siddiqi / *D. carota, V. vinifera, Pr. armeniaca, P. vulgaris, M. sativa, Hordeum vulgare* L., *C. sativus, O. europaea*; M. NANUS (Allen) Siddiqi / *M. sativa*; M. MICRODORUS (Geraert) Siddiqi / *P. vulgaris*; NEOPSILENCHUS sp. / *V. vinifera, D. carota, P. vulgaris*; NOTHOTYLENCHUS sp. / *D. carota, V. vinifera, M. sativa, P. vulgaris*; PARATYLENCHUS NAINIANUS Edward *et* Misra / *V. vinifera*; P. NEOAMBLYCEPHALUS Geraert / *D. carota*; PARATHYLENCHUS sp. / *M. sativa, D. carota, Pr. armeniaca*; PRATYLENCHOIDES sp. / *M. sativa*, PRATYLENCHUS BRACHYURUS (Godfrey) Filipjev *et* Schuurmans Stekhoven / *M. communis*; P. MINYUS Sher *et* Allen / *M. sativa, P. vulgaris*; P. PSEUDOPRATENSIS Seinhorst / *D. carota, P. vulgaris, V. vinifera, M. sativa*; P. THORNEI Sher *et* Allen / *D. carota, P. vulgaris, M. sativa*; PRATYLENCHUS sp. / *Pr. armeniaca, P. vulgaris, M. sativa*; PSEUDHALENCHUS sp. / *D. carota*; QUINISULCIUS sp. / *D. carota*; ROTYLENCHUS sp. / *V. vinifera, P. vulgaris, O. europaea*; THADA CANCELLATA Thorne / *V. vinifera*, TRICHODORUS sp. / *V. vinifera, Pr. persica, Pyrus communis* L.; TYLENCHORHYNCHUS CLARUS Allen / *V. vinifera, D. carota, M. sativa*; T. GOFFARTI Sturhan / *Pr. persica, P. vulgaris, P. communis*; TYLENCHORHYNCHUS sp. / *P. communis, M. communis, C. aurantium, D. carota, M. sativa*; TYLENCHULUS SEMIPENETRANS Cobb. / *C. aurantium, C. paradisi, C. limon* Burm, *C. reticulata* Blanco.; TYLENCHUS sp. / *H. vulgare, V. vinifera, D. carota, C. sativus, P. vulgaris*; XIPHINEMA INDEX Thorne *et* Allen / *V. vinifera, F. carica*; X. MEDITERRANEUM Martelli *et* Lamberti / *C. aurantium, V. vinifera.*

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SUMMARY

A comprehensive report on the until-now found plant parasitic nematodes in Cyprus is given. 58 nematodes, 36 of which were identified to species and 22 to genus are mentioned. 44 of them are being reported for the first time. The nematodes were found associated with 46 host plants.

RIASSUNTO

Un elenco di nematodi fitoparassiti trovati a Cipro.

È dato un elenco completo dei nematodi fitoparassiti finora trovati a Cipro. Sono state osservate 58 differenti specie, 36 delle quali sono state identificate. Delle altre 22 è dato solo il nome del genere; 44 di esse sono state segnalate per la prima volta a Cipro. I nematodi sono stati trovati associati con 46 differenti specie vegetali.

RÉSUMÉ

Une liste des nématodes phytoparasites trouvés à Chypre.

58 nématodes parasites des plantes ont été trouvés jusqu'à présent à l'île de Chypre, dont 36 ont été identifiés à l'espèce, et 22 au genre. 44 de ces nématodes sont signalés pour la première fois. Ces nématodes ont été associés a 46 plantes hôtes.

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