

A reappraisal of Tylenchina (Nemata). 11. List of generic and supra-generic taxa, with their junior synonyms

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SUMMARY

The series of papers under the heading « A reappraisal of Tylenchina (Nemata) » 1 through 10 having been completed are now summarized and presented in tabular form. This paper is complementary to the earlier classification presented by Maggenti *et al.* (1987). In this paper Tylenchina is divided into two superfamilies, nine families, eighteen subfamilies and 116 genera. The taxa considered as junior synonyms, *dubia* or *incertae sedis* are : two suborders, six superfamilies, 29 families, 51 subfamilies, and 134 taxa of the genus-group (i.e. genera and sub-genera). Also included are notes and discussions of new taxonomic actions. Actions taken are : *Ceramotylenchus* Ebsary, 1986 is synonymized with *Miculenchus* Andrassy, 1951; *Pseudobasiria* Jahan, 1986 is synonymized with *Basiria* Siddiqi, 1959; *Brachydorus* de Guiran & Germani, 1968 is considered a valid genus; Pararotylenchidae Baldwin & Bell, 1981 and Interrotylenchidae Eroshenko, 1984 are synonyms of Hoplolaimidae Filip'ev, 1934; Interrotylenchinae Eroshenko, 1984 and Scutelloneminae Eroshenko, 1984 are synonyms of Hoplolaiminae Filip'ev, 1934; *Interrotylenchus* Eroshenko, 1984 and *Scutellonemoides* Eroshenko, 1984 are synonymized with *Rotylenchus* Filip'ev, 1936; Criconemellinae Khan & Saeed, 1984 is synonymized with Criconematinae, Taylor, 1936; correct synonymizations of *Mesocriconema* and *Madinema* (both with *Criconemella*) and of *Neocriconema* (with *Discocriconemella*) are given, as well as correct authorities and dates concerning species of *Trophotylenchulus*. The article ends with an alphabetic repertory of generic and suprageneric taxa of the suborder.

RÉSUMÉ

Réévaluation des Tylenchina (Nemata). 11. Liste des taxons génériques et supragénériques, et de leurs synonymes

La série de dix articles constituant une « Réévaluation des Tylenchina » est condensée, sous forme de liste, dans le présent article qui complète la classification présentée par Maggenti *et al.* (1987). Les Tylenchina sont divisés en deux superfamilles, neuf familles, dix-huit sous-familles et 116 genres. Les taxons considérés comme synonymes mineurs, *dubia* ou *incertae sedis* sont : deux sous-ordres, six superfamilles, 29 familles, 51 sous-familles et 134 taxons du groupe-genre (genres et sous-genres). Des notes concernant de nouvelles propositions taxonomiques complètent l'article. Ces propositions sont les suivantes : *Ceramotylenchus* Ebsary, 1986 est synonymisé à *Miculenchus* Andrassy, 1951; *Pseudobasiria* Jahan, 1986 à *Basiria* Siddiqi, 1959; *Brachydorus* de Guiran & Germani, 1968 est rétabli comme genre valide; les familles des Pararotylenchidae Baldwin & Bell, 1981 et des Interrotylenchidae Eroshenko, 1984 sont synonymisées aux Hoplolaimidae Filip'ev, 1934; les Interrotylenchinae Eroshenko, 1984 et Scutelloneminae Eroshenko, 1984 aux Hoplolaiminae Filip'ev, 1934; *Interrotylenchus* Eroshenko, 1984 et *Scutellonemoides* Eroshenko 1984, à *Rotylenchus* Filip'ev, 1936; les Criconemellinae Khan & Saeed, 1984 aux Criconematinae Taylor, 1936. Sont données également les synonymisations correctes de *Mesocriconema* et *Madinema* (l'un et l'autre avec *Criconemella*) et de *Neocriconema* (avec *Discocriconemella*), de même que les autorités et dates correctes concernant certaines espèces du genre *Trophotylenchulus*. L'article se termine par un répertoire alphabétique des taxons génériques et supragénériques du sous-ordre.

This article constitutes a summary of the classifications that appeared in the series of articles on Tylenchina (Luc *et al.*, 1987; Maggenti *et al.*, 1987; Geraert & Raski, 1987; Fortunier & Maggenti, 1987; Luc & Fortunier, 1987; Fortunier & Luc, 1987; Luc, 1987; Fortunier, 1987; Raski & Luc, 1987; Luc, Maggenti & Fortunier,

1988). The generic and suprageneric taxa of this suborder, together with their junior synonyms are given below, followed by some notes explaining new data : omissions in previous articles, recently published taxa, new synonymies, changes, etc.

The list is complete for the articles abstracted in *Hel-*

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minthol. Abstr. Ser. B, up to and including vol. 55 (1986). It has been completed, as far as possible, by consulting publications not yet recorded in *Helminthol. Abstr.*

CLASSIFICATION OF THE SUBORDER TYLENCHINA

Suborder **TYLENCHINA** Chitwood, 1950

- = Heteroderina Skarbilovich, 1959
- = Criconematina Siddiqi, 1980

*Superfamily **Tylenchoidea** Örley, 1880

- = Hoplolaimoidea Filip'ev, 1934
- = Heteroderoidea Filip'ev & Schuurmans Stekhoven, 1941
- = Dolichodoroidea Chitwood, 1950
- = Atylenchoidea Skarbilovich, 1959

*Family **TYLENCHIDAE** Örley, 1880

- = Atylenchidae Skarbilovich, 1959
- = Ecphyadophoridae Skarbilovich, 1959
- = Boleodoridae Khan, 1964
- = Tyloporidae Paramonov, 1967

*Subfamily **TYLENCHINAE** Örley, 1880

- = Dactylotylenchinae Wu, 1969
- = Duosulciinae Siddiqi, 1979

Genera :

- **Tylenchus* Bastian, 1865
 - = *Aerotylenchus* Fotedar & Handoo, 1979
- Miculenchus* Andrassy, 1951
 - = *Ceramotylenchus* Ebsary, 1986 (n. syn.) [cf. Note N° 1]
- Filenchus* Andrassy, 1954
 - = *Ottolenchus* Husain & Khan, 1965
 - = *Dactylotylenchus* Wu, 1968
 - = *Lambertia* Brzeski, 1977
 - = *Duosulcius* Siddiqi, 1979
 - = *Zanenchus* Siddiqi, 1979
 - = *Discotylenchus* Siddiqi, 1980
- Malenchus* Andrassy, 1968
 - = *Neomalenchus* Siddiqi, 1979
- Irantylenchus* Kheiri, 1972
- Polenchus* Andrassy, 1980
- Allotylenchus* Andrassy, 1984
- Cucullitylenchus* Huang & Raski, 1986
- Mukazia* Siddiqi, 1986 [cf. Note N° 2]

Subfamily **ECPHYADOPHORINAE** Skarbilovich, 1959

- = Epicharinematinae Maqbool & Shahina, 1985
- = Ecphyadophoroidinae Siddiqi, 1986

Genera :

- **Ecphyadophora* de Man, 1921
 - = *Karachinema* Maqbool & Shahina, 1985

Lelenchus Andrassy, 1954

- = *Tylenchus* (*Lelenchus*) Andrassy, 1954
- Ecphyadophoroides* Corbett, 1964
 - = *Tenunemellus* Siddiqi, 1986
- Epicharinema* Raski, Maggenti, Koshy & Sosamma, 1982
- Mitranema* Siddiqi, 1986

Subfamily **TYLADORINAE** Paramonov, 1967

- = *Campbellenchinae* Wouts, 1978
- = *Eutylenchinae* Siddiqi, 1986

Genera :

- Eutylenchus* Cobb, 1913
- Macrotrophurus* Loof, 1958
- Cephalenchus* Goodey, 1962
 - = *Imphalenchus* Dhanachand & Jairajpuri, 1980
- **Tylodorus* Meagher, 1963
- Campbellenchus* Wouts, 1977

Subfamily **ATYLENCHINAE** Skarbilovich, 1959

- = *Antarctenchinae* Spaull, 1972
- = *Pleurotylenchinae* Andrassy, 1976
- = *Aglenchinae* Siddiqi & Khan, 1983

Genera :

- **Atylenchus* Cobb, 1913
- Aglenchus* Andrassy, 1954
- Pleurotylenchus* Szczygiel, 1969
- Antarctenchus* Spaull, 1972
- Gracilancea* Siddiqi, 1976
- Coslenchus* Siddiqi, 1978
 - = *Cosaglenchus* Siddiqui & Khan, 1983
 - = *Paktylenchus* Maqbool, 1983

Subfamily **BOLEODORINAE** Khan, 1964

- = *Psilenchinae* Paramonov, 1967
- = *Basiriinae* Decker, 1972
- = *Leipotylenchinae* Sher, 1973

Genera :

- Psilenchus* de Man, 1921
- **Boleodorus* Thorne, 1941
- Basiria* Siddiqi, 1959
 - = *Clavilenchus* Jairajpuri, 1966
 - = *Basiroides* Thorne & Malek, 1968
 - = *Neobasiria* Javed, 1982
 - = *Pseudobasiria* Jahan, 1986 (n. syn.) [cf. Note N° 3]
- Neopsilenchus* Thorne & Malek, 1968
- Atetylenchus* Khan, 1973
 - = *Leipotylenchus* Sher, 1974
- Neothada* Khan, 1973
- Duotylenchus* Saha & Khan, 1982
- Basirienchus* Geraert & Raski, 1986
- Genus incertae sedis :**
 - Luella* Massey, 1974
- Genera dubia :**
 - Sakia* Khan, 1964
 - Basiliophora* Husain & Khan, 1965

Family **ANGUINIDAE** Nicoll, 1935 (1926)

- = *Anguillulinidae* Baylis & Daubney, 1926
- = *Nothotylenchidae* Thorne, 1941

* Asterisk indicates the type taxon for each rank.

- = Sychnotylenchidae Paramonov, 1967
- = Ditylenchidae Golden, 1971
- = Halenchidae Jairajpuri & Siddiqi, 1969
- = Anguillulinae Baylis & Daubney, 1926
- = Nothotylenchinae Thorne, 1941
- = Sychnotylenchinae Paramonov, 1967
- = Halenchinae Jairajpuri & Siddiqi, 1969
- = Pseudhalenchinae Siddiqi, 1971
- = Ditylenchinae Golden, 1971
- = Neoditylenchinae Kakuliya & Devdariani, 1975
- = Cynipanguininae Fotedar & Handoo, 1978
- = Nothanguininae Fotedar & Handoo, 1978
- = Thadinae Siddiqi, 1986

Genera :

**Anguina* Scopoli, 1777

- = *Anguillulina* (*Anguina*) Scopoli, 1777
- = *Anguillulina* Gervais & Van Beneden, 1869
- = *Paranguina* Kir'yanova, 1955
- = *Nothanguina* Whitehead, 1959

Halenchus Cobb, 1933

Ditylenchus Filip'ev, 1936

- = *Anguillulina* (*Ditylenchus*) Filip'ev, 1936
- = *Nothotylenchus* Thorne, 1941
- = *Boleodoroides* Mathur, Khan & Prasad, 1966
- = *Diptenchus* Khan, Chawla & Seshadri, 1969
- = *Safianema* Siddiqi, 1980
- = *Orrina* Brzeski, 1981

Thada Thorne, 1941

Sychnotylenchus Rühm, 1956

- = *Neoditylenchus* Meyl, 1961

Pseudhalenchus Tarjan, 1958

Subanguina Paramonov, 1967

- = *Heteroanguina* Chizhov, 1980
- = *Afrina* Brzeski, 1981

= *Mesoanguina* Chizhov & Subbotin, 1985

Cynipanguina Maggenti, Hart & Paxam, 1974

Pterotylenchus Siddiqi & Lenne, 1984

Genus incertae sedis :

Chitinotylenchus Micoletzky, 1922

Family DOLICHODORIDAE Chitwood, 1950

Genera :

- **Dolichodorus* Cobb, 1914
- Brachydorus* de Guiran & Germani, 1968 [cf. note No 4]
- Neodolichodorus* Andrassy, 1976
- = *Plesiiodorus* Siddiqi, 1976

Family BELONOLAIMIDAE Whitehead, 1960

- = Telotylenchidae Siddiqi, 1960
- = Tylenchorhynchidae Eliava, 1974

*Subfamily BELONOLAIMINAE Whitehead, 1960

Genera :

- **Belonolaimus* Steiner, 1949
- = *Ibipora* Monteiro & Lordello, 1977
- Carphodorus* Colbran, 1965
- Morulaimus* Sauer, 1966
- Geocenamus* Thorne & Malek, 1968

- = *Hexadorus* Ivanova & Shagalina, 1983
- Sauertylenchus* Sher, 1974

Subfamily TELOTYLENCHINAE Siddiqi, 1960

- = Tylenchorhynchinae Eliava, 1964
- = Trophurinae Paramonov, 1967
- = Tetylenchinae Siddiqi, 1970
- = Merliniinae Siddiqi, 1971
- = Meiodorinae Siddiqi, 1971

Genera :

**Tylenchorhynchus* Cobb, 1913

- = *Bitylenchus* Filip'ev, 1934
- = *Telotylenchus* Siddiqi, 1960
- = *Quinisulcius* Siddiqi, 1971
- = *Dolichorhynchus* Mulk & Jairajpuri, 1974 *nec* Wiley, 1901 (Cephalochordata)
- = *Trilineellus* Lewis & Golden, 1981
- = *Divittus* Jairajpuri, 1984
- = *Morasinema* Javed, 1984
- = *Tessellus* Jairajpuri & Hunt, 1984
- = *Neodolichorhynchus* Jairajpuri & Hunt, 1984

Trophurus Loof, 1956

- = *Clavaurotylenchus* Caveness, 1958

Trichotylenchus Whitehead, 1960

- = *Uliginotylenchus* Siddiqi, 1971

Nagehus Thorne & Malek, 1968

Paratrophurus Arias, 1970

- = *Histotylenchus* Siddiqi, 1971
- = *Telotylenchoides* Siddiqi, 1971

Merlinius Siddiqi, 1970

- = *Scutylenchus* Jairajpuri, 1971

Triversus Sher, 1974

- = *Meiodorus* Siddiqi, 1974
- = *Mulveyotus* Anderson & Ebsary, 1982

Amplimerlinius Siddiqi, 1976

- = *Meiodorus* Siddiqi, 1974
- = *Mulveyotus* Anderson & Ebsary, 1982

Amplimerlinius Siddiqi, 1976

Genus dubium :

Tetylenchus Filip'ev, 1936

Family PRATYLENCHIDAE Thorne, 1949

- = Nacobbidae Chitwood, 1950
- = Radopholidae Allen & Sher, 1967

*Subfamily PRATYLENCHINAE Thorne, 1949

- = Radopholinae Allen & Sher, 1967
- = Hoplotylinae Siddiqi, 1971
- = Hirschmanniellinae Fotedar & Handoo, 1978

Genera :

**Pratylenchus* Filip'ev, 1936

Radopholus Thorne, 1949

- = *Radopholoides* de Guiran, 1967
- = *Neoradopholus* Khan & Shakil, 1973

Pratylenchoides Winslow, 1958

- = *Hoplorhynchus* Andrassy, 1985

Hoplotylus s'Jacob, 1960

Zygotylenchus Siddiqi, 1963

- = *Mesotylus* de Guiran, 1964

Hirschmanniella Luc & Goodey, 1964

- = *Hirschmannia* Luc & Goodey, 1962 *nec* Olofson, 1941 (Copepoda)

Apratylenchoides Sher, 1973

Subfamily NACOBBINAE Chitwood, 1950

Genus :

**Nacobbus* Thorne & Allen, 1944

Family HOPLOLAIMIDAE Filip'ev, 1934

- = Nemonchidae Skarbilovich, 1959
- = Aphasmatylenchidae Sher, 1965
- = Rotylenchulidae Husain & Khan, 1965
- = Pararotylenchidae Baldwin & Bell, 1981 (n. syn.) [cf. Note N° 5]
- = Interrotylenchidae Eroshenko, 1984 (n. syn.) [cf. Note N° 6]

*Subfamily HOPLOLAIMINAE Filip'ev, 1934

- = Rotylenchoidinae Whitehead, 1958
- = Nemonchinae Skarbilovich, 1959
- = Aphasmatylenchinae Sher, 1965
- = Rotylenchinae Golden, 1971
- = Pararotylenchinae Baldwin & Bell, 1981
- = Interrotylenchinae Eroshenko, 1984 (n. syn.) [cf. Note N° 6]
- = Scutellonemoidinae Eroshenko, 1984 (n. syn.) [cf. Note N° 6]

Genera :

- **Hoplolaimus* von Daday, 1905
 - = *Nemonchus* Cobb, 1913
 - = *Hoplolaimoides* Shakil, 1973
 - = *Basirolaimus* Shamsi, 1979
- Rotylenchus* Filip'ev, 1936
 - = *Anguillulina* (*Rotylenchus*) Filip'ev, 1936
 - = *Gottholdsteineria* Andrassy, 1958
 - = *Orientalylus* Jairajpuri & Siddiqi, 1977
 - = *Calvatylus* Jairajpuri & Siddiqi, 1977
 - = *Interrotylenchus* Eroshenko, 1984 (n. syn.) [cf. Note N° 6]
 - = *Scutellonemoides* Eroshenko 1984 (n. syn.) [cf. Note N° 6]
 - = *Varotylus* Siddiqi, 1986
- Helicotylenchus* Steiner, 1945
 - = *Rotylenchoides* Whitehead, 1958
 - = *Zimmermannia* Shamsi, 1973
- Scutellonema* Andrassy, 1958
- Aorolaimus* Sher, 1963
 - = *Peltamigratus* Sher, 1964
 - = *Nectopelta* Siddiqi, 1986
- Aphasmatylenchus* Sher, 1965
- Antarctylus* Sher, 1973
- Pararotylenchus* Baldwin & Bell, 1981

Subfamily ROTYLENCHULINAE Husain & Khan, 1967

- = Acontylinae Fotedar & Handoo, 1978

Genera :

- **Rotylenchulus* Lindford & Oliveira, 1940
 - = *Spirotylenchus* (= *Spyrotylenchus*) Lordello & Cesnik, 1958
 - = *Leiperotylenchus* Das, 1960
- Acontylus* Meagher, 1968
- Senegalonema* Germani, Luc & Baldwin, 1984

Family HETERODERIDAE Filip'ev & Schuurmans Stekhoven, 1941

- = Meloidogynidae Skarbilovich, 1959
- = Meloidoderidae Golden, 1971
- = Ataloderidae Wouts, 1973

*Subfamily HETERODERINAE Filip'ev & Schuurmans Stekhoven, 1941

- = Meloidoderinae Golden, 1971
- = Ataloderinae Wouts, 1973
- = Sarisoderinae Husain, 1976
- = Punctoderinae Krall' & Krall', 1978
- = Verutinae Esser, 1981
- = Cryphoderinae Wouts, 1985

Genera :

- **Heterodera* Schmidt, 1871
 - = *Tylenchus* (*Heterodera*) Schmidt, 1871
 - = *Heterodera* (*Heterodera*) Schmidt, 1871
 - = *Heterobolbus* Railliet, 1896
 - = *Bidera* Krall' & Krall', 1978
 - = *Ephippiodera* Shagalina & Krall', 1981
- Meloidodera* Chitwood, Hannon & Esser, 1956
- Globodera* Skarbilovich, 1959
- Cryphodera* Colbran, 1966
 - = *Zelandodera* Wouts, 1973
- Atalodera* Wouts & Sher, 1971
- Sarisodera* Wouts & Sher, 1971
 - = *Sherodera* Wouts, 1973
- Punctodera* Mulvey & Stone, 1976
- Cactodera* Krall' & Krall', 1978
- Hylonema* Luc, Taylor & Cadet, 1978
- Thecavermiculatus* Robbins, 1978
- Dolichodera* Mulvey & Ebsary, 1980
- Verutus* Esser, 1981
- Rhizonema* Cid del Prado Vera, Lownsbery & Maggenti, 1983
- Afenestrata* Baldwin & Bell, 1985
 - = *Afrodera* Wouts, 1985
- Bellodera* Wouts, 1985

Subfamily MELOIDOGYNINAE Skarbilovich, 1959

Genus :

- **Meloidogyne* Goeldi, 1892
 - = *Caconema* Cobb, 1924
 - = *Hypsoperine* Sledge & Golden, 1964
 - = *Hypsoperine* (*Spartonema*) Siddiqi, 1986

Genus dubium :

- Meloidoderella* Khan & Husain, 1972 (in Meloidoderellinae Husain, 1976, *subfam. dub.*)

Subfamily NACOBODERINAE Golden & Jensen, 1974

- = Meloinematinae (= Meloineminae) Husain, 1976

Genera :

- Meloinema* Choi & Geraert, 1974
- **Nacobbodera* Golden & Jensen, 1974
- Bursadera* Ivanova & Krall', 1985

Superfamily **Criconematoidea** Taylor, 1936
 = Hemicycliophoroidea Skarbilovich, 1959
 = Tylenchocriconematoidea Raski & Siddiqui, 1975

*Family **CRICONEMATIDAE** Taylor, 1936
 = Macroposthoniidae Skarbilovich, 1959
 = Hemicycliophoridae Skarbilovich, 1959
 = Madinematidae Khan, Chawla & Saha, 1975
 = Caloosiidae Siddiqi, 1980

*Subfamily **CRICONEMATINAE** Taylor, 1936
 = Macroposthoniinae Skarbilovich, 1959
 = Madinematinae Khan, Chawla & Saha, 1975
 = Criconemellinae Khan & Saeed, 1985 (n. syn.)
 [cf. Note N° 7]

Genera :

**Criconema* Hofmänner & Menzel, 1914
 = *Lobocriconema* De Grisse & Loof, 1965
 = *Nothocriconema* De Grisse & Loof, 1965
 = *Merocriconema* Raski & Pinochet, 1976
 = *Nenocriconema* Darekar & Khan, 1981
 = *Notholetus* Ebsary, 1981
 = *Nothocriconemella* Ebsary, 1981
 = *Paracriconema* Ebsary, 1981
 = *Amphisbaenema* Orton Williams, 1982
 = *Cerchnotocriconema* Bernard, 1982
Ogma Southern, 1914
 = *Criconema (Variasquamata)* Mehta & Raski, 1971
 = *Variasquamata* Mehta & Raski, 1971 [cf. Note N° 8]
 = *Crossonema* Mehta & Raski, 1971
 = *Crossonema (Crossonema)* Mehta & Raski, 1971
 = *Crossonema (Seriespinula)* Mehta & Raski, 1971
 = *Seriespinula* Mehta & Raski, 1971 [cf. Note N° 8]
 = *Neolobocriconema* Mehta & Raski, 1971
 = *Croserinema* Khan, Chawla & Saha, 1976
 = *Neocrossonema* Ebsary, 1981
 = *Pseudocriconema* Minagawa, 1984
 = *Syro* Orton Williams, 1985
 = *Ogma (Homogma)* Siddiqui, 1986
 = *Paralobocriconema* Minagawa, 1986
 = *Macrocriconema* Minagawa, 1986

Hemicriconemoides Chitwood & Birchfield, 1957

Bakernema Wu, 1964

Criconemella De Grisse & Loof, 1965
 = *Xenocriconemella* De Grisse & Loof, 1965
 = *Mesocriconema* Andrassy, 1965 [cf. Note N° 9]
 = *Madinema* Khan, Chawla & Saha, 1976 [cf. Note N° 9]
 = *Seshadriella* Darekar & Khan, 1981
 = *Neobakernema* Ebsary, 1981
 = *Crossonemoides* Eroshenko, 1981

Discocriconemella De Grisse & Loof, 1965
 = *Neocriconema* Diab & Jenkins, 1965 [cf. Note N° 9]
 = *Acrozostron* Orton Williams, 1981

Nothocriconemoides Maas, Loof & De Grisse, 1971

Blandicephalanema Mehta & Raski, 1971

Pateracephalanema Mehta & Raski, 1971
 = *Pateracephalanema (Pellipecten)* Siddiqui, 1986

Genera dubia :

Macroposthonia de Man, 1921

Criconemoides Taylor, 1936

Subfamily **HEMICYCLIOPHORINAE** Skarbilovich, 1959

Genera :

**Hemicycliophora* de Man, 1921
 = *Procriconema* Micoletzky, 1925
 = *Colbranium* Andrassy, 1979
 = *Aulosphora* Siddiqi, 1980
 = *Loofia* Siddiqi, 1980
Caloosia Siddiqi & Goodey, 1964
 = *Hemicaloosia* Ray & Das, 1978

Family **TYLENCHULIDAE** Skarbilovich, 1947

= Paratylenchidae Thorne, 1949
 = Sphaeronematidae Raski & Sher, 1952
 = Meloidoderitidae Kir'yanova & Pogosyan, 1973
 = Tylenchocriconematidae Raski & Siddiqui, 1975

*Subfamily **TYLENCHULINAE** Skarbilovich, 1947

= Sphaeronematinae Raski & Sher, 1952

Genera :

**Tylenchulus* Cobb, 1913
Sphaeronema Raski & Sher, 1952
 = *Goodeyella* Siddiqi, 1986
 = *Tumiota* Siddiqi, 1986
Trophotylenchulus Raski, 1957 [cf. Note N° 10]
 = *Ivotylenchulus* Hashim, 1984 [cf. Note N° 10]
Trophonema Raski, 1957
Meloidoderita Pogosyan, 1966

Subfamily **PARATYLENCHINAE** Thorne, 1949

Genera :

**Paratylenchus* Micoletzky, 1922
 = *Paratylenchoides* Raski, 1973
Cacopaurus Thorne, 1943
Gracilacus Raski, 1962

Subfamily **TYLENCHOCRICONEMATINAE** Raski & Siddiqui, 1975

Genus :

**Tylenchocriconema* Raski & Siddiqui, 1975

TAXONOMIC NOTES

Note N° 1

Ebsary (1986) proposed the genus *Ceramotylenchus* (type and only species : *C. tessellatus* Ebsary, 1986) for a single female; the specific name *tessellatus* refers to the cuticular structure ("... cuticular blocks arranged in alternating rows..."). The published drawing are insufficient but the light microscope photographs clearly show the zigzag structure of the body cuticle characteristic of *Miculenchus* (cf. Raski & Geraert, 1985).

Ceramotylenchus Ebsary, 1986 is here proposed as a junior synonym of *Miculenchus* Andrásy, 1959. The species *C. tessellatus* is transferred and becomes *M. tessellatus* (Ebsary, 1986) n. comb. It differs from the two known species by shorter body and longer stylet.

Note No 2

Siddiqi (1986) proposed the genus *Mukazia* with *Malenchus novus* Mukhina & Kazachenko, 1981 as type and only species. This new genus was not taken into consideration in the reappraisal of the family Tylenchidae (Geraert & Raski, 1987), although it has been mentioned in a note in an earlier revision of the genus *Malenchus* (Geraert & Raski, 1986). *M. nova* presents a weakly developed medium oesophageal bulb, markedly more posterior (MB = 50 - 53 %) than in *Malenchus* (MB = 42 - 50 %); moreover the annuli do not differ before and after the end of the lateral field as in *Malenchus*. Mukhina and Kazachenko's (1981) very detailed drawings suggest their species belongs to *Miculenchus* Andrásy, 1951 mainly because of the value of MB and the deep incisures. The lateral-ventral view of the male tail shows small but distinct caudal alae. *Miculenchus elegans* Raski & Geraert, 1985 has similar measurement but the male is unknown. The absence of caudal alae (in the type species, *M. salvus*) being until now a generic characteristic of *Miculenchus*, *Mukazia* is considered a valid genus, close to, but distinct from *Miculenchus*.

Note No 3

Jahan (1986) proposed the genus *Pseudobasiria* for *Basiroides sindhicus* Maqbool, Fatima & Shahina, 1984, type and only species. Siddiqi (1986) considered *B. sindhicus* a junior synonym of *Basiria ritteri* (Baqri & Jairajpuri, 1969) Bernard, 1980. We agree with this action as the characters on which is based *Pseudobasiria* (absence of phasmids, tail deeply annulated and tail terminus slightly different from that of *Basiroides*) appear not sufficiently founded and/or important to be taken into consideration at generic level. So we consider *Pseudobasiria* Jahan, 1986 as a junior synonym of *Basiria* Siddiqi, 1959.

Note No 4

Luc and Fortuner (1987) considered the genus *Brachydorus* as *genus dubium* essentially because of lack of information concerning the morphology of the face, a character considered as essential for the separation of the two other genera of the family, *Dolichodoros* and *Neodolichodoros*. SEM examination of *Brachydorus swarupi*

revealed a unique structure of the face, rather different from these observed in the two other genera (Raski & Luc, in press). Consequently, *Brachydorus* is considered a valid genus in Dolichodoridae.

Note No 5

Eroshenko (1984) elevated Pararotylenchinae Baldwin & Bell, 1981 to family rank, and placed this family in Tylenchoidea because of the abutting oesophageal glands not overlapping the intestine and the absence of oesophago-intestinal valve.

As discussed by the original authors (Baldwin & Bell, 1981) and by Fortuner (1987), *Pararotylenchus* shares many derived characters with the traditional hoplolaimids. It does share some ancestral characteristics of Belonolaimidae, however, classifications should be based only on shared derived characteristics, and not on shared ancestral characteristics. The genus *Pararotylenchus* is confirmed as a member of the family Hoplolaimidae. The subfamily Pararotylenchinae was rejected by Fortuner (1987).

Within Hoplolaimidae, there is a structural difference between *Rotylenchus* with oesophageal lumen shifted ventrally between the two subventral glands, and *Pararotylenchus* with lumen not shifted. This difference is considered to be diagnostic at generic level only (see Fortuner, 1987), and the family and subfamily Pararotylenchidae and Pararotylenchinae are here rejected.

Note No 6

Eroshenko (1984) proposed the family Interrotylenchidae, with two subfamilies, Interrotylenchinae (type and only genus *Interrotylenchus*) and Scutellonemoidinae (type and only genus *Scutellonemoides*) in the superfamily Hoplolaimoidea (here = Tylenchoidea). The new genera include several species previously in *Rotylenchus*: four known and a new species in *Interrotylenchus*; one known species in *Scutellonemoides*.

The family Interrotylenchidae was diagnosed by Eroshenko (1984) as having a mixture of hoplolaimoid characteristics (anterior extremity with strong sclerotization, short tail, phasmids sometimes scutelliform) and tylenchoid characteristics (oesophageal glands compact, in the shape of a pear-like bulb). The same mixture of characteristics was used by Baldwin and Bell (1981) in the diagnosis of Pararotylenchinae (see above). Both Interrotylenchidae and Pararotylenchinae differ from the genus *Rotylenchus* in Hoplolaiminae only by the structure of the oesophageal glands. To avoid an unnecessary inflation in the number of families, Interrotylenchidae and its subfamilies Interrotylenchinae and Scutellonemoidinae, are here rejected.

In contradiction with the diagnosis of the family Interrotylemidae (supposedly with pear shaped glandular "bulb"), the two genera *Interrotylemichus* and *Scutellonemoides* were described by Eroshenko (1984) with dorsal gland slightly overlapping the intestine. This characteristic seems to be the main difference with *Rotylemichus s. str.* with longer glandular overlap. In addition, *Scutellonemoides* is said to have larger phasmids.

The relative length of the dorsal gland overlap can be described by the overlap coefficient proposed by de Guiran and Siddiqi (1967) and equal to :

$$\frac{\text{distance oesophago-intestinal junction} - \text{end of glands}}{\text{distance posterior end of median bulb} - \text{end of glands}} \times 100$$

This percentage, calculated from figures in the original descriptions, is 10 to 30 % in the species placed by Eroshenko (1984) in the new genera (*I. breviglans* 10 %; *I. quartus* 25 %; *S. feroxcis* 15 to 33 %, etc.). It is quite variable in species in *Rotylemichus s. str.*, from 8 % in *R. pini*, 20 % in *R. neorobustus* to 40-50 % in many species including *R. robustus*, the type species, and it can reach 60 % (*R. eximius*) to 66 % (*R. calvus*). Because no clear division exists in the gradual lengthening of the glands, this characteristic does not justify the creation of separate genera.

Some species now in *Rotylemichus* were originally described in *Scutellonema* because of large phasmids (i.e. *R. impar*, *R. inciscaudatus*, *R. insularis*, *R. minutus*, etc.) In these species, and in *R. feroxcis*, type and only species of *Scutellonemoides*, the diameter of the phasmid does not exceed the width of the central band of the lateral field, and it does not interrupt nor bend the inner lateral field lines. A small difference in size is not considered to be relevant for generic diagnosis.

As a consequence of the above, we propose :

- Interrotylemidae Eroshenko, 1984 is considered a junior synonym of Hoplolaimidae Filip'ev, 1934;
- Interrotylemichinae Eroshenko, 1984 and Scutelloneminae Eroshenko, 1984 are considered junior synonyms of Hoplolaiminae Filip'ev, 1934;
- *Interrotylemichus* Eroshenko, 1984 and *Scutellonemoides* Eroshenko, 1984, are considered junior synonyms of *Rotylemichus* Filip'ev, 1936;
- The following species are returned or transferred to the genus *Rotylemichus*, with the following new synonymizations :

- Rotylemichus agnetis* Szczygiel, 1968
- = *Interrotylemichus agnetis* (Szczygiel, 1968) Eroshenko, 1984
- R. arsenjevi* (Eroshenko, 1984) nov. comb.
- = *I. arsenjevi* Eroshenko, 1984
- R. breviglans* Sher, 1965
- = *I. breviglans* (Sher, 1965) Eroshenko, 1984
- R. capitatus* Eroshenko, 1981
- = *I. capitatus* (Eroshenko, 1981) Eroshenko 1984
- R. feroxcis* Eroshenko, 1981

= *Scutellonemoides feroxcis* (Eroshenko, 1981) Eroshenko, 1984

R. quartus (Andrássy, 1958) Sher, 1961

= *I. quartus* (Andrássy, 1958) Eroshenko, 1984

Note N° 7

Khan and Saeed (1985) proposed a new taxon, the subfamily Criconemellinae, with type genus *Criconemella*. No other genera are placed in that subfamily which is said to differ from Criconematinae by : i) the lower number of annuli in female (42-200 vs more than 200 in Criconematinae; ii) the male with or without lateral field vs « usually present » in Criconematinae! A key of the subfamilies of Criconematidae is given in which Criconemellinae keys with « female usually 200 or more than 200 annules »! Consequently Criconemellinae is considered a junior synonym of Criconematinae.

Note N° 8

According to the principle of coordination [Intern. Code zool. Nomencl., Art. 43 (a)] a subgenus elevated to generic rank keeps the original authority of the subgenus. Consequently the authorities for genera *Serispinula* and *Variasquamata* have been modified as indicated.

Note N° 9

In Luc and Raski (1987) reappraisal of Criconematodea, the genera *Mesocriconema*, *Neocriconema* and *Madinema* have been placed twice as junior synonyms *pro parte* of both the genera *Criconemella* and *Discocriconemella*, because their species have been reverted or transferred to either one of the latter two genera. This was not a correct nomenclatural statement as a genus must follow its type species. Consequently *Mesocriconema* (type species *Criconemella pruni*) and *Madinema* (type species : *Criconemella maglia*) are proposed as junior synonyms of *Criconemella*, whereas *Neocriconema* (type species *Discocriconemella limitanea*) is proposed as junior synonym of *Discocriconemella*.

Note N° 10

Ivotylemichulus was described by Hashim in a journal dated 1983, but published on 23 Jan. 1984; so the correct authority is : *Ivotylemichulus* Hashim, 1984. In the same article Hashim (1984) transferred *Tylenchulus clavicaudatus* and *T. obscurus* to the genus *Trophotylemichulus*. He was given credit for this transfer in Raski and Luc (1987). This was an error, as Cohn and Kaplan independently proposed the same transfer in a journal published

on 16 Dec. 1983. So these latter authors must be given credit for the transfer. To avoid confusion, the nomenclatural data concerning the genus and its species are recapped below :

Trophotylenchulus Raski, 1957
= *Ivotylenchulus* Hashim, 1984

TYPE SPECIES :

Trophotylenchulus floridensis Raski, 1957
= *Tylenchulus floridensis* (Raski, 1957) Maggenti, 1962

OTHER SPECIES :

T. andhraensis Muthukrishnan & Shariff, 1986
T. clavicaudatus (Colbran, 1966) Cohn & Kaplan, 1983
= *Tyl. clavicaudatus* Colbran, 1966
T. mangeloti (Luc, 1957) Goodey, 1963
= *Tyl. mangeloti* Luc, 1957
= *Ivotylenchulus mangeloti* (Luc, 1957) Hashim, 1984
T. obscurus (Colbran, 1961) Cohn & Kaplan, 1983
= *Tyl. obscurus* Colbran, 1961
T. piperis Mohandas, Ravana & Raski, 1985
T. saltensis Hashim, 1984

ALPHABETIC REPERTORY OF
GENERIC AND SUPRAGENERIC TAXA
OF THE SUBORDER TYLENCHINA

Acontylinae : syn. of Rotylenchulinae
Acontylus : Rotylenchulinae, Hoplolaimidae
Acrozostrom : syn. of *Discocriconemella*
Aerotylenchus : syn. of *Tylenchus*
Afenestrata : Heteroderinae, Heteroderidae
Afrina : syn. of *Subanguina*
Afrodera : syn. of *Afenestrata*
Aglenchinae : syn. of Atylenchinae
Aglenchus : Atylenchinae, Tylenchidae
Allotylenchus : Tylenchinae, Tylenchidae
Amphisbaenema : syn. of *Criconema*
Amplimerlinius : Telotylenchinae, Belonolaimidae
Anguillulina : syn. of *Anguina*
Anguillulina (Anguina) : syn. of *Anguina*
Anguillulina (Ditylenchus) : syn. of *Ditylenchus*
Anguillulina (Rotylenchus) : syn. of *Rotylenchus*
Anguillulinidae : syn. of Anguinidae
Anguillulininae : syn. of Anguinidae
Anguina : Anguinidae
Anguinidae : Tylenchoidea
Antarctenchinae : syn. of Atylenchinae
Antarctenchus : Atylenchinae, Tylenchidae
Antarctylus : Hoplolaiminae, Hoplolaimidae

Aorolaimus : Hoplolaiminae, Hoplolaimidae
Aphasmatylenchidae : syn. of Hoplolaimidae
Aphasmatylenchinae : syn. of Hoplolaiminae
Aphasmatylenchus : Hoplolaiminae, Hoplolaimidae
Apratylenchoidea : Pratylenchinae, Pratylenchidae
Atalodera : Heteroderinae, Heteroderidae
Ataloderidae : syn. of Heteroderidae
Ataloderinae : syn. of Heteroderinae
Atetylenchus : Boleodorinae, Tylenchidae
Atylenchidae : syn. of Tylenchidae
Atylenchinae : Tylenchidae, Tylenchoidea
Atylenchoidea : syn. of Tylenchoidea
Atylenchus : Atylenchinae, Tylenchidae
Aulosphora : syn. of *Hemicyclophora*

Bakernema : Criconematinae, Criconematidae
Basiliophora : gen. dub. in Boleodorinae, Tylenchidae
Basiria : Boleodorinae, Tylenchidae
Basirienchus : Boleodorinae, Tylenchidae
Basiriinae : syn. of Boleodorinae
Basiroides : syn. of *Basiria*
Basirrolaimus : syn. of *Hoplolaimus*
Bellodera : Heteroderinae, Heteroderidae
Belonolaimidae : Tylenchoidea
Belonolaiminae : Belonolaimidae, Tylenchoidea
Belonolaimus : Belonolaiminae, Belonolaimidae
Bidera : syn. of *Heterodera*
Bitylenchus : syn. of *Tylenchorhynchus*
Blandicephalanema : Criconematinae, Criconematidae
Boleodoridae : syn. of Tylenchidae
Boleodorinae : Tylenchidae, Tylenchoidea
Boleodoroides : syn. of *Ditylenchus*
Boleodorus : Boleodorinae, Tylenchidae
Brachydorus : Dolichodoridae
Bursadera : Nacobboderinae, Heteroderidae

Caconema : syn. of *Meloidogyne*
Cacopaurus : Paratylenchinae, Tylenchulidae
Cactodera : Heteroderinae, Heteroderidae
Caloosia : Hemicyclophorinae, Criconematidae
Caloosiidae : syn. of Criconematidae
Calvatylus : syn. of *Rotylenchus*
Campbellenchinae : syn. of Tyloporinae
Campbellenchus : Tyloporinae, Tylenchidae
Carphodorus : Belonolaiminae, Belonolaimidae
Cephalenchus : Tyloporinae, Tylenchidae
Ceramotylenchus : syn. of *Miculenchus*
Cerchnotocriconema : syn. of *Criconema*
Chitinotylenchus : inc. sed. in Anguinidae
Clavaurotylenchus : syn. of *Trophurus*
Clavilenchus : syn. of *Basiria*
Colbranium : syn. of *Hemicyclophora*
Cosaglenchus : syn. of *Coslenchus*
Coslenchus : Atylenchinae, Tylenchidae
Criconema : Criconematinae, Criconematidae
Criconema (Variasquamata) : syn. of *Ogma*
Criconematidae : Criconematoidea
Criconematina : syn. of Tylenchina
Criconematinae : Criconematidae, Criconematoidea
Criconematoidea : Tylenchina

- Criconemella* : Criconematinae, Criconematidae
 Criconemellinae : syn. of Criconematinae
Criconemoides : *gen. dub.* in Criconematinae
Croserinema : syn. of *Ogma*
Crossonema : syn. of *Ogma*
Crossonema (*Crossonema*) : syn. of *Ogma*
Crossonema (*Seriespinula*) : syn. of *Ogma*
Crossonemoides : syn. of *Criconemella*
Cucullitylenchus : Tylenchinae, Tylenchidae
Cryphodera : Heteroderinae, Heteroderidae
 Cryphoderinae : syn. of Heteroderinae
Cynipanguina : Anguinidae
 Cynipanguininae : syn. of Anguinidae

 Dactylotylenchinae : syn. of Tylenchinae
Dactylotylenchus : syn. of *Filenchus*
Diptenchus : syn. of *Ditylenchus*
Discocriconemella : Criconematinae, Criconematidae
Discotylechus : syn. of *Filenchus*
 Ditylenchidae : syn. of Anguinidae
 Ditylenchinae : syn. of Anguinidae
Ditylenchus : Anguinidae
Divittus : syn. of *Tylenchorhynchus*
Dolichodera : Heteroderinae, Heteroderidae
 Dolichodoridae : Tylenchoidea
 Dolichodoroidea : syn. of Tylenchoidea
Dolichodorus : Dolichodoridae
Dolichorhynchus : syn. of *Tylenchorhynchus*
 Duosulciinae : syn. of Tylenchinae
Duosulcius : syn. of *Filenchus*
Duotylechus : Boleodorinae, Tylenchidae

Ecphyadophora : Ecphyadophorinae, Tylenchidae
 Ecphyadophoridae : syn. of Tylenchidae
 Ecphyadophorinae : Tylenchidae, Tylenchoidea
Ecphyadophoroides : Ecphyadophorinae, Tylenchidae
 Ecphyadophoroidinae : syn. of Ecphyadophorinae
Ephippiodera : syn. of *Heterodera*
Epicharinema : Ecphyadophorinae, Tylenchidae
 Epicharinematinae : syn. of Ecphyadophorinae
 Eutylenchinae : syn. of Tyldorinae
Eutylechus : Tyldorinae, Tylenchidae

Filenchus : Tylenchinae, Tylenchidae

Geocenamus : Belonolaiminae, Belonolaimidae
Globodera : Heteroderinae, Heteroderidae
Goodeyella : syn. of *Sphaeronema*
Gottholdsteineria : syn. of *Rotylechus*
Gracilacus : Paratylenchinae, Tylenchulidae
Gracilancea : Atylenchinae, Tylenchidae

 Halenchidae : syn. of Anguinidae
 Halenchinae : syn. of Anguinidae
Halenchus : Anguinidae
Helicotylechus : Hoplolaiminae, Hoplolaimidae
Hemicaloosia : syn. of *Caloosia*
Hemicriconemoides : Criconematinae, Criconematidae
Hemicyclophora : Hemicyclophorinae, Criconematidae
 Hemicyclophoridae : syn. of Criconematidae
 Hemicyclophorinae : Criconematidae, Criconematoidea
 Hemicyclophoroidea : syn. of Criconematoidea

Heteroanguina : syn. of *Subanguina*
Heterobolbus : syn. of *Heterodera*
Heterodera (*Heterodera*) : syn. of *Heterodera*
Heterodera (*Heterodera*) : syn. of *Heterodera*
 Heteroderidae : Tylenchoidea
 Heteroderina : syn. of Tylenchina
 Heteroderinae : Heteroderidae, Tylenchoidea
 Heteroderoidea : syn. of Tylenchoidea
Hexadorus : syn. of *Geocenamus*
Hirschmannia : syn. of *Hirschmanniella*
Hirschmanniella : Pratylenchinae, Pratylenchidae
 Hirschmanniellinae : syn. of Pratylenchinae
Histotylechus : syn. of *Paratrophurus*
 Hoplolaimidae : Tylenchoidea
 Hoplolaiminae : Hoplolaimidae, Tylenchoidea
 Hoplolaimoidea : syn. of Tylenchoidea
Hoplolaimoides : syn. of *Hoplolaimus*
Hoplolaimus : Hoplolaiminae, Hoplolaimidae
Hoplorhynchus : syn. of *Pratylenchoides*
 Hoplotylinae : syn. of Pratylenchinae
Hoplotylus : Pratylenchinae, Pratylenchidae
Hylonema : Heteroderinae, Heteroderidae
Hypsoperine : syn. of *Meloidogyne*
Hypsoperine (*Spartonema*) : syn. of *Meloidogyne*

Ibipora : syn. of *Belonolaimus*
Imphalenchus : syn. of *Cephalenchus*
 Interrotylenchinae : syn. of Hoplolaiminae
 Interrotylenchidae : syn. of Hoplolaimidae
Interrotylenchus : syn. of *Rotylechus*
Irantylechus : Tylenchinae, Tylenchidae
Ivotylechulus : syn. of *Trophotylechulus*

Karachinema : syn. of *Ecphyadophora*

Lambertia : syn. of *Filenchus*
Leiperotylechus : syn. of *Rotylechulus*
 Leipotylenchinae : syn. of Boleodorinae
Leipotylechus : syn. of *Atetylenchus*
Lelenchus : Ecphyadophorinae, Tylenchidae
Lobocriconema : syn. of *Criconema*
Loofia : syn. of *Hemicyclophora*
Luella : *inc. sed.* in Boleodorinae, Tylenchidae

Macrocriconema : syn. of *Ogma*
Macroposthonia : *gen. dub.* in Criconematinae
 Macroposthoniidae : syn. of Criconematidae
 Macroposthoniinae : syn. of Criconematinae
Macrotrophurus : Tyldorinae, Tylenchidae
Madinema : syn. of *Criconemella*
 Madinematidae : syn. of Criconematidae
 Madinematinae : syn. of Criconematinae
Malenchus : Tylenchinae, Tylenchidae
 Meiodorinae : syn. of Telotylenchinae
Meiodorus : syn. of *Triversus*
Meloidodera : Heteroderinae, Heteroderidae
Meloidoderella : *gen. dub.* in Meloidogyninae
 Meloidoderellinae : *subfam. dub.* in Heteroderidae
 Meloidoderidae : syn. of Heteroderidae
 Meloidoderinae : syn. of Heteroderinae
Meloidoderita : Tylenchulinae, Tylenchulidae

- Meloidoderitidae : syn. of Tylenchulidae
Meloidogyne : Meloidogyninae, Heteroderidae
Meloidogynidae : syn. of Heteroderidae
Meloidogyninae : Heteroderidae, Tylenchoidea
Meloinema : Nacobboderinae, Heteroderidae
Meloinematinae : syn. of Nacobboderinae
Meloineminae : see Meloinematinae
Merliniinae : syn. of Telotylenchinae
Merlinius : Telotylenchinae, Belonolaimidae
Merocriconema : syn. of *Criconema*
Mesoanguina : syn. of *Subanguina*
Mesocriconema : syn. of *Criconemella*
Mesotylus : syn. of *Zygotylenchus*
Miculenchus : Tylenchinae, Tylenchidae
Mitranema : Ecphyadophorinae, Tylenchidae
Morasinema : syn. of *Tylenchorhynchus*
Morulaimus : Belonolaiminae, Belonolaimidae
Mukazia : Tylenchinae, Tylenchidae
Mulveyotus : syn. of *Triversus*
- Nacobbidae : syn. of Pratylenchidae
Nacobbinae : Pratylenchidae, Tylenchoidea
Nacobbodera : Nacobboderinae, Heteroderidae
Nacobboderinae : Heteroderidae, Tylenchoidea
Nacobbus : Nacobbinae, Pratylenchidae
Nagelus : Telotylenchinae, Belonolaimidae
Nectopelta : syn. of *Aorolaimus*
Nemonchidae : syn. of Hoplolaimidae
Nemonchinae : syn. of Hoplolaiminae
Nemonchus : syn. of *Hoplolaimus*
Nenocriconema : syn. of *Criconema*
Neobakernema : syn. of *Criconemella*
Neobasiria : syn. of *Basiria*
Neocriconema : syn. of *Discocriconemella*
Neocrossonema : syn. of *Ogma*
Neoditylenchinae : syn. of Anguinidae
Neoditylenchus : syn. of *Sychnotylenchus*
Neodolichodorus : Dolichodoridae
Neodolichorhynchus : syn. of *Tylenchorhynchus*
Neolobocriconema : syn. of *Ogma*
Neomalenchus : syn. of *Malenchus*
Neopsilenchus : Boleodorinae, Tylenchidae
Neoradopholus : syn. of *Radopholus*
Neothada : Boleodorinae, Tylenchidae
Nothanguina : syn. of *Anguina*
Nothanguinidae : syn. of Anguinidae
Nothanguininae : syn. of Anguinidae
Nothocriconema : syn. of *Criconema*
Nothocriconemella : syn. of *Criconema*
Nothocriconemoides : Criconematinae, Criconematidae
Notholetus : syn. of *Criconema*
Nothotylenchidae : syn. of Anguinidae
Nothotylenchinae : syn. of Anguinidae
Nothotylenchus : syn. of *Ditylenchus*
- Ogma* : Criconematinae, Criconematidae
Ogma (Homogma) : syn. of *Ogma*
Orientalylus : syn. of *Rotylenchus*
Orrina : syn. of *Anguina*
Ottolenchus : syn. of *Filenchus*
- Paktylenchus* : syn. of *Coslenchus*
Paracriconema : syn. of *Criconema*
Paralobocriconema : syn. of *Ogma*
Paranguina : syn. of *Anguina*
Pararotylenchidae : syn. of Hoplolaimidae
Pararotylenchinae : syn. of Hoplolaiminae
Pararotylenchus : Hoplolaiminae, Hoplolaimidae
Paratrophurus : Telotylenchinae, Belonolaimidae
Paratylenchidae : syn. of Tylenchulidae
Paratylenchinae : Tylenchulidae, Criconematoidea
Paratylenchoides : syn. of *Paratylenchus*
Paratylenchus : Paratylenchinae, Tylenchulidae
Pateracephalanema : Criconematinae, Criconematidae
Pateracephalanema (Pellipecten) : syn. of *Pateracephalanema*
Peltamigratus : syn. of *Aorolaimus*
Plesiodorus : syn. of *Neodolichodorus*
Pleurotylenchinae : syn. of Atylenchinae
Pleurotylenchus : Atylenchinae, Tylenchidae
Polenchus : Tylenchinae, Tylenchidae
Pratylenchidae : Tylenchoidea
Pratylenchinae : Pratylenchidae, Tylenchoidea
Pratylenchoides : Pratylenchinae, Pratylenchidae
Pratylenchus : Pratylenchinae, Pratylenchidae
Procriconema : syn. of *Hemicyclophora*
Pseudhalenchinae : syn. of Anguinidae
Pseudhalenchus : Anguinidae
Pseudobasiria : syn. of *Basiria*
Pseudocriconema : syn. of *Ogma*
Psilenchinae : syn. of Boleodorinae
Psilenchus : Boleodorinae, Tylenchidae
Pterotylenchus : Anguinidae
Punctodera : Heteroderinae, Heteroderidae
Punctoderinae : syn. of Heteroderinae
- Quinisulcius* : syn. of *Tylenchorhynchus*
- Radopholidae : syn. of Pratylenchidae
Radopholinae : syn. of Pratylenchinae
Radopholoides : syn. of *Radopholus*
Radopholus : Pratylenchinae, Pratylenchidae
Rhizonema : Heteroderinae, Heteroderidae
Rotylenchinae : syn. of Hoplolaiminae
Rotylenchoides : syn. of *Helicotylenchus*
Rotylenchoidinae : syn. of Hoplolaiminae
Rotylenchulidae : syn. of Hoplolaimidae
Rotylenchulinae : Hoplolaimidae, Tylenchoidea
Rotylenchulus : Rotylenchulinae, Hoplolaimidae
Rotylenchus : Hoplolaiminae, Hoplolaimidae
- Safianema* : syn. of *Ditylenchus*
Sakia : gen. dub. in Boleodorinae, Tylenchidae
Sarisodera : Heteroderinae, Heteroderidae
Sarisoderinae : syn. of Heteroderinae
Sauertylenchus : Belonolaiminae, Belonolaimidae
Scutellonema : Hoplolaiminae, Hoplolaimidae
Scutellonemoides : syn. of *Rotylenchus*
Scutellonemoidinae : syn. of Hoplolaiminae
Scutylenchus : syn. of *Merlinius*
Senegalonema : Rotylenchulinae, Hoplolaimidae
Seriespinula : syn. of *Ogma*
Seshadriella : syn. of *Criconemella*

Sherodera : syn. of *Atalodera*
Sphaeronema : Tylenchulinae, Tylenchulidae
 Sphaeronematidae : syn. of Tylenchulidae
 Sphaeronematinae : syn. of Tylenchulinae
Spirotylechus : syn. of *Rotylechus*
Spyrotylechus : see *Spirotylechus*
Subanguina : Anguinidae
 Sychnotylechidae : syn. of Anguinidae
 Sychnotylechinae : syn. of Anguinidae
Sychnotylechus : Anguinidae
Syro : syn. of *Ogma*
 Telotylechidae : syn. of Belonolaimidae
 Telotylechinae : Belonolaimidae, Tylenchoidea
Telotylechoides : syn. of *Paratrophurus*
Telotylechus : syn. of *Tylenchorhynchus*
Tenunemellus : syn. of *Ecphyadophoroides*
Tessellus : syn. of *Tylenchorhynchus*
 Tetylenchinae : syn. of Telotylechinae
Tetylenchus : gen. dub. in Telotylechinae, Belonolaimidae
Thada : Anguinidae
 Thadinae : syn. of Anguinidae
Thecavermiculatus : Heteroderinae, Heteroderidae
Trichotylechus : Telotylechinae, Belonolaimidae
Trilineellus : syn. of *Tylenchorhynchus*
Triversus : Telotylechinae, Belonolaimidae
Trophonema : Tylenchulinae, Tylenchulidae
Trophotylechulus : Tylenchulinae, Tylenchulidae
 Trophurinae : syn. of Telotylechinae
Trophurus : Telotylechinae, Belonolaimidae
Tumiota : syn. of *Sphaeronema*
 Tylenchidae : Tylenchoidea
 Tylenchina : Nemata
 Tylenchinae : Tylenchidae, Tylenchoidea
Tylenchocriconema : Tylenchocriconematinae, Tylenchulidae
 Tylenchocriconematidae : syn. of Tylenchulidae
 Tylenchocriconematinae : Tylenchulidae, Criconematoidea
 Tylenchocriconematoidea : syn. of Criconematoidea
 Tylenchoidea : Tylenchina
 Tylenchorhynchidae : syn. of Belonolaimidae
 Tylenchorhynchinae : syn. of Telotylechinae
Tylenchorhynchus : Telotylechinae, Belonolaimidae
 Tylenchulidae : Criconematoidea
 Tylenchulinae : Tylenchulidae, Criconematoidea
Tylenchulus : Tylenchulinae, Tylenchulidae
Tylenchus : Tylenchinae, Tylenchidae
Tylenchus (Heterodera) : syn. of *Heterodera*
Tylenchus (Lelenchus) : syn. of *Lelenchus*
 Tylodoridae : syn. of Tylenchidae
 Tylodorinae : Tylenchidae, Tylenchoidea
Tylodorus : Tylodorinae, Tylenchidae
Uliginotylechus : syn. of *Trichotylechus*
Variasquamata : syn. of *Ogma*
Varotylus : syn. of *Rotylechus*
 Verutinae : syn. of Heteroderinae
Verutus : Heteroderinae, Heteroderidae
Xenocriconemella : syn. of *Criconemella*
Zanenchus : syn. of *Filenchus*

Zelandodera : syn. of *Cryphodera*
Zimmermannia : syn. of *Helicotylechus*
Zygotylechus : Pratylenchinae, Pratylenchidae

ACKNOWLEDGEMENTS

M. B. Souchaud, ORSTOM Principal Assistant, is gratefully acknowledged for help in establishing the list of taxa.

REFERENCES

- BALDWIN, J. G. & BELL, A. H. (1981). *Paratylechus* n. gen. (Paratylechinae n. subfam., Hoplolaimidae) with six new species and two new combinations. *J. Nematol.*, 13 : 111-128.
- COHN, E. & KAPLAN, D. T. (1983). Parasitic habits of *Trophotylechulus floridensis* (Tylenchulidae) and its taxonomic relationship to *Tylenchulus semipenetrans* and allied species. *J. Nematol.*, 15 : 514-523.
- EBSARY, B. A. (1986). *Ceramotylechus tessellatus* n. gen., n. sp. and *Pleurotylenchus minor* n. sp. (Nematoda : Tylenchida) from Alabama. *Canad. J. Zool.*, 64 : 238-242.
- EROSHENKO, A. S. (1981). [Plant parasitic nematodes of underwood; families Tylenchorhynchidae and Hoplolaimidae (Nematoda)]. *Svobodnozhivushchie i fitopatogennye nematody fauny Dal'nego Vostoka* : 22-27; 85-92.
- EROSHENKO, A. S. (1984). [Plant nematodes of coniferous plants in the Primorsk Territory]. *Parazity zhivotnykh i rastenii* : 87-97.
- FORTUNER, R. (1987). A reappraisal of Tylenchina (Nemata). 8. The family Hoplolaimidae Filip'ev, 1934. *Revue Nématol.*, 10 : 219-232.
- FORTUNER, R. & LUC, M. (1987). A reappraisal of Tylenchina (Nemata). 6. The family Belonolaimidae Whitehead, 1960. *Revue Nématol.*, 10 : 183-202.
- FORTUNER, R. & MAGGENTI, A. R. (1987). A reappraisal of Tylenchina (Nemata). 4. The family Anguinidae Nicoll, 1935 (1926). *Revue Nématol.*, 10 : 163-176.
- GERAERT, E. & RASKI, D. J. (1986). Unusual *Malenchus* species (Nematoda : Tylenchidae). *Nematologica*, 32 : 27-55.
- GERAERT, E. & RASKI, D. J. (1987). A reappraisal of Tylenchina (Nemata). 3. The family Tylenchidae Örley, 1880. *Revue Nématol.*, 10 : 143-161.
- DE GUIRAN, G. & SIDDIQI, M. R. (1967). Characters differentiating the genera *Zygotylechus* Siddiqi, 1963 (syn. *Mesotylus* de Guiran, 1964) and *Pratylenchoides* Winslow, 1958 (Nematoda : Pratylenchinae). *Nematologica*, 13 : 235-240.
- HASHIM, Z. (1984). Description of *Trophotylechulus saltiensis* n. sp., with a comment on the status of *Trophotylechulus* Raski, 1957 and a proposal for *Ivotylechulus* n. gen. (Nematoda : Tylenchida). *Revue Nématol.*, 6 (1983) : 179-186.
- JAHAN, I. (1986). A new genus, *Pseudobasiria* (Tylenchidae : Nematoda), with comments on the position of *Clavilenchus similis* Thorne & Malek, 1968 and *Basiria dolichura* Loof, 1971 from Pakistan. *Proc. Parasitol.*, 2 : 63-65.

- KHAN, H. A. & SAEED, M. (1985). Redescription of *Cricone-mella kamali* (De Grisse and Loof, 1965) Khan, 1971 with the proposal of a new subfamily Criconemellinae. *Proc. Parasitol.*, 1 : 20-23.
- LUC, M. (1987). A reappraisal of Tylenchina (Nemata). 7. The family Pratylenchidae Thorne, 1949. *Revue Nématol.*, 10 : 203-218.
- LUC, M. & FORTUNER, R. (1987). A reappraisal of Tylenchina (Nemata). 5. The family Dolichodoridae Chitwood, 1950. *Revue Nématol.*, 10 : 177-181.
- LUC, M., MAGGENTI, A. R. & FORTUNER, R. (1988). A reappraisal of Tylenchina (Nemata). 9. The family Heteroderidae. *Revue Nématol.*, 11 : 159-176.
- LUC, M., MAGGENTI, A. R., FORTUNER, R., RASKI, D. J. & GERAERT, E. (1987). A reappraisal of Tylenchina (Nemata). 1. For a new approach to the taxonomy of Tylenchina. *Revue Nématol.*, 10 : 127-134.
- MAGGENTI, A. R., LUC, M., RASKI, D. J., FORTUNER, R. & GERAERT, E. (1987). A reappraisal of Tylenchina (Nemata). 2. Classification of the suborder Tylenchina (Nemata : Diplogasteria). *Revue Nématol.*, 10 : 135-142.
- MUKHINA, T. I. & KAZACHENKO, I. P. (1981). [A new species, *Malenchus novus* sp. n., (Nematoda : Tylenchida) from the East]. *Parazitologiya*, 15 : 191-194.
- RASKI, D. J. & GERAERT, E. (1985). A new species of *Miculenchus* Andrassy, 1959 and further notes on *M. salvus* (Nematoda : Tylenchidae). *Nematologica*, 30 (1984) : 419-428.
- RASKI, D. J. & LUC, M. (1987). A reappraisal of Tylenchina (Nemata). 10. The superfamily Criconematoidea. *Revue Nématol.*, 10 : 409-444.
- RASKI, D. J. & LUC, M. (1988). SEM data on *Brachydorus swarupi* Koshi, Raski & Sosamma, 1981, and considerations on the taxonomic position of the genus *Brachydorus* de Guiran & Germani, 1968 (Nemata : Dolichodoridae). *Revue Nématol.*, 11 (under press).
- SIDDIQI, M. R. (1986). *Tylenchida Parasites of Plants and Insects*. St. Albans, U.K., Commonwealth Institute of Parasitology, X + 646 p.

Accepté pour publication le 25 septembre 1987.