

Provisional checklist of Annelids (megadriles) of central Amazonia, Peru and Brazil

by Rob Blakemore, August, 2006 YNU Japan

The current list has approximately 160 species from this region updated from Blakemore (2005). Lavelle & Lapied (2003) calculated 105 species in 36 genera from the Guayana Shield, North of the Amazon and South-East of the Orinoco; they included 10 peregrine species, 8 unidentified taxa, and estimated a total Amazonia earthworm fauna of >2,000 earthworm species.

<http://www.ingentaconnect.com/content/urban/281/2004/00000047/F0020005/art00005>.

Earlier, Righi (1999) claimed 260 species from Brazil with 70 he listed from Sao Paulo, but these included microdriles so the numbers of megadriles are lower (see website:

<http://www.biota.org.br/pdf/v5cap02.pdf>).

Recently, Feijoo *et al.* (2004) reported that Colombian Oligochaeta comprise 113 species placed in nine families, 30 genera and six subgenera, of which 90 are native and 23 exotic [http://www.ecologia.edu.mx/azm/documentos/20_2/M-Feijoo.pdf]. However, they mistakenly refer to 7 new taxa and to synonyms of *D. rubida*, *A. rosea* and *O. occidentalis* and they overlook *Pontodrilus litoralis* (Megascolecidae), so that actual totals of known exotics differ.

For summary of smaller aquatic microdriles, the reader is directed to Roembke (2004) and Pamplin *et al.* (2005). Some other sources are listed in References below.

Results

Families, Genera and Species reported from Amazonia compiled from various sources eg. Michaelsen, 1900; Blakemore (2002); Lavelle & Lapied (2003) and references cited therein. Family classification follows Blakemore (2000; 2002).

Family Ocnerodrilidae – about 20 genera, not only in S. America

Bauba

Bauba santosi Righi, 1980

Belladrilus

Belladrilus arua Righi, 1984

Belladrilus emilianii Righi, 1984

Belladrilus jimi Righi, 1984 - Brazil (Mischis, 2000; 2004)

Belladrilus (Belladrilus) otarion Righi, 1995 (from cave?) - Iporanga, Sao Paulo

Belladrilus pocaju Righi, 1984

Belladrilus (Belladrilus) vaucheri Zicsi, 1995

Brunodrilus

Brunodrilus angetoi Righi, 1971

Eukerria Michaelsen – S. America (including Peru and Brazil)

Eukerria asuncionis (Rosa, 1895) - Brazil (Mischis, 2000; 2004)

Eukerria eiseniana – Bolivar (Venezuela) /Roraima (Brazil)

Eukerria garmani (Rosa, 1895) - Brazil

Eukerria guamis – Manaus

Eukerria kukenthalii (Michaelsen, 1908) – Brazil and peregrine

Eukerria saltensis (Beddard, 1895) – S. America and peregrine

Eukerria stagnalis (Kinberg, 1867) – S. America including Brazil

Eukerria subandina (Rosa, 1895) – S. America including Brazil

Eukerria urna Righi, 1968 – Brazil

Exisdrilus

Exisdrilus rarus - Manaus

Gordiodrilus

Gordiodrilus paski - Sao Paulo

Gordiodrilus marcusi - Anhembi, Sao Paulo

Haplodrilus Eisen – Paraguay, Brazil

Haplodrilus tagua - Manaus

Kerriona Michaelsen – Brazil

Kerriona limae - Salesopolis, Sao Paulo

Ocnerodrilus Eisen – Northern S. America

Ocnerodrilus (Ilyogenia) hendriei paulistus - Sao Paulo

Ocnerodrilus (Ilyogenia) ibemi - Sao Sebastiao, Sao Paulo

Ocnerodrilus (Ocnerodrilus) occidentalis Eisen, 1878 - peregrine

Pygmaeodrilus

Pygmaeodrilus amapaensis Righi, 1988 - Brazil

Paulistus Michaelsen – Brazil

Quechua Michaelsen – Peru

Xibaro Righi, 1981 - Equador.

Family Acanthodrilidae – several peregrine species are possible in this region.

Microscolex Rosa – southern S. America and peregrine

Microscolex dubius (Fletcher, 1887) - peregrine including S. America

Microscolex phosphoreus (Duges, 1837) – peregrine including S. America

Yagansia Michaelsen, southern S. America, one species from Peru

Yagansia peruana Cernosvitov, 1939 - ?Altiplano overlaps Chile, type-locality in Peru

Family Octochaetidae – about 30 genera, not only in S. America

Dariodrilus

Dariodrilus ferrarius - Manaus

Dichogaster Beddard – S. America and peregrine

Dichogaster andina andina Cognetti, 1904

Dichogaster andina evae Righi et al., 1978 – Rio Tocantins

Dichogaster affinis - Manaus

Dichogaster annae (Horst, 1893) (syns. include *Benhamia parva* Michaelsen, 1896; *D. servi* Righi & Ayres, 1975; *D. silvestris cacaois* Righi, 1968) – S. America

Dichogaster badajos Righi, Ayres & Bittencourt, 1978

Dichogaster bolau (Michaelsen, 1891) – peregrine found Amazonia, and Sao Paulo

Dichogaster gracilis (Michaelsen, 1892) - Manaus

Dichogaster ibaia Righi, Ayres & Bittencourt, 1978 - Manaus

Dichogaster modiglianii (Rosa, 1896) – peregrine species found Amazonia

Dichogaster saliens (Beddard, 1893) - Manaus; Sao Paulo

Dichogaster servi - Osasco, Sao Paulo; Rio Grande do Sul

Dichogaster xecatu - Manaus

Neogaster Cernosvitov, 1934

Neogaster aidae Righi, 1975

Neogaster americana Cernosvitov, 1934 - from Brazil

Neogaster angeloi - from Brazil

Neogaster gavrillovi Righi & Caballero, 1970 - from Brazil

Pickfordia

Pickfordia (Omodeoscolex) divergens itapecu (Righi, Ayres & Bittencourt, 1978) – Manaus and Rio Tocantins Brazil, Guadeloupe Island (Caribbean), and Paraguay - from Csuzdi (1993: 67). Note: this taxa formerly *Wegneriella divergens itapecu*.

Pickfordia (Omodeoscolex) tocaya (Righi, Ayres & Bittencourt, 1978) - Manaus
(*Wegeneriella* Michaelsen, 1933 – now restricted to West Africa, - see Csuzdi, 1993 cf. Lavelle
& Laped, 2003: 424).

Wegeneriona Cernosvitov, 1939 – tropical S. America

Wegeneriona beauforti Michalsen, 1933 - N. Brazil

Wegeneriona belenensis Righi, 1988 - Manaus

Wegeneriona brasiliana Cernosvitov, 1939

Wegeneriona cernosvitovi Righi & Caballero, 1970 - from Brazil (and Equador)

Wegeneriona michaelsoni (Cernosvitov, 1934)

Family Megascolecidae - several peregrine species are known or probable in this region.

Amyntas aspergillum (Perrier) - reported from Sao Paulo by Righi (1967) possibly
actually refers to *A. robustus* (Perrier).

Amyntas corticis - peregrine including S. America

Amyntas gracilis - peregrine including S. America

Amyntas morrisoni - peregrine including S. America

Amyntas rodericensis (Grube, 1879) – S. America

Amyntas ? tricystis (Perrier, 1877) poorly described as *Perichatea tricystis* from Brazil.

Metaphire californica - peregrine including S. America

Metaphire houletti

Metaphire schmarda - Sao Paulo (Righi, 1980)

Pheretima? dicystis (Perrier, 1877) – Brazil, poorly described, species inquirenda.

Pheretima? tricystis (Perrier, 1877) – Brazil, poorly described, species inquirenda.

Polypheretima elongata (Perrier, 1872) – S. America

Polypheretima taprobanae (Beddard, 1892) – Sao Paulo, Brazil

Pontodrilus litoralis (Grube, 1855) – littoral, cosmopolitan - including S. America

Family Glossoscolecidae – about 25 genera with ca. 200 species, mainly S. America

Alexidrilus Righi, 1971

Alexidrilus litoralis Ljungstrom, 1972 – Brazil

Alexidrilus lourdesae Righi, 1971 – Brazil

Andioscolex Michaelsen - tropical S. America (but not Peru)

Andioscolex itajo - Araras, Sao Paulo

Anteoides Cognetti – S. America (but not Peru nor Brazil)

Andiorrhinus Cognetti – S. America (including N. Brazil)

Andiorrhinus (Amazonidrilus) aberratus Zicsi & Csuzdi, 1999

Andiorrhinus (Amazonidrilus) amaparis Righi, 1971

Andiorrhinus (Amazonidrilus) amazonius Michaelsen, 1918 – Rio Taruma Mirim/
Manaus

Andiorrhinus (Amazonidrilus) brasiliensis buritis

Andiorrhinus (Amazonidrilus) caudata – Rio Taruma Mirim, Manaus

Andiorrhinus (Amazonidrilus) curiosus – Manaus

Andiorrhinus icomi Righi, 1971

Andiorrhinus (Amazonidrilus) mandauaka

Andiorrhinus (Amazonidrilus) motto Righi & Araujo, 1999

Andiorrhinus planaria Michaelsen, 1934 – Rio Negro

Andiorrhinus (Amazonidrilus) venezuelanus tarumanis Righi et al., 1976 – Rio
Negro/Rio Solimoes, Manaus

Andiorrhinus (Andiorrhinus) kuru Moreno & Paoletti, 2004

Andiorrhinus (Turedrilus) baniwa

Andiorrhinus (Turedrilus) bare
Andioscolex
Andioscolex atunesi Righi, 1971
Andioscolex freitasi Righi, 1971
Andioscolex geayi Cernosvitov, 1934 (sometimes misquoted as "Righi, 1971")
Andioscolex tinga Righi, 1971
Atatina
Atatina gatesi
Aptodrilus Cognetti – S. America (including N. Brazil)
Cirodrilus
Cirodrilus righii Zicsi, Rombke & Garcia, 2001 - Manaus
Diacheta (8 species in subgenus are known)
Diacheta (Amazo) atroaris Righi et al., 1978 - Manaus
Diacheta (Amazo) mingua
Diacheta (Diacheta) adisi Righi, 1987 - Manaus
Diacheta (D.) carsevenica
Diacheta (D.) juli Righi et al., 1978 - Manaus
Diacheta (D.) mura Righi, 1989 - Manaus
Diacheta (D.) uaimiri - Brazil
Diaguia
Diaguia michaelsoni Vordero, 1942 - Brazil (Mischis, 2000; 2004)
Diaguia viviana Righi, 1990 - Manaus
Enantiodrillus
Enantiodrillus borellii Cognetti, 1902 - Brazil (Mischis, 2000; 2004)
Enantiodrillus cognettii Michaelsen, 1933 - Brazil
Fimoscolex Michaelsen – Brazil
Fimoscolex angai – Sao Paulo, Brazil
Fimoscolex ohausi Michaelsen, 1900 – Brazil (Rio de Janeiro)
Fimoscolex sacii – Sao Paulo, Brazil
Fimoscolex sporadochaetus Michaelsen, 1917 - Brazil
Glossodrillus
Glossodrillus arapaco Righi, 1982 – Brazil
Glossodrillus baiuca Hamoui & Donatelli, 1983 – Brazil
Glossodrillus cigges Righi, 1971 – Brazil
Glossodrillus mairaro Righi, 1982
Glossodrillus motu Righi, 1990 – Brazil
Glossodrillus oliveirae Righi, 1982 – Brazil
Glossodrillus tico Righi, 1982 – Brazil
Glossodrillus schubarti Righi, 1982 – Manaus
Glossodrillus sucunduris - Brazil, Manaus
Glossodrillus uete dithecae Righi, 1988 – Brazil, Manaus
Glossoscolex Leuckart – tropical S. America
Glossoscolex amomee - Sao Paulo
Glossoscolex bondari - Rio Claro, Sao Paulo
Glossoscolex bressloui Michaelsen, 1918, Ribeirao Pires, Sao Paulo, Rio di Janeiro
Glossoscolex catharinensis Michaelsen, 1918, Barreira, Brazil
Glossoscolex corderoi - Sao Manuel, Sao Paulo
Glossoscolex facchinii - Araras, Sao Paulo
Glossoscolex fasold Michaelsen, 1918, Alto da Serra by Santos, Sao Paulo, Brazil
Glossoscolex giganteus australis - Apiai, Sao Paulo
Glossoscolex giganteus giganteus Leuchart, 1835 – Brazil (Rio de Janeiro)

Glossoscolex gordurensis - Sao Paulo
Glossoscolex grandis grandis (Michaelsen, 1892) – Brazil
Glossoscolex grandis ibirai – Ibirá, Sao Paulo, Brazil
Glossoscolex grecoi - Sao Paulo
Glossoscolex jimi Righi, 1972: 41
Glossoscolex montagneri - Sao Sebastiao, Sao Paulo
Glossoscolex mrazi - Sao Paulo
Glossoscolex (Tomperoge) parecis Righi & Ayres, 1975 - Brazil (Mischis, 2000; 2004)
Glossoscolex paulistus - Piracicaba, Arras, Sao Paulo
Glossoscolex sazimai - Garaguatatuba, Sao Paulo
Glossoscolex taunayi Michalsen, 1926 - Serra da Bocaina, Sao Paulo
Glossoscolex tocape - Sao Paulo
Glossoscolex truncatus Rosa, 1895 - Brazil
Glossoscolex tupii – Sao Paulo, Brazil
Glossoscolex uruguayensis uruguayensis Cordero, 1943 - Brazil (Mischis, 2000; 2004)
Glossoscolex umijiae - Cotia, Sao Paulo
Glossoscolex vizottoi - Rio Preto, Sao Paulo
Glossoscolex wiengreeni (Michaelsen, 1897) – S. Brazil
Holoscolex
Holoscolex caramuru Righi, 1990 - Brazil, Manaus
Holoscolex nemorosus tacoa Righi, 1990 - Brazil, Manaus
Martiodrilus Michaelsen, Peru, S. Brazil
Martiodrilus duodenarius (Michaelsen, 1917)- Brazil (originally *Thamnodrilus*)
Martiodrilus geayi (Cernosvitov, 1934) - N. Brazil (originally *Th. tenkatei geayi*)
Martiodrilus gonggripi (Michaelsen, 1933) - N. Brazil
Martiodrilus helleri - (Michaelsen, 1917) - N. Brazil (originally *Thamnodrilus*)
Martiodrilus matapi (Righi, 1969) - Manaus (originally *Thamnodrilus matapi*)
Martiodrilus potarensis (Rosa, 1898) - N. Brazil (originally *Anteus*)
Martiodrilus tenkatei (Horst, 1887) - N. Brazil (originally *Rhinodrilus*)
Onychochaeta Beddard – S. America
Onychochaeta windlei (Beddard, 1890) - N. Brazil
Opisthodrilus Rosa – S. America (including Brazil)
Opisthodrilus borellii Rosa, 1895 - Brazil (Mischis, 2000; 2004)
Periscolex Cognetti - S. America (but not Peru nor Brazil)
Perolofius
Perolofius ljungstromi - Brazil, San Carlos de Rio Negro
Pontoscolex Schmarda – S. America (including Brazil)
Pontoscolex (Meroscolex) guianicus Cernosvitov, 1934 - N. Brazil
Pontoscolex (Meroscolex) hoogmoedi Righi, 1969 - N. Brazil
Pontoscolex (Meroscolex) longissimus Cernosvitov, 1934 - N. Brazil
Pontoscolex (Meroscolex) marcusii Righi & Ayres, 1976
Pontoscolex (Meroscolex) roraimensis Righi, 1984 (1990?) – Roraima, Brazil
Pontoscolex (Pontoscolex) corethrurus (Muller, 1857) – Brazil
Pontoscolex (Pontoscolex) cuasi Righi, 1984 – Brazil
Pontoscolex (Pontoscolex) eudoxiae Righi, 1984 – Manaus
Pontoscolex (Pontoscolex) hingstoni Righi, 1971 – N. Brazil
Pontoscolex (Pontoscolex) maracaensis Righi, 1984 – Brazil
Pontoscolex (Pontoscolex) nogueirai Righi, 1990 – Brazil
Pontoscolex (Pontoscolex) uairimensis Righi, 1985
Pontoscolex (Pontoscolex) vandersleeni Michaelsen, 1933 – Brazil, Manaus
Rhinodrilus Perrier, 1872 – S. America (including Brazil)

Rhinodrilus alatus Righi, 1971 – Brazil
Rhinodrilus annulatus Cernosvitov, 1934 – Brazil
Rhinodrilus appuni pavoni Righi & Araujo, 1999
Rhinodrilus brasiliensis (Benham, 1886) – Pedza acu [erstwhile type of *Urobenus*]
Rhinodrilus bursiferus Righi, 1971 – Brazil
Rhinodrilus contortus Cernosvitov, 1938 – Manaus
Rhinodrilus duseni – Parana, Matogrosso du Sol
Rhinodrilus fajner Brazil (giant worm)
Rhinodrilus garbei – Botucatu
Rhinodrilus hoeflingae Righi, 1980 – Minas Gerais?
Rhinodrilus horsti (Beddard, 1891) – Brazil
Rhinodrilus juncundus Righi, 1985 – Rio Tocantins
Rhinodrilus lakei – Manaus
Rhinodrilus papillifer (Michaelsen, 1892) – Porto Alegre (type locality), Rio do Sul, S. Brazil; Paraguay
Rhinodrilus pitun Righi and Moraes, 1990 – Pernambuco, Brazil
Rhinodrilus priollii Righi, 1967 – Manaus
Rhinodrilus romani Michaelsen, 1928 – Rio Negro

Righiodrilus

Righiodrilus amazonicus Zicsi & Csuzdi, 1999 - N. Brazil
Righiodrilus tico - N. Brazil

Tairona

Tairona tipema, Righi et al., 1976 – Rio Negro

Thamnodrilus Beddard – Central and S. America (including Peru)

Thamnodrilus gulielmi Righi, 1971 - N. Brazil
Thamnodrilus salatheii Righi, 1971 - Brazil

Tuiba

Tuiba diana Righi et al., 1976 - Manaus

Tupinaki

Tupinaki bokermanni - Sao Paulo

Urobenus Benham

Urobenus brasiliensis brasiliensis Benham, 1886 - Manaus, San Paulo
Urobenus buritis - Manaus
Urobenus petrerei Righi, 1985 – Rio Tocantins

Zongodrilus Righi, 1995 - Ecuador

Family Almididae – ca. six genera with ca. 40 species, not only in S. America

Drilocrius Michaelsen - tropical S. America

Drilocrius iheringi (Michaelsen, 1895) from Sao Paulo & Paraguay
Drilocrius sp., Stephenson, 1931 – Paraguay
 plus several other *Drilocrius* spp.

Glyphidrilocrius

Glyphidrilocrius ehrhardti Michaelsen, 1926

Family Criodrilidae - primitive, mainly European family, type sometimes transported.

Criodrilus lacuum Hoffmeister, 1845 - Brazil (Knäpper & Porto, 1979)
Guarani camaqua Rodriguez & Lima in Lima & Rodriguez, in press; monotypic; from rice fields of Rio Grande do Sul, Brazil.

Family Sparganophilidae - mainly North American and possibly ancient European family.

Areco reco Righi, Ayres & Bittencourt 1978 - monotypic Amazonian taxon.

Family Lumbricidae – several peregrine species are possible in this region.

- Aporrectodea rosea* (Savigny, 1826) - peregrine including S. America
- Aporrectodea caliginosa* (Savigny, 1826) - peregrine including S. America
- Aporrectodea rosea* (Savigny, 1826) - peregrine including S. America and Brazil
- Aporrectodea trapezoides* (Duges, 1828) - peregrine including S. America
- Bimastos parvus* (Eisen, 1874) - peregrine including S. America
- Dendrobaena veneta* (Rosa, 1886) - Brazil (Knäpper & Porto, 1979)
- Dendrodrilus rubidus* (Savigny, 1826) – S. America
- Eisenia fetida* (Savigny, 1826) - widespread
- Eisenia lucens* (Waga, 1857) - Brazil (Knäpper & Porto, 1979)
- Eiseniella tetraedra* (Savigny, 1826) (Pacheco *et al.*, 1992)
- Octolasion cyaneum* (Savigny, 1826) - South Brazil (e.g. Righi, 1967)

Family Eudrilidae - one peregrine species reported from Guayana (by Cernosvitov, 1935)

Eudrilus eugeniae - Vinhedo, Sao Paulo (Righi, 1968)

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