

## Transfer of Type Specimens<sup>1</sup>

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**Key words:** taxonomy, nematode type specimens.

A type collection was started in 1955 at what was then the Citrus Experiment Station of the University of Florida in Lake Alfred, Florida. Specimens have been described in the literature as being in Cabinet-2724 of the University of Florida Collection. In 1978 the entire collection was moved to Gainesville where its expansion continued. It eventually totaled 89 slides of various types, almost invariably mounted in glycerine on Cobb metal slides between #0 coverslips (except for those specimens donated by others). The collection, comprised of nematodes from various parts of the world, has been transferred to the United States Department of Agriculture Collection at Beltsville, Maryland, where it is maintained by Dr. A. M. Golden.

An alphabetical listing of the species, the number and sex of the specimens, the type locality, the date collected, the University of Florida collection designation, and the USDA Nematode Collection number are presented.

### REFERENCES

- Aboul-Eid, H. Z. 1970. Systematic notes on *Longidorus* and *Paralongidorus*. *Nematologica* 16:159-179.
- Andrassy, I. 1959. Neue und wenig bekannte Nematoden aus Jugoslawien. *Annales Historico-Naturales Musei Nationalis Hungarici* 51:259-275.
- Bos, W. S., and P. A. A. Loof. 1985. *Nematologica* 30 (1984), in press.
- Brzeski, M. W. 1963. *Paratylenchus macrodorus* n. sp. (Nematoda: Paratylenchidae), a new plant parasitic nematode from Poland. *Bulletin de l'Academie Polonaise des Sciences. Classe II*, 11(6):277-280.
- Cobb, N. A. 1913. New nematode genera found inhabiting fresh water and nonbrackish soils. *Journal of the Washington Academy of Sciences* 3(16):432-444.
- Colbran, R. C. 1962. Studies of plant and soil nematodes. 5. Four new species of Tylenchoidea from Queensland pineapple fields. *Queensland Journal of Agricultural Science* 19(2):231-239.
- Cooman, A. 1965. *Xiphinema basilgoodeyi* n. sp. with observations on its larval stages (Nematoda: Dorylaimidae). *Nematologica* 10(4):581-593.
- Dalmasso, A. 1969. Etude anatomique et taxonomique des genres *Xiphinema*, *Longidorus* et *Paralongidorus* (Nematoda: Dorylaimidae). *Memoires du Muséum National d'Histoire Naturelle* 61(2):33-82.
- DeMan, J. G. 1921. Nouvelles recherches sur les nematodes libres terricoles de la Hollande. *Capita Zoologica* 1(1):3-62.
- DiEdwards, A. A., and V. G. Perry. 1964. *Heterodera leucelyma* n. sp. (Nemata: Heteroderidae), a severe pathogen of St. Augustine grass in Florida. *Florida Agricultural Experiment Station Bulletin* 687.
- Heyns, J. 1968. A monographic study of the nematode families Nygolaimidae and Nygolaimellidae. *Entomology Memoirs, South Africa* 19:1-144.
- Jenkins, W. R. 1956. *Paratylenchus projectus*, new species (Nematoda: Criconemataidae) with a key to the species of *Paratylenchus*. *Journal of the Washington Academy of Sciences* 46(9):296-298.
- Krnjaic, D., and P. A. A. Loof. 1973. Description of *Nothocriconema psammophilum* n. sp. (Nematoda: Criconematoidea) with some data on its ecology. *Mededelingen Rijksfaculteit van de Landbouwhoogeschool te Gent* 38(1):73-76.
- Kumar, A. C. 1981. Studies on nematodes in coffee soils. 5. Description of three new species of *Tylenchorhynchus* and occurrence of four other Tylenchid species. *Journal of Coffee Research* 7(3):88-99.
- Lamberti, F., and T. Bleve-Zacheo. 1979. Studies on *Xiphinema americanum sensu lato* with descriptions of 15 new species. *Nematologia Mediterranea* 7:51-106.
- Lamberti, F., and A. C. Tarjan. 1974. *Xiphinema costaricense* n. sp. (Longidoridae: Nematoda) a new species of dagger nematode from Costa Rica. *Nematologia Mediterranea* 2(1):1-11.
- Loof, P. A. A. 1968. Taxonomy of *Hemicyclophora* species from west and central Europe (Nematoda: Criconematoidea). *Mededelingen van de Landbouwhoogeschool te Wageningen* 68(4):1-43.
- Loof, P. A. A. 1983. Two new species of Longidoridae (Dorylaimida) from Saudi Arabia. *Nematologica* 28(1982):307-317.
- Loof, P. A. A. 1984. *Hemicyclophora* species from Iran (Nematoda: Criconematoidea). *Nematologica* 30(1), in press.
- Loof, P. A. A., and P. W. T. Maas. 1972. The genus *Xiphinema* (Dorylaimida) in Surinam. *Nematologica* 18(1):92-119.
- Loof, P. A. A., and R. D. Sharma. 1979. Plant parasitic nematodes from Bahia State, Brazil: The genus *Xiphinema* Cobb, 1913 (Dorylaimoidea). *Nematologica* 25(1):111-127.
- Loos, C. A. 1949. Notes on free-living and plant-parasitic nematodes of Ceylon—No. 5. *Journal of the Zoological Society of India* 1(1):23-29.
- Luc, M., and A. Dalmasso. 1964. Three new species

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Nematode Name	Specimens	Type Locality	Collection Date	USDA Nema Collection Label	Original Univ. Fla. Label	
					Tray	Slide
<i>Dolichodorus miradvulvus</i> Smart & Khuong, 1985	1 ♀ Holotype	Stuart, FL	8 Mar 83	T-393t (Holo)	5	14
<i>Dolichodorus miradvulvus</i>	1 ♂ Allotype	Stuart, FL	8 Mar 83	T-394t (Allo)	5	15
<i>Dolichodorus miradvulvus</i>	1 ♂, 1 ♀ Paratypes	Stuart, FL	21 June 82	T-3378p	5	16
<i>Dolichodorus miradvulvus</i>	1 ♂, 1 ♀ Paratypes	Stuart, FL	21 Jun 82	T-3379p	5	17
<i>Dolichodorus miradvulvus</i>	1 ♂, 1 ♀ Paratypes	Stuart, FL	21 Jun 82	T-3380p	5	18
<i>Dolichodorus miradvulvus</i>	1 ♀ Paratype	Stuart, FL	21 Jun 82	T-3381p	5	19
<i>Dolichodorus miradvulvus</i>	♂ tail Paratype	Stuart, FL	21 Jun 82	T-3382p	5	20
<i>Ecpheyadophora tenuissima</i> deMan, 1921	1 ♂ Neotype	Ruurlo, Holland	3 Jun 56	T-395t (Neo)	1	6
<i>Gracilacus idalimus</i> Raski, 1962	1 ♀ Paratype	Riverside, CA	12 Nov 58	T-3383p	3	6
<i>Gracilacus intermedius</i> Raski, 1962	1 ♀ Paratype	Bolinas, CA	23 Mar 52	T-3384p	3	5
<i>Gracilacus mirus</i> Raski, 1962	1 ♀ Paratype	Livermore, CA	27 Feb 61	T-3385p	3	3
<i>Hemicriconemoides obtusus</i> Colbran, 1962	1 ♀ Paratype	Bowling Green, Queensland, Australia	Sep 67	T-3386p	3	11
<i>Hemicyliophora epicharoides</i> Loof, 1968	4 ♀ Paratypes	Brindisi, Italy	1977	T-3387p	4	3
<i>Hemicyliophora epicharoides</i> Loof, 1985	4 ♀ Paratypes	Brindisi, Italy	1977	T-3388p	4	4
<i>Hemicyliophora iranica</i> Loof, 1985	1 ♀ Paratype	Shahsavar, Iran	Jan 72	T-3389p	5	1
<i>Hemicyliophora lutosoides</i> Loof, 1985	1 ♀ Paratype	Zavareh, Iran	?	T-3390p	5	2
<i>Hemicyliophora megalodiscus</i> Loof, 1985	1 ♀ Paratype	Rudbar, Iran	Feb 72	T-3391p	5	3
<i>Hemicyliophora parvana</i> Tarjan, 1952	1 ♀ Lectotype	Sanford, FL	5 Jun 51	T-396t (Lecto)	1	15
<i>Hemicyliophora sculpturata</i> Loof, 1985	1 ♀ Paratype	Zavareh, Iran	1973	T-3392p	5	4
<i>Hemicyliophora spinituberculata</i> Loof, 1985	1 ♀ Paratype	Bandar Pahlavi, Iran	?	T-3393p	5	5

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<i>Hemicyclophora sturhani</i> Loof, 1985	1 ♀ Paratype	Zandjan, Iran	Oct 71	T-3394p	5	6
<i>Heterodera leuceilyma</i> DiEdwards & Perry, 1964	5 Paratype cysts	West Palm Beach, FL	Oct 61	T-3395p	2	15
<i>Heterodera leuceilyma</i>	6 ♂ Paratypes	West Palm Beach, FL	Oct 61	T-3396p	2	16
<i>Heterodera leuceilyma</i>	6 larvae Paratypes	West Palm Beach, FL	Oct 61	T-3397p	2	17
<i>Longidorus juvenilis</i> Dalmasso, 1969	3 ♀, 1 ♂ Paratypes	Frejus-Var, France	Nov 68	T-3398p	3	13
<i>Longidorus siddiquii</i> Aboul-Eid, 1970	1 ♀, 1 ♂ Paratypes	Aligarh, India	1957	T-3401p	2	18
<i>Nothocriconema psammophilum</i> Krnjaic & Loof, 1973	1 ♀ Paratype	Yugoslavia	1973	T-3399p	5	7
<i>Nothocriconemoides lineolatus</i> Maas, Loof & deGrisse, 1971	1 ♀ Paratype	Carolina, Surinam	Apr 69	T-3400p	3	15
<i>Nyglaimus scalprum</i> Heyns, 1968	1 ♀ Holotype, 1 ♂ Allotype	Safety Harbor, FL	10 Jan 63	T-397t (Holo & Allo)	3	10
<i>Paratylenchus elachistus</i> Steiner, 1949	Paralectotype	Clewiston, FL	21 Jul 43	T-3404p	2	13
<i>Paratylenchus halophilus</i> Wouts, 1966	1 ♂ Paratype	Best's Island, NZ	18 Jun 65	T-3402p	3	2
<i>Paratylenchus halophilus</i>	1 ♀ Paratype	Best's Island, NZ	18 Jun 65	T-3403p	3	1
<i>Paratylenchus macrodorus</i> Brzeski, 1963	3 ♀, j Paratypes	Skierniewice, Poland	30 Aug 61	T-3405p	2	19
<i>Paratylenchus microdorus</i> Andrassy, 1959	1 ♀ Paratype	Montenegro, Yugoslavia	1958	T-3406p	2	1
<i>Paratylenchus minusculus</i> Tarjan, 1960	1 ♀ Holotype	Winter Haven, FL	18 Jul 57	T-398t (Holo)	1	16
<i>Paratylenchus minusculus</i>	2 ♂ Allotypes	Winter Haven, FL	18 Jul 57	T-399t (Allo)	1	17
<i>Paratylenchus projectus</i> Jenkins, 1956	1 ♀ Neotype	Marlboro, MD	5 Jun 58	T-400t (Neo)	1	19
<i>Paratylenchus sarissus</i> Tarjan, 1960	1 ♀ Holotype	Kingston, RI	6 Apr 55	T-401t (Holo)	1	18
<i>Pseudhalenchus anchilisposomus</i> Tarjan, 1958	1 ♀ Paratype	Berkeley, CA	15 Oct 56	T-3407p	1	10

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<i>Pseudhalenches anchilisposomus</i>	1 ♀ Paratype	Berkeley, CA	15 Oct 56	T-3408p	1	11
<i>Pseudhalenches minutus</i> Tarjan, 1958	1 ♀ Holotype	Lake of the Hills, FL	2 Mar 56	T-402t (Holo)	1	1
<i>Pseudhalenches minutus</i>	1 ♂ Paratype	Lake of the Hills, FL	2 Mar 56	T-3409p	1	2
<i>Tylencholaimus brevicaudatus</i> (Tarjan, 1953)	1 ♀ Lectotype	Kingston, RI	12 Jan 53	T-403t (Lecto)	1	12
<i>Tylenchorhynchus angii</i> Kumar, 1981	♀ Paratypes	CCRI, India	Jul 79	T-3410p	4	10
<i>Tylenchorhynchus cynodonii</i> Kumar, 1981	♀ Paratypes	CCRI, India	1979	T-3411p	4	11
<i>Tylenchorhynchus musae</i> Kumar, 1981	♀ and ♂ Paratypes	CCRI, India	Aug 75	T-3412p	4	12
<i>Xiphinema americanum</i> Cobb, 1913	1 ♂ Neotype	Kingston, RI	10 Oct 52	T-404t (Neo)	1	13
<i>Xiphinema americanum</i>	3 ♀ Topotypes	Kingston, RI	12 Jan 53	T-3413p	1	14
<i>Xiphinema arenarium</i> Luc & Dalmasso, 1964	1 ♀ Paratype	Mortes, France	?	T-3414p	2	14
<i>Xiphinema basilgoodeyi</i> Coomans, 1965	1 ♀ Paratype	Nioka, Ituri, Congo	Oct 59	T-3415p	2	20
<i>Xiphinema bulgariensis</i> Stoianov, 1964	1 ♀ Paratype	Bulgaria	Mar 62	T-3463p	3	9
<i>Xiphinema citricolum</i> Lamberti & Bleve-Zacheo, 1979	1 ♀ Paratype	Eloise, FL	24 Sep 64	T-3416p	4	6
<i>Xiphinema costaricense</i> Lamberti & Tarjan, 1974	1 ♀ Paratype	Turrialba, Costa Rica	19 Oct 69	T-3417p	4	2
<i>Xiphinema coxi</i> Tarjan, 1964	1 ♀ Holotype	Merritt Island, FL	25 Aug 59	T-405t (Holo)	2	6
<i>Xiphinema denoudeni</i> Loof & Maas, 1972	3 ♀ Paratypes	Geyersvljt, Surinam	Dec 69	T-3418p	3	17
<i>Xiphinema dimidiatum</i> Loof & Sharma, 1979	1 ♀ Paratype	Sergipe, Brazil	1979	T-3419p	5	8
<i>Xiphinema dolosum</i> Loof, 1985	1 ♀ Paratype	Samaru, Nigeria	Nov 79	T-3420p	5	9
<i>Xiphinema fatikae</i> Bos & Loof, 1984	2 ♀, 1 j Paratypes	Fatika, Nigeria	?	T-3421p	5	10

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					Tray	Slide
<i>Xiphinema filicaudatum</i> Loof & Maas, 1972	1 ♀ Paratype	LaPoule, Surinam	Aug 64	T-3422p	3	18
<i>Xiphinema georgianum</i> Lamberti & Bleve-Zacheo, 1979	4 ♀ Paratypes	Jekyll Island, GA	8 Jun 58	T-3423p	6	4
<i>Xiphinema georgianum</i>	1 ♀ Paratype	Jekyll Island, GA	8 Jun 58	T-3424p	6	5
<i>Xiphinema georgianum</i>	1 ♀ Paratype	Jekyll Island, GA	8 Jun 58	T-3425p	4	8
<i>Xiphinema griphum</i> Bos & Loof, 1984	5 ♀ Paratypes	Oxnard, CA	Jan 63	T-3426p	3	7
<i>Xiphinema imambaksi</i> Loof & Maas, 1972	1 ♀ Paratype	Geyersvlijt, Surinam	Dec 69	T-3427p	3	16
<i>Xiphinema insignis</i> Loos, 1949	1 ♀ Paratype	Kurunegala, Ceylon	Jul 44	T-3428p	2	3
<i>Xiphinema intermedia(um)</i> Lamberti & Bleve-Zacheo, 1979	3 ♀ Paratypes	Ft. Pierce, FL	28 Aug 64	T-3429p	6	1
<i>Xiphinema laevistriatum</i> Lamberti & Bleve-Zacheo, 1979	1 ♀ Paratype	Indiantown, FL	May 62	T-3430p	6	6
<i>Xiphinema laevistriatum</i>	1 ♀ Paratype	Indiantown, FL	May 62	T-3431p	4	7
<i>Xiphinema majus</i> Bos & Loof, 1984	1 ♀ Paratype	Samaru, Nigeria	Nov 79	T-3432p	5	11
<i>Xiphinema mediterraneum</i> Martelli & Lamberti, 1967	4 ♀ Paratypes	Aldeia Galega, Portugal	Jan 63	T-3433p	3	8
<i>Xiphinema neovuitenezi</i> Dalmasso, 1969	3 ♂, 1 ♀ Paratypes	Beziers, France	May 58	T-3434p	3	14
<i>Xiphinema oryzae</i> Bos & Loof, 1984	1 ♀ Paratype	Nigeria	?	T-3435p	5	12
<i>Xiphinema peruvianum</i> Lamberti & Bleve-Zacheo, 1979	4 ♀, 2 ♂ Paratypes	Lima, Peru	Oct 62	T-3436p	6	2
<i>Xiphinema peruvianum</i>	6 ♀ Paratypes	Lima, Peru	Oct 62	T-3437p	6	3
<i>Xiphinema phoenicis</i> Loof, 1983	1 ♀, 1 ♂ Paratypes	Riad, Saudi Arabia	?	T-3438p	5	13
<i>Xiphinema pratense</i> Loos, 1949	1 ♀ Paratype	Talawakelle, Ceylon	Nov 45	T-3439p	2	4

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					Tray	Slide
<i>Xiphinema rivesi</i> Dalmasso, 1969	8 ♀ Paratypes	France	Sep 68	T-3440p	3	12
<i>Xiphinema rotundatum</i> Schuurman Stekhoven & Teunissen, 1938	2 ♀ Paratypes	Belgian Congo, Africa	16 Apr 34	T-3441p	2	8
<i>Xiphinema rotundatum</i>	2 ♀ Paratypes	Belgian Congo, Africa	16 Apr 34	T-3442p	2	9
<i>Xiphinema surinamense</i> Loof & Maas, 1972	1 ♂ Paratype	Lelydorp Project, Surinam	Jul 69	T-3443p	3	19
<i>Xiphinema surinamense</i>	1 ♀ Paratype	Lelydorp Project, Surinam	Jul 69	T-3444p	3	20
<i>Xiphinema tarjanense</i> Lamberti & Bleve-Zacheo, 1979	2 ♀, 1 j Paratypes	Winter Haven, FL	15 Nov 57	T-3445p	6	7
<i>Xiphinema tarjanense</i>	1 ♀ Paratype	Winter Haven, FL	15 Nov 57	T-3446p	4	5
<i>Xiphinema tenuicutis</i> Lamberti & Bleve-Zacheo, 1979	1 ♀ Paratype	Oliver Springs, TN	Aug 57	T-3447p	6	9
<i>Xiphinema tenuicutis</i>	1 ♀ Paratype	Oliver Springs, TN	Aug 57	T-3448p	4	9
<i>Xiphinema tropicale</i> Zullini, 1973	1 ♀ Holotype	Chiapas, Mexico	9 Mar 71	T-406t (Holo)	6	8
<i>Xiphinema vulgare</i> Tarjan, 1964	1 ♀ Holotype	Lake Alfred, FL	4 May 61	T-407t (Holo)	1	3
<i>Xiphinema vulgare</i>	1 ♂ Allotype, 3 ♀	Lake Alfred, FL	4 May 61	T-408t (Allo)	2	10
<i>Xiphinema vulgare</i>	4 ♀, 2 j Paratypes	Lake Alfred, FL	4 May 61	T-3450p	2	11
					2	12

- of *Xiphinema* associated with vine (French text). *Nematologica* 9(4):531-541.
- Maas, P. W. Th., P. A. A. Loof, and A. deGrisse. 1971. *Nothocronemoides lineolatus* (n. gen., n. sp. Nematoda: Criconematidae). *Mededelingen Faculteit Landbouwwetenschappen Gent* 36(2):711-715.
- Martelli, G., and F. Lamberti. 1967. Le specie di *Xiphinema Cobb*, 1913 trovate in Italia e commenti sulla presenza di *Xiphinema americanum Cobb* (Nematoda: Dorylaimoidea). *Phytopathologia Mediterranea* 6:65-85.
- Raski, D. J. 1962. Paratylenchidae n. fam. with descriptions of five new species of *Gracilacus* n. g. and an emendation of *Cacopaurus* Thorne, 1943, *Paratylenchus* Micoletzky, 1922 and Criconematidae Thorne, 1943. *Proceedings of the Helminthological Society of Washington* 29(2):189-207.
- Schuurmans Stekhoven, J. H., and R. J. H. Teunissen. 1938. Nematodes libres terrestres. Fasc. (22) Mission (de Witte) (1933-35). Exploration du Parc National Albert Deuxieme Serie, Belgium.
- Smart, G. C., Jr., and N. B. Khuong. 1985. *Dolichodorus miradvertis* n. sp. (Nematoda: Tylenchida) with a key to species. *Journal of Nematology* 17:29-37.
- Steiner, G. 1949. Plant nematodes the grower should know. *Proceedings of the Soil and Crop Science Society of Florida* 4-B:72-117.
- Stoianov, D. 1964. A contribution to the nematode fauna of the grape vine (Bulgarian text). *Plant Protection* (Bulgarian Ministry Agriculture) 6:16-24.
- Tarjan, A. C. 1952. The nematode genus *Hemicyclophora* deMan, 1921 (Criconematidae) with a description of a new plant-parasitic species. *Proceedings of the Helminthological Society of Washington* 19(2):65-77.
- Tarjan, A. C. 1956. Known and suspected plant-parasitic nematodes of Rhode Island. II. *Xiphinema americanum* with notes on *Tylencholaimus brevicardatus*, n. comb. *Proceedings of the Helminthological Society of Washington* 23(1):88-92.
- Tarjan, A. C. 1958. A new genus, *Pseudhalenchus* (Tylenchinae: Nematoda), with descriptions of two new species. *Proceedings of the Helminthological Society of Washington* 25(1):20-25.
- Tarjan, A. C. 1960. A review of the genus *Paratylenchus* Micoletzky, 1922 (Paratylenchidae: Nematoda) with a description of two new species. *Annals of the New York Academy of Science* 84(10):329-390.
- Tarjan, A. C. 1964. Two new American dagger nematodes (*Xiphinema*: Dorylaimidae) associated with citrus, with comments on the variability of *X. bakeri* Williams, 1961. *Proceedings of the Helminthological Society of Washington* 31(1):65-76.
- Wouts, W. M. 1966. *Paratylenchus halophilus* (Nematoda: Criconematidae) a new species from New Zealand. *New Zealand Journal of Science* 9(1):281-286.
- Zullini, A. 1973. Some soil and freshwater nematodes from Chiapas (Mexico). *Accademia Nazionale dei Lincei* 171:55-96.