

Korean earthworm species - updated checklist by R.J. Blakemore August, 2006

The geographical region is the Korean peninsula and offshore Chejoo-do or Cheju (Quelpart), Jeju-do, and Geoje-do Islands. Total land area of the peninsula, including 3,580 smaller islands, is ca. 220,847 sq. kilometers (vs. Japan 376,520 sq. km). The current list compiles 94 (ca. 70 pheretimoids) earthworm species from Korea with dubious reports or debatable synonyms marked with a "?". Exotic or peregrine species are marked with an asterisk "*".

An online list from the "Korean Institute for Earthworm Research" and the "Korean Earthworm Database" lists just 40 species [http://earthworm.chonbuk.ac.kr/db_list/search_eng.asp and http://biodiv.cccb.re.kr/~geoworm/renew/sub_db_list00.php March, 2006, maintained by Professor Kim Tae-Hung (also as Dr Tae-Heung Kim) of Chunbuk University, Department of Bioscience (or Chollapuk_do University Agricultural Department or Dept. Agrobiolgy, Junbook University) who was uncontactable due to obsolete email addresses].

Moniligastridae

1. *Drawida anchingiana* Chen, 1933 (originally *D. gisti* var. *anchingiana*) from Quelpart Isl.
2. *Drawida gisti* Michaelsen, 1931
3. *Drawida guryeensis* Hong, 2002
4. *Drawida japonica* (Michaelsen, 1892)*
5. *Drawida jirisanensis* Hong, 2002
6. *Drawida keikiensis* Kobayashi, 1938
7. *Drawida koreana* Kobayashi, 1938.
8. *Drawida nemora* Kobayashi, 1936
9. *Drawida songae* Hong, 2002

Lumbricidae

1. *Aporrectodea caliginosa* (Savigny, 1826)*
2. *Aporrectodea trapezoides* (Dugès, 1828)*
3. *Aporrectodea tuberculata* (Eisen, 1874)*
4. *Aporrectodea rosea* (Eisen, 1874)*
5. *Bimastos parvus* (Eisen, 1874) [also reported as *Bimastos beddardi* (Michaelsen, 1894)].*
6. *Dendrodrilus rubidus rubidus* (Savigny, 1826)*
7. *Dendrodrilus rubidus tenuis* (Eisen, 1874) [reported by Kobayashi (1941)].*
8. *Eisenia andrei* Bouché, 1972 [possibly a synonym or sub-species of *E. fetida*].*

9. *Eisenia fetida* (Savigny, 1826) [often still misspelt "foetida"].*
10. *Eisenia japonica* (Michaelsen, 1892) [syns. *Allolobophora japonica* f. *gigantica* Oishi, 1934; *Allolobophora japonica* f. *minuta* Oishi, 1934].*
11. *Eisenia koreana* (Zicsi, 1972) [originally in *Eiseniella*, transfer by Easton (1983)].
12. *Eisenia nordenskioldi nordenskioldi* (Eisen, 1879)*
13. ?*Eisenia nordenskioldi pallida* Malevic, 1956 **species inquirenda** [syn. *E. acystis* (Michaelsen, 1903) reported from northern Korea by Perel (1997: 22, 70)].*
14. ?*Lumbricus rubellus* Hoffmeister, 1843 [sourced from Giheung Farmer School, Korea by Cho *et al.*, (2004) *Journal of Biochemistry and Molecular Biology*, 37, No. 2:199-205 (http://www.jbmb.or.kr/jbmb/jbmb_files/%5B37-2%5D0404011548_199-205.pdf) but, if cultured, it is more likely to be *Eisenia fetida*].*
15. ?*Lumbricus terrestris* Linnaeus, 1758 [a highly improbable report from a Seoul sewage treatment plant by Lee, E.Y. *et al.* (2002) *Journal of Environmental Quality* 31:1782-1788].*

Megascolecidae

1. *Amyntas acinctus* (Goto & Hatai, 1899)
2. *Amyntas assimilis* Hong & Kim, 2002
3. *Amyntas agrestis* (Goto & Hatai, 1899) [syn. *Pheretima striata* Ishizuka, 1999].*
4. *Amyntas baemsagolensis* Hong & James, 2001
5. *Amyntas bubonis* Hong & James, 2001
6. *Amyntas carnosus* (Goto & Hatai, 1899) [syns. *Pheretima kyamikia* Kobayashi, 1934; ?*Amyntas youngtai* Hong & James, 2001; *Amyntas sangyeoli* Hong & James, 2001: 272; ?*Amyntas nanshanensis* Shen *et al.*, 2003]*.
7. *Amyntas corticis* (Kinberg, 1867) [many synonyms including *P. diffringens* Baird, 1869 still cited from Korea by Hong & James (2001: 92); and *P. morii* Kobayashi, 1938].*
8. *Amyntas cuneatus* Hong & James, 2001 [possibly belongs in *Metaphire*].
9. *Amyntas deogyusanensis* Hong & James, 2001
10. *Amyntas draconis* Hong & James, 2001
11. *Amyntas ephippiatus* Hong & Lee, 2001
12. *Amyntas fibulus fibulus* (Kobayashi, 1936)
13. *Amyntas fibulus ranunculus* (Kobayashi, 1936)
14. *Amyntas geojeinsulae* (Song & Paik, 1970)
15. *Amyntas geomunensis* Hong & James, 2001 [probably belongs in *Metaphire*].
16. *Amyntas gongjuensis* Hong & Kim, 2002
17. *Amyntas gucheonensis* (Song & Paik, 1970)

18. *Amyntas gyeryongensis* Hong & Kim, 2002
19. *Amyntas hupeiensis* (Michaelsen, 1895)*
20. *Amyntas jangbogoi* Hong & James, 2001
21. *Amyntas jindoensis* Hong & James, 2001
22. *Amyntas jiriensis* (Song & Paik, 1971)
23. *Amyntas kanrazanus incretus* (Kobayashi, 1937: 340) (syn. *Amyntas alveolatus* Hong & James, 2001).
24. *Amyntas kanrazanus kanrazanus* (Kobayashi, 1937: 340) [cf. *Amyntas yongshilensis* Hong & James, 2001].
25. *Amyntas kimhaeiensis* Hong & James, 2001
26. *Amyntas kobayashii* (Kobayashi, 1938)
27. ?*Amyntas koreanus* (Kobayashi, 1938) [syns. *Pheretima conjugata* Ishizuka, 1999 - synonym as per Blakemore (2003: 43, addenda) although *koreana* and *conjugata* may well be the same as *P. schizopora* (Goto & Hatai, 1898) and therefore enter the ambit of *Amyntas tokioensis* - pers. obs.; originally *Pheretima koreana*].
28. *Amyntas minjae* Hong, in Hong, Lee & Kim, 2001
29. *Amyntas moakensis* Hong & Kim, 2002
30. *Amyntas monstriferus* (Kobayashi, 1936) [miscited as "*A. monstrifera*" by Hong & James (2001)].
31. *Amyntas mujuensis* Hong & Kim, 2002
32. *Amyntas multimaculatus* Hong & Lee, 2001
33. *Amyntas murayamai* (Kobayashi, 1938: 164)
34. *Amyntas naejangensis* Hong & James, 2001
35. *Amyntas oviformis* Hong & James, 2001
36. *Amyntas. pagyeiensis* Hong in Hong, Lee & Kim, 2001
37. *Amyntas palgongensis* Hong in Hong, Lee & Kim, 2001 [possibly same as *A. draconis*].
38. *Amyntas phaselus* (Hatai, 1930) [syns. ?*Pheretima maculosus* [sic] Hatai, 1930b: 661 (non *Pheretima maculosa* Gates, 1933 = *Pheretima malacus* Gates, 1936); *Pheretima kamitai* Kobayashi, 1934; *Pheretima serrata* Kobayashi, 1936); *Pheretima phaselus tamurai* Kobayashi, 1938; *Pheretima mutica* Chen, 1938].
39. *Amyntas piagolensis* Hong & James, 2001
40. *Amyntas plantus* (Song & Paik, 1973)
41. *Metaphire quelparta* (Kobayashi, 1937)
42. *Amyntas reisuiensis* (Kobayashi, 1938)
43. *Amyntas robustus* (Perrier, 1872) [several synonyms including *Perichaeta masatacae* Beddard, 1892].*

44. *Amyntas sangumburi* Hong & Kim, 2002
45. *Amyntas serratus* (Kobayashi, 1936)
46. *Amyntas seungpanensis* (Song & Paik, 1970) [sometimes misspelt " Ph. seungpanesis"].
47. *Amyntas sinsiensis* Hong & James, 2001
48. *Amyntas songnisanensis* Hong & Lee, 2001
49. *Amyntas sopaikensis* (Song & Paik, 1973)
50. *Amyntas susakii patinus* (Kobayashi, 1936: 171)
51. *Amyntas susakii susakii* (Kobayashi, 1936: 171)
52. *Amyntas taebaekensis* Hong & James, 2001
53. *Amyntas tappensis* (Ohfuchi, 1935) [syns. *Pheretima bimaculata* Ishizuka, 1999; *Pheretima silvatica* Ishizuka, 1999; ?*Pheretima surcata* Ishizuka, 1999 (cf. *A. tokioensis*); *Amyntas odaesanensis* Hong & James, 2001; *Amyntas righii* Hong & James, 2001; *Amyntas fasciiformis* Hong & James, 2001 - synonym as per Blakemore (2003: 43, addenda; 2005); ?*Amyntas sanchongensis* Hong & James, 2001 **Syn. nov.** - if not synonymous then non-superficial male pores possibly qualify it for *Metaphire*].
54. *Amyntas tokioensis* (Beddard, 1892) [syns. ?*schizopora*, ?*irregularis*, *levis*, ?*parvicystis*; ?*verticosa*; ?*yongshilensis* Hong & James, 2001, ?*eastoni* Hong & James, 2001; ?*boletiformis* Hong & James, 2001 (these last two synonyms as per Blakemore, 2003: 43, addenda); ?*Amyntas paiki* Hong in Hong, Lee & Kim, 2001]*?.
55. *Amyntas vallis* (Kobayashi, 1936)
56. *Amyntas vicinus* Hong & James, 2001
57. *Amyntas vittatus* (Goto & Hatai, 1898) [cf. *A. tokioensis*].
58. *Amyntas yeoi* Hong & Kim, 2002
59. *Amyntas yongshilensis* Hong & James, 2001 [cf. *A. kanrazanus*].
60. *Metaphire aggera* (Kobayashi, 1934)
61. *Metaphire bitheca* (Kobayashi, 1938)
62. *Metaphire hilgendorfi* (Michaelsen, 1892) [many synonyms including *irregularis*].*
63. *Metaphire koryoensis* (Kobayashi, 1936)
64. *Metaphire megascolidoides* (Goto & Hatai, 1899)
65. *Metaphire soulensis* (Kobayashi, 1938) [syn. *Pheretima shinkeiensis* Kobayashi, 1938; *Pheretima aokii* Ishizuka, 1999 - synonymy as per Blakemore (2003: 43)].*
66. ? *Metaphire vesiculata* (Goto & Hatai, 1899) [syns. ?*Pheretima köllikeri* Michaelsen, 1928 (et *P. koellikeri*); ?*Pheretima okutamaensis* Ishizuka, 1999; ?*Pheretima biggiberosa* Ishizuka, 1999].
67. ? *Metaphire yamadai* (Hatai, 1930) [*Metaphire yamardai*: (sic lapsus pro *yamadai*) Easton, 1981: 60 (syn. *soulensis* - but this not accepted here, see *Metaphire soulensis*). Easton (1981:

60) had distribution as "Japan, China, Korea", but Korea is probably just for his *soulensis* synonym; whereas Kobayashi (1939) just claims *yamadai* in Japan and China].

68. *Perionyx excavatus* Perrier, 1872*

69. *Pithemera sempoensis* (Kobayashi, 1938: 149) [seminal groove on 18; caeca in 24].

Pheretima keishuensis Kobayashi, 1938: 90 is a nomen nudum (?= *M. quelparta*).

[End of Korean species checklist].