Tasmanian Earthworms type-specimens and other material examined

by R.J. Blakemore, SERG YNU Japan December, 2008

Summary

This definitive list is compiled from the original source: "Tasmanian Earthworms" by Blakemore (2000). Cited references and further details can be found therein or in other later publications. All the material was inspected, labelled, and lodged at the time of publication but, as normal, the continuance and integrity of the material becomes the sole responsibilty and duty of curators at host institutions after deposition.

Pontodrilus primoris Blakemore, 2000

Fig. 9.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K1285, Ansons Bay beach, NE Tasmania, ca. FQ 034 541, 23.iii.1978, Coll: Dr P.R. Last of CSIRO, "ex I.S.R. Ichthyological collection", "in sand", (mature, dissected and figured).

PARATYPES: none.

Graliophilus adsiduus Blakemore, 2000

Fig. 10.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1777, Mt Arthur, N Tasmania, EQ 255 317, 630 m, 17.v.1991, R. Mesibov, from rainforest worms found along creek, (mature, dissected and sketched).

PARATYPES: (P1) 14:1122, Mt Victoria Forest Reserve, N Tasmania, EQ 662 225, 720 m, 22.vi.1992, R.D. D'Orazio, wet sclerophyll to rainforest, (mature, dissected); (P2) 14:3064, same details as (P1), (mature, posterior-amputee); (P3-4) 14:3063, same details as (H), (two subadults that superficially agree).

Graliophilus ? bassanus (Spencer, 1895)

Fig. 11

Megascolides bassanus Spencer, 1895: 46-47, figs. 34-36; Jensz & Smith, 1969: 99.

Plutellus bassanus ; Michaelsen, 1900: 169.

Perionychella (subgenus?) bassana ; Jamieson, 1974: 253-255.

MATERIAL

TYPES: not present in MOV, presumed lost (Jensz and Smith, 1969: 99).

SPECIMENS: none found. This description was taken from Spencer's original.

Graliophilus benlomondi Blakemore, 2000

Fig. 12.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3599, village at summit of Ben Lomond, NE Tasmania, 41º35'S.147º40'E, ca EQ 568 005, 1,500 m, 23,iii,1997, Rob Blakemore, Adrian Pinder and Richard Marchant, from moist clay-loam beside creek, (mature, dissected and figured).

PARATYPES: all same details as H, ANIC:RB.97.3.7 (P1), (mature, dissected); TM:K1546 (P2), (mature, dissected); 14:3600 (P3), (mature dissected); ANIC:RB.97.3.8 (P4), (mature); TM:K1547 (P5), (mature); 14:3600 (P6-P9), (one mature, one aclitellate mature and two subadults, one a posterior regenerate).

Graliophilus cooperi Blakemore, 2000

Fig. 13.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:959, Rowallan, Dublin Plain (dry sclerophyll, on Private Property), DP 385 833, 575 m., 6.x.1992, M. Cooper and R.D. D'Orazio, dry sclerophyll, (mature, dissected and drawn).

PARATYPES: (P1) ANIC:RB.96.11.13, same collection details as H, (mature, dissected); (P2) 14:1776, same collection details as H, (mature, dissected); (P3) 14:3578 (ex 14:414), Lake Rowallan, Mersey White Water Forest Reserve, DP 351 808, 445 m, 6.x.1992, R.D.D. and M.C., dry sclerophyll with low dense heath , (mature dissected); (P4) 14:3582 (ex 14:419), same details as H, (mature that agrees externally).

SPECIMENS: 14:967, Mole Creek, DP 443 876, Devil's Gullet State Reserve, DP 443 876, 1140 m, 5.x.1992, R.D.D. and M.C., mountain plateau grassland, (seven mature specimens, one dissected); 14:977, Mole Creek, DP 443 876, Lake MacKenzie Rd., DP 362 942, 540m, 5.x.1992, R.D.D. and M.C., wet sclerophyll, (six mature specimens, one dissected).

Graliophilus ellisii (Spencer, 1895)

Fig. 15.

Cryptodrilus ellisii Spencer, 1895: 42-43, figs. 22-24; Jensz & Smith, 1969: 87.

Plutellus ellisi ; Michaelsen, 1900: 172.

Perionychella (subgenus?) ellisi ; Jamieson, 1974: 257.

MATERIAL EXAMINED

SYNTYPES: MOV:F40032 (previously NMV:G32), labeled in Spencer's hand, "C sp 9T." and "Dee Bridge in damp soil on log, Jan/[18]93", (six specimens in poor condition, dried and brittle and yielding little useful information; two were aclitellate; four were previously dissected, probably by Spencer). Note: Jamieson (1974: 257) erroneously stated that G32 consisted of only four syntypes.

MOV:F40033 (previously NMV:G33) labeled "C. sp 10T", "C. ellisii", and "Dee Bridge T. Jan/[18]93", this jar had contained five specimens which are now lost (Jensz & Smith, 1969).

SPECIMENS: none found despite searches of type-locality by the current author.

Graliophilus praestringor Blakemore, 2000

Fig. 16.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:852, Dazzler Range, Tattersall Road, N Tasmania, EQ 773 359, 440 m, 29.vi.1992, R.D. D'Orazio and A. Mitchell, wet sclerophyll, (aclitellate mature, dissected and figured).

PARATYPES: (P1) 14:1120, Dazzler Range, Kerrisons Road, EQ 755 376, 415 m, 29.vi.1992, R.D. D'Orazio and A. Mitchell, wet scleropyll, (posterior regenerate from 85, dissected and drawn); (P2) 14:3075, same details as P1, (aclitellate, mature, posterior amputee); (P3) 14:3076, same details as P1, (subadult); (P4) 14:3077, same details as P1, (mature); (P5-P6) 14:1119, Dazzler Range, Kerrisons Road, EQ 756 389, 510 m, 29.vi.1992, R.D. D'Orazio and A. Mitchell, rainforest, (one subadult and one juvenile); (P7-P8) 14:739, Dalgarth Forest Reserve, Wallaby Creek, N Tasmania, EQ 734 329, 30.vi.1992, R.D. D'Orazio, rainforest, (four specimens, one subadult and one juvenile that superfically agree, plus two immatures); (P9-11) 14:1114, Sideling Range, EQ 344 354, 555 m, 15.vi.1992, R.D. D'Orazio and M. Cooper, logged rainforest, (three matures).

SPECIMENS: (S1) 14:3092, Mt Arthur, N. Tasmania EQ 255 317, 630 m, 17.v.1991, R. Mesibov, (mature, dissected and figured); 14:1730, Mt Arthur, EQ 246-310, 750 m, 1991, R. Mesibov, (six specimens, one previously dissected); 14:3096, Mt Arthur, 21.iii.1984, R.H. Green, (two matures and an immature); 14:2350, Mt Arthur, in rainforest, 16.ii.1972, J. Simmons, labeled "*Perionychella hobartensis* det. G. Dyne", (four matures and one immature).

Graliophilus tripapillatus (Jamieson, 1974)

Fig. 17.

Graliophilus (?) tripapillatus Jamieson, 1974: 261-263; Figs. 17, 32A; Plate 1.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K313, Tarraleah, 42º20'S.146º25'E, 27.v.1954, J.L. Hickman, "over pipeline", (dissected entire specimen, redrawn here).

PARATYPES: (P2-6) TM:K314-318, same collection details as H, (none previously dissected, only P3 dissected here); (P1, 7-9) BM(NH):1973.2.1-4, same details as (H), (not located in Museum); (P10-12) AM:W5203-5205, same collection details as (H), (not inspected).

SPECIMENS: none found despite searches of type-locality by the current author.

Vesiculodrilus albus Blakemore, 2000

Fig. 18.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3293, near Scottsdale, ca. 41º10'S.147º35'E, NE Tasmania, dug from Forestry Tasmania "Cuckoo" soil pit, 25.i.1996, R.J. and S.A.McI. Blakemore, (mature, dissected and figured).

PARATYPES: (P1-11) 14:3294, same details as H, (five specimens agree externally with H, the other specimens are slightly smaller, average size about 50 mm, but they also agree).

Vesiculodrilus ansoni Blakemore, 2000

Fig. 19.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:2031, Ansons River Reserve, Ansons Bay, NE Tasmania, FQ 034 541, 40m, 12.i.1994, R.D. D'Orazio and D.E. Soccol, (mature, posterior amputee near tail, dissected and drawn).

PARATYPE: (P) 14:3108, same collection details as H, (sub-adult, dissected; sample also contains three unregistered tails).

Vesiculodrilus apris Blakemore, 2000

Fig. 20.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0284, Wild Pig Hill, EQ 489 962, near Ansons Bay, NE Tasmania, 160m, 28.vii.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (mature, posterior amputee at segment 60 - drawn and dissected).

PARATYPES: (P1) ANIC:RB.96.12.16, same collection details as H, (mature, dissected); (P2) TM:K1538, same collection details as H, (mature, dissected); (P3) 14:3103, same details as H, (mature, dissected); (P4) 14:3128, same details as H, (sub-adult, dissected); (P5) 14:3104, same details as H, (immature, dissected); (P6-7) 14:2030, Ansons River Reserve, Ansons Bay, FQ 034 541, 40m, 12.i.1994, R.D. D'Orazio and D.E. Soccol, (two specimens - P6, sub-adult, dissected, P7, damaged mature); (P8-10) 14:3113, Ansons Bay, May 1988, E. Collins, (three specimens - P8, mature, dissected, P9-10 sub-adults, P9 dissected); (P11) 14:3147, Ansons Bay, 20.xi.1993, Mrs Collins, (macerated sub-adult); (P12) 14:2339, Swimcart Beach, Binalong Bay, FQ 070 346, 2.x.1978, R.H. Green, (aclitellate mature, dissected).

Vesiculodrilus bithecatus (Jamieson, 1974)

Fig. 21.

Perionychella (Vesiculodrilus) bithecata Jamieson, 1974: 233-234, figs. 8A, 16H, Plate 93.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K264, Hellyer Gorge, NE Tasmania, 145º35'E.41º41'S, 28.v.1954, J.L. Hickman, (mature specimen, previously dissected, reinspected and figured).

PARATYPES: (P1) BM:1972:8:1, same details as H, (mature specimen, undissected); (P2-3) AM:5186-7, same details as H, (not examined).

Vesiculodrilus borealis Blakemore, 2000

Fig. 22, Fig. 23.

Vesiculodrilus borealis Blakemore, 2000b:5-7, figs. 1-2.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3478, Sprent Basin, Lake Pedder, SW Tasmania, ca. 42º55'S.146º10'E, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, in loam under Ti-tree/Banksia, (mature specimen, dissected and figured).

PARATYPES: (P1) 14:3471, same details as H, (mature, dissected and figured); (P2) 14:3479, same details as H, (mature, posterior amputee); (P3) 14:3480, same details as H, (mature, posterior amputee, dissected); (P4) 14:3486, Bell Basin, Lake Pedder, 419600 5259700, 310 m, 9.iv.1996, R.J. Blakemore, in loam (mature, dissected); (P5) 14:3487, same details as (P4), (mature); (P6-8) 14:3488, same details as (P4), (three matures, one a posterior amputee, dissected); (P9-11) 14:3489, same details as (P4), (two matures, one a posterior amputee plus an immature and an unregistered tail); (P12-15) 14:3500, same details as (H), (three subadults - two posterior amputees, and an immature); (P16-18) 14:3472, same location as H, (two subadults and an

immature plus three unregistered tails); (P19-20) 14:1261, Tram Road Picnic area, Wynyard, NW Tasmania, 389200 5457200, 34m, 19.iv.1993, R.D. D'Orazio and D.E. Soccol, (two mature specimens, both dissected).

SPECIMENS: 14:414, Lake Rowallan, N Tasmania, White Water Forest Reserve, DP 3577 808, 445m, 6.x.1992, R.D. D'Orazio and M. Cooper, (nineteen specimens, four matures and seven immatures agree superficially); 14:415, Lake Rowallan, Fish River Road, DP 365 749, 720m, 6.x.1992, R.D. D'Orazio and M. Cooper, (fifteen specimens, seven matures and five immatures, one mature posterior-regenerate dissected, plus immature of different species); 14:418, Mt Roland, NE Tasmania, Short Spur Road, DQ 446 088, 240 m, 24.ix.1992, R.D. D'Orazio and M. Gittus, (thirteen specimens that agree superficially, except one 14:3581 which is abnormal with an aborted anterior segment, three dissected); 14:465, Mt Roland, Lienna Road, N Tasmania, DQ 399 406, 455m, 24.xi.1992, R.D. D'Orazio and M. Gittus, (four specimens that agree superficially); 14:413, Mole Creek, Arm River Forest Reserve, N. Tasmania, DP 332 839, 460 m, 5.x.1992, R.D. D'Orazio and M. Cooper, (five specimens that agree superficially); 14: 968, Mole Creek, Snake Creek Road, N. Tasmania, DP 391 895, 590 m, 5.x.1992, R.D. D'Orazio and M. Cooper, (six mature specimens that agree superficially); 14: 419, Lake Rowallan, White Water Forest Reserve, DP 385 833, 575m, 6.x.1992, R.D. D'Orazio and M. Cooper, (two specimens that agree superficially).

Vesiculodrilus bronte Blakemore, 2000

Fig. 24.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K293, Marlborough Highway, near Bronte, 146º30'E.42º10'S, 26.v.1954, J.L. Hickman, (mature specimen, dissected and drawn).

PARATYPES: none.

Vesiculodrilus brunyi Blakemore, 2000

Fig. 25.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3707, McCracken Creek, Missionary Road, Bruny Island, SE Tasmania, EN 294 244, 20m., R.D. D'Orazio and M. Cooper, dry sclerophyll, (mature, drawn and dissected).

PARATYPES: all with same details as H, 14:3708 (P1), (mature, dissected); 14:3709 (P2), (mature dissected); 14:3710 (P3-4), (two matures that agree externally); 14:1698 (P5-11), (three aclitellate matures, one dissected, plus four juveniles that agree superficially).

Vesiculodrilus bufalus Blakemore, 2000

Fig. 26.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:2072, Buffalo Brook, Avoca, E Tasmania, EP 492 791, 320 m, 19.x.1993, R.D. D'Orazio, dry sclerophyll woodland, (mature specimen, drawn and dissected).

PARATYPES: all same collection data as H, 14:3148, (P1), (clitellate, posterior amputee, dissected); 14:3149, (P2), (clitellate, inspected); 14:3150 (P3), (clitellate, inspected); 14:3151 (P4), (aclitellate, posterior amputee, inspected); 14:3152 (P5), (juvenile, inspected).

Vesiculodrilus canaliculatus Blakemore, 2000

Fig. 27.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3786, Maweena south of Wynyard, NW Tasmania, DELP Sheet 8315 130465, 290 m, "Maweena Soil Sequence, Site 18 [or 8?] #6 Deep", 13.ix.1993, QVM collection from Forestry Tasmania (M. Laffan?), (mature, damaged in midbody but complete, dissected and drawn).

PARATYPE: (P) 14:3787, same details as H, (mature, dissected).

Vesiculodrilus culminis Blakemore, 2000

Fig. 28.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3631, near summit of Ben Lomond, NE Tasmania, 41º35'S.147º40'E, ca EQ 568 005, 1,500 m, 23,iii,1997, Rob Blakemore, Adrian Pinder and Richard Marchant, from moist clay-loam beside creek, (mature, dissected and figured).

PARATYPES: none.

Vesiculodrilus cuneatus Blakemore, 2000

Fig. 29.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974: 247-250.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3255, Tasmanian Forestry site TSF 078, South Springfield, NE Tasmania, EQ 388 287, 560 m, 24.iv.1992, QVM collection, labeled “TSF 78 Sp 2 or Sideling Sp 3”, (mature, dissected and drawn).

PARATYPES: (P1) 14:3256 same details as (H), (mature, dissected); (P2-P4) TM:K405, Mt Arthur east side, 15.x.1971, A.J. Dartnall and R.C. Kershaw, (P2, a complete mature, P3 a mature posterior amputee, P4, a subadult, previously dissected); (P5) 14:156, Mt Victoria, 720 m, EQ 662 225, 22.vi.1992, R.D. D’Orazio, (mature).

Vesiculodrilus cygnus Blakemore, 2000

Fig. 30.

MATERIAL EXAMINED

HOLOTYPE: 14:0352 (H), Royal George, West Swan River, Lake Leake, E Tasmania, EP 790 605, 540 m, “9.5Km from Meetus Falls turn off until bridge”, 10.viii.1992, R.D. D’Orazio and M. Cooper, dry sclerophyll, (mature, drawn and dissected).

PARATYPES: seven specimens all from one sample: 14:1721 (P1), Aspley Myrtle Forest, E Tasmania, EP 932 719, 450 m., 5.viii.1992, R.D. D’Orazio and M. Cooper, rainforest, (mature, dissected); 14:3690 (P2), (mature dissected); 14:3691 (P3), (mature); 14:3692 (P4), (mature); 14:3693 (P5), (mature); 14:3694 (P6), (aclitellate mature); 14:3695, (P7), (an immature specimen, length - 20mm).

Vesiculodrilus decathecus (Michaelsen, 1910). **Comb. nov.** *Species inquirendum.*

Fig. 14.

Plutellus decatheca Michaelsen, 1910: 81-83, figs. XIV-XVI.

Perionychella (subgenus?) decatheca ; Jamieson, 1974: 255.

(Non *Plutellus decathecatus* Altman, 1936).

MATERIAL

TYPES: missing (from Hamburg Museum?), (Reynolds & Cook, 1976: 93).

The description from Michaelsen (1910) is based on a single mature specimen. [Describing it as "*Diporochaeta (Vesiculodrilus) decatheca*", Jamieson (2000: 538) claims to have rediscovered Michaelsen's type (Hamburg Museum HM V3560); however, his redescription (2000: fig. 10.72) shows (erroneously?) only 4 pairs of spermathecae in 5/6/7/8/9. Nevertheless, it now seems most likely that it is a junior synonym of the *V. mortoni* species complex, as suggested by Blakemore (2000: 63)].

Vesiculodrilus dendrophagus Blakemore, 2000

Fig. 31.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3267, Scout Hut, Forester River, NE Tasmania, EQ575 544, 40 m, 10.x.1990, QVM collection, ex litter, (mature posterior amputee, dissected and drawn).

PARATYPES: all with same collection details as (H), 14:3268 (P1), (mature, dissected); 14:3269 (P2), (subadult, posterior-amputee, dissected); 14:3270 (P3), (mature); 14:3271 (P4), (mature, posterior-amputee); 14:3272 (P5), (mature); 14:3273 (P6), (mature).

SPECIMENS: 14:3266, from the same sample, (10 specimens that agree superficially).

Vesiculodrilus duodecithecatus Blakemore, 2000

Fig. 32.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3769, Mt Barrow, N Tasmania, EQ 353 212, 750m, 16.vi.1992, R.D. D'Orazio and M. Cooper, "MT.B2", rainforest, (mature specimen, drawn and dissected).

PARATYPES: all same collection data as H, ANIC:RB:98.1.21 (P1), (aclitellate mature, dissected); TM:K1580 (P2), (aclitellate mature, dissected); 14:3770 (P3), (immature specimen lacking genital markings, dissected).

Vesiculodrilus emu Blakemore, 2000

Fig. 33.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K287, Emu River, Fern Glade, Burnie, 24.viii.1954, J.L. Hickman, (mature specimen, previously dissected, here redescribed and figured).

PARATYPES: none found despite resurvey by the current author; (specimen K288, with the same collection details and also included in the description of *V. hobartensis* by Jamieson, is in fact an immature *Notoscolex* sp.).

Vesiculodrilus fictilis Blakemore, 2000

Fig. 34.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:2062, Buffalo Brook, Avoca, E Tasmania, EP 492 791, 320 m, 19.x.1993, R. D. D'Orazio, dry sclerophyll woodland, (mature specimen dissected and drawn).

PARATYPES: (P1-3) 14:2066, same details as H, (P1- mature, dissected; P2, mature; P3, subadult).

Vesiculodrilus fingal Blakemore, 2000

Fig. 35.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:828, Fingal, Valley Road, E Tasmania, EP 894 836, 760 m, 3.viii.1992, R.D. D'Orazio and M. Cooper, unlogged dry sclerophyll forest, (mature, dissected and drawn)

PARATYPES: same details as (H), 14:3061 (P1), (mature, dissected); 14:3062 (P2), (mature, inspected).

Vesiculodrilus fonsager Blakemore, 2000

Fig. 36.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3054, South Springfield, NE Tasmania, EQ 388 287, 560 m, 3.vi.1992, R.D. D'Orazio, rainforest, (dissected and drawn).

PARATYPES: all with same locality as (H), 14:3055 (P1), (aclitellate mature, dissected); 14:1736 (P2), (mature); 14:3056 (P3), (mature); 14:3257-3258 (P4-5), ditto but collection date 24.iv.1992, (two matures, both dissected, one sketched; these specimens seemed slightly macerated).

Vesiculodrilus glandiferus glandiferus (Jamieson, 1974)

Figs. 37.

Perionychella (Vesiculodrilus) glandifera Jamieson, 1974: 237-238, figs. 10A-B [segments miscounted], 15D (p. 254), 16L-M (p. 256).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K283, St Helens, 41º20'S.146º10'E, on road to Launceston via Scottsdale between 94 and 96 mileposts, 26.viii.1953, L.J. Hickman, (mature, dissected).

PARATYPE: (P) BM:1972:8:9, St. Columba Falls, 41º20'S.147º55'E, 17.iv.1954, J.L. Hickman, (aclitellate specimen, dissected).

SPECIMENS: 14:3120, Coffee Court, Binalong Bay, 1.ix.1993, T. Wodnaugh, (mature specimen, dissected and figured); 14:2334, St. Helens, Binalong Bay Rd., FQ 095 322, 5.xi.1978,

T. Hume, (mature specimen, dissected); 14:3153, St. Helens, Binalong Bay Rd., 5.xi.1978, T. Hume, (mature specimen); 14:1665, Moorina, Frome Road, NE Tasmania, EQ 762 443, 420 m, 21.vii.1992, R.D.D'Orazio and M. Cooper, (three mature specimens, dissected and one sketched).

Vesiculodrilus glandiferus pyengana Blakemore, 2000

Figs. 38.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3286, Pyengana, St. Columba Falls, ca. 41º20'S.147º55'E, EQ 800 280, 24.i.1996, S.A.McI. Blakemore, collected on walking track in rainforest near the Falls (mature, dissected).

PARATYPES: none.

Vesiculodrilus gracilis Blakemore, 2000

Fig. 39.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0115, Pelion Valley, C Tasmania, DP 209 660, 940 m, rainforest, 12.ii.1992, QVM collection, (mature, figured and dissected).

PARATYPES: (P1) 14:3546, Pelion Gap, C Tasmania, DP 217 364, 1120 m, 12.ii.1992, QVM, (mature, dissected); (P2-3) 14:0112, same details as P1, (two juveniles, both dissected that also agree superficially; sample contains an immature of a different species); (P4) 14:3548, Pelion Valley, Frog Flats, C Tasmania, DP 196 368, 875 m, rainforest, 13.ii.1992, QVM, (mature, dissected).

Vesiculodrilus gryps Blakemore, 2000

Figs. 40.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3734, Griffin Forest Reserve, Mathinna, E Tasmania, EQ 687 088, 23.vi.1992, R.D. D'Orazio and M. Cooper, gully at edge of pines, (mature, dissected and figured).

PARATYPES: all with same details as H, 14:3735 (P1-3), (three mature specimens, two aclitellates P1 and P3 dissected).

Vesiculodrilus hobartensis (Spencer, 1895)

Fig. 41.

Cryptodrilus hobartensis Spencer, 1895: 37-38, figs. 10-12; Jensz & Smith, 1969: 88.

Plutellus hobartensis; Michaelsen, 1900: 175-176.

Megascolides hobartensis; Sweet, 1900: 111-112.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245; figs 11A-F [some misidentified]; 15A-B [p. 254 with incorrect scalebars]; 16P-R.

Diporochaeta hobartensis; Jamieson, 1994: 175.

MATERIAL EXAMINED

LECTOTYPE: MOV:F40050 (previously NMV:G50), "Parattah, Tasmania. January 1893." "C. sp 5 Parattah Jan/93" [in Spencer's hand], ca. 42º20'S.147º25'E, collected by W. Baldwin Spencer, (this specimen, a previously undissected posterior-amputee 28+ mm long, was designated a lectotype of *Cryptodrilus hobartensis* by Jensz & Smith (1969: 88); Jamieson (1974) found it to be a parthenogenic morph that lacked seminal vesicles, had prostate ducts but no glands, lacked penial setae, and had abnormal spermathecae and genital markings. It is currently in reasonable condition but has suffered some damage from dissection and has had several spermathecae detached and left loose in its body cavity (pers. obs.)). In view of its gross morphological differences from Spencer's description it is debatable whether or not this previously undissected specimen would have qualified as a syntype, even though it was in a jar labeled the same as the type series, and it should perhaps be requested of the Commission to set aside this parthenogenic morph lectotype in favour of a neotype, such as 14:3502, under Article 75.5 of ICZN (1999).

PARALECTOTYPES: NMV:G49, "*Cryptodrilus hobartensis* Mt Wellington, A. Morton, July/[18]92.", "C. sp5. T. (cf. sp4)" [in Spencer's hand], ca. 42º55'S.147º15'E, collected by Mr A. Morton of the Tasmanian Museum, (ten dried specimens plus fragments consisting of one previously dissected mature, two undissected matures, one ca. 44 mm long, and seven subadults, one ca. 75 mm long; all these specimens were dried and brittle yielding little useful information); NMV:G51, Parattah, February, 1893, (originally four complete specimens, one partly dissected, in fair condition but dried according to Jensz & Smith (1969: 88) now not locatable in MOV, Dr T. Stranks (pers. comm.)). Note: Whereas Jensz & Smith (1969: 88) list G49 as having eight specimens and five fragments, and G51 as having four specimens, Jamieson (1974: 243) failed to mention G49 yet stated that G51 had only two paralectotypes. It is therefore possible that these samples have been intermixed as G49 now has ten specimens plus fragments, and G51 is not locatable. Jamieson (1974), although synonymising *Vesiculodrilus insularis* with *V. hobartensis*, failed to mention the lectotype of *V. insularis* (NMV:G39) which has the same collection details as G51. Note: under Article 73.2.2 of ICZN (1999), paralectotypes have no name-bearing

function after designation of a lectotype and do not regain status as syntypes if the lectotype is lost or destroyed.

SPECIMENS: 14:3502, Mt Wellington, ca. 42º55'S.147º15'E, 21.ii.1996, R.J. Blakemore, (a mature specimen, dissected and drawn, sample also contains two immatures that agree superficially); 14:3510, Tunnack (close to Parattah type-locality), ca. 42º25'S.147º30'E, 21.ii.1996, R.J. Blakemore, and 27.ii.1996, R.J. Blakemore and J. Hirth, (four mature specimens, two dissected); TM:K299, Tunnack, 18.viii.1954, J.L. Hickman, under logs and stones damp conditions, (one mature with tip missing, previously dissected, redrawn; one subadult, undissected; sample includes a posterior portion and an immature of a different species); TM:K300-301, Collin's Vale near Hobart, 147º05'E.42º50'S, 8-9.ix.1955, J.L. Hickman, in myrtle forest, (two mature specimens, one dissected); TM:K302, Mt Wellington, Bett's Vale, 147º15'E.42º55'S, 4.iii.1954, J.L. Hickman, under stones at creek, (small specimen, 50 mm long, dissected); TM:K304, Lenah Valley, Newtown Falls, 147º20'E.42º50'S, 24.vi.1957, L.J. Hickman, (two mature specimens, one dissected); TM:K305, Mt Nelson, Sandy Bay, 147º20'E.42º50'S, 11.ix.1953, J.L. Hickman, (mature specimen, previously partially dissected, here fully dissected and sketched); TM:K306, Risdon, 147º20'E.42º50'S, 26.vi.1947, V.V. Hickman, (mature, previously dissected); BM:1972:8:15-17, East Risdon, 14.viii.1954, J.L. Hickman, from under stones on hill and in valley, (mature specimen, undissected; plus two subadults); TM:K307, same details as K306, (dissected mature and two subadults); TM:K308, Tinderbox, 147º20'E.43º05'S, 4.viii.1957, J.L. Hickman, under fallen eucalyptus leaves, (mature specimen, dissected); 14:780, Lizard Hill, Tasman Peninsula, 7.ix.1992, R.D. D'Orazio, Eucalypt forest with wet understorey, (eight matures, one dissected, and six subadults); 14:3067-3068, same details as 14:780, (two smaller matures, one dissected); 14:821, Brookerana Reserve, E Tasmania, EP 709 193, 590 m., 11.viii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (seven large matures, one dissected).

Vesiculodrilus inornatus Blakemore, 2000

Fig. 42.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0021, edge of Melaleuca Lagoon, Melaleuca, SW Tasmania, DM 321 921, L.F. McGowan, 4.iii.1992, in leaf litter, (mature, figured and dissected).

PARATYPES: (P1-2) 14:3788, same details as H, (P1, mature, dissected; P2 subadult, inspected).

Vesiculodrilus insularis (Spencer, 1895)

Fig. 43.

Cryptodrilus insularis Spencer, 1895: 41-42, Figs. 19, 20, 21.

Plutellus insularis; Michaelsen, 1900: 176.

Megascolides insularis; Sweet, 1900: 111, fig. 16.

Vesiculodrilus insularis; Jamieson, 1973: 225.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245.

(Non *Cryptodrilus insularis* Rosa, 1891, now in synonymy of *Pontodrilus litoralis*)

MATERIAL EXAMINED

LECTOTYPE: MOV:F40039 (previously NMV:G39), "Parattah, Feb/[18]93." "C sp 8. T." [in Spencer's hand], ca. 42º20'S.147º25'E, collected by W. Baldwin Spencer, (an immature specimen which was complete and undissected when designated by Jensz and Smith (1969) but is now halved at segment 30, has had the anterior half dissected with many of the internal organs removed and missing from the jar - this specimen consequently yields little additional information and is inadequate for illustration).

SPECIMENS: 14:3511, Tunnack (near Parattah type locality), 21.ii.1996, R.J. Blakemore, and 27.ii.1996, R.J. Blakemore and J. Hirth, in woodland soil, (combined sample of fourteen specimens, mostly mature, three dissected one drawn); TM:K289, Great Lake, 146º45'E.41º55'S, 26.v.1954, J.L. Hickman, near stones around base of gum tree, slopes of lake, (mature specimen, undissected); TM:K290, same details as K289, (mature, dissected and sketched).

Vesiculodrilus lateralis Blakemore, 2000

Fig. 44.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245.

MATERIAL EXAMINED

HOLOTYPE: 14:3503, Mt. Wellington, ca. 42º55'S.147º15'E, 21.ii.1996, R.J. Blakemore, in soil and litter in gullies, (mature, probably posterior regenerate as pygium setose, dissected and drawn).

PARATYPES: (P1) 14:3504, same details as H, (mature, undissected); (P2) 14:3505, same details as H, (mature, dissected); (P3) 14:3506, same details as H, (mature, undissected); (P4) TM:K303, Mt Wellington, Shoobridge Bend Track, ca. 42º55'S.147º15'E, 580 m, 19.viii.1971, E. Bradbury, in loam and clay in Eucalypt-fern woodland, (mature specimen, dissected).

Vesiculodrilus lepidus Blakemore, 2000

Fig. 45.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1753, Sideling Range, N Tasmania, 550 m., EQ 344 354, 15.vi.1992, R.D. D'Orazio, rainforest, (mature, dissected and figured).

PARATYPES: none.

Vesiculodrilus lilliputensis Blakemore, 2000

Fig. 46.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:221, Weldborough, NE Tasmania, 1.8 km along Emu Road, EQ 781 408, 540 m, 21.vii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll to rainforest, (mature specimen, dissected and drawn).

PARATYPES: (P1) ANIC:RB.97.2.2, same collection details as H, (mature, dissected); (P) TM:K1540, same details as H, (weakly-clitellate mature, dissected); (P3) 14:3132, same details as H, (mature); (P4) 14:3133, same details as H, (aclitellate mature); (P5-10) 14:3112, "16 km beyond Derby on road to Weldborough [ca. EQ 750 400,], 15.x.1985, Mrs Holmes", "...Small worms were above clay beneath about 2" of compost layer", (six macerated specimens, four matures of 65-100 mm, and two juveniles, one mature dissected); (P11) 14:3142, same details as P5-10, (immature, dissected).

Vesiculodrilus marian Blakemore, 2000

Fig. 47.

MATERIAL EXAMINED

HOLOTYPE: 14:3316, Maria Island, SE Tasmania, Bishop & Clerk Mountain, QVM collection, (mature, posterior amputee, dissected and figured).

PARATYPES: none.

Vesiculodrilus maritimus Blakemore, 2000

Fig. 48.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974: 247-250.

MATERIAL EXAMINED

HOLOTYPE: TM:K419, Eastern Slope of Hobart Domain, ca. 42º50'S.147º20'E, 14.viii.1954, J.L. Hickman, (a previously undissected mature specimen, dissected and sketched).

PARATYPES: (P1) TM:K402, Domain, Hobart, August 1954, J.L. Hickman, (a previously undissected specimen); (P2) TM:K416, Sandy Bay, Hobart, September 1954, J.L. Hickman, (a

previously undissected specimen - a second immature specimen in this sample was a *Cryptodrilus* sp.).

Vesiculodrilus mathinna Blakemore, 2000

Fig. 49.

Perionychella (Vesiculodrilus) hobartensis (part.); Jamieson, 1974: 241-245.

MATERIAL EXAMINED

HOLOTYPE: (H,) 14:1473, Evercreech Forest Reserve, Mathinna, NE Tasmania, 41º29'S.147º53'E, EQ 821 175, 640m, 23,vi.1992, R.D. D'Orazio, (mature, dissected, sketched).

PARATYPES: (P1) ANIC:RB.00.1.4, same details as H, (mature that agrees exactly externally, sample includes seven large immatures, 14:3728, that superficially agree); (P2) TM:K291, Goulds' Country, near Lottah, NE Tasmania, 41º15'S.148º05'E, 16.iv.1954, Dr J.L. Hickman, (mature specimen, previously dissected, here re-inspected and sketched); (P3) TM:K292, same collection details as P2, (mature, only partially dissected previously, here more fully described).

Vesiculodrilus melaleuteus Blakemore, 2000

Fig. 50.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0013, Melaleuca, Half-woody Hill, SW Tasmania, DM 338 889, 80 m, 5.iii.1992, Louise F. McGowan, in wet forest, (mature, dissected and sketched).

PARATYPES: none.

Vesiculodrilus mesibovi Blakemore, 2000

Fig. 51.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1725, Mt Arthur, N Tasmania, EQ 246 310, 750 m, 19.v.1991, R. Mesibov, wet sclerophyll, (mature, dissected and drawn)

PARATYPE: (P) 14:3978, Upper Castra, NW Tasmania, DQ 304 274, 285 m, 19.i.1994, R.D. D'Orazio and D. Soccol, (mature posterior amputee, dissected).

Vesiculodrilus metandris Blakemore, 2000

Fig. 52.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974: 247-250.

MATERIAL EXAMINED

HOLOTYPE: TM:K414, Eaglehawk Neck, ca. 43º00'S.147º55'E, 13.v.1954, J.L. Hickman, (a previously undissected mature specimen - listed under *P.(V.) mortoni* by Jamieson (1974: 148, 450), here dissected and sketched).

PARATYPES: none (a second specimen in this sample is a damaged *Cryptodrilus* sp.).

Vesiculodrilus mortoni montis Blakemore, 2000

Fig. 53.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974:247-250, figs12B (p. 244), 15E-G (p. 254), 16T (p. 256).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K413, Mt Wellington, ca. 42º55'S.147º15'E, 27.x.1955, J.L. Hickman, (a previously undissected mature specimen, here dissected and drawn).

PARATYPES: (P1-P21) 14:3312-3315, Shoobridge Bend, Mt Wellington, ca. 42º55'S.147º15'E, 21.ii.1996, R.J. Blakemore, (twenty-one specimens, P1-P3, i.e., 14:3312-3314, dissected; all other specimens in 14:3315 were inspected - including three posterior amputees, three aclitellates and three immatures); (P22-P26) TM:K404, Waterworks Rd. Hobart, 17.viii.1954, J.L. Hickman, (five specimens none previously dissected, only one, P22, fully mature, dissected); (P27-P30) TM:K407, Collinsvale, 8-9.xi.1955, J.L. Hickman, (four specimens, one a posterior amputee, plus a tail); (P31) TM:K417, Mt Wellington, April 1952, W. Radford, (an undissected mature specimen); (P32-33) TM:K415, labeled by Jamieson as "Fern Glade, Emu River, Burnie, 24.viii.1954, J.L. Hickman" but most likely from Fern Tree, near Mt Wellington, Hobart, (three specimens, one found to be a *Cryptodrilus* sp., the other two matures, one previously dissected, and one, P33, here dissected and sketched - both agree externally and internally).

SPECIMENS: MOV:F40041 (previously NMV:G41), labeled "Mt Wellington, July 1892 A. Morton, C sp 3", a second label in Spencer's hand states "*C. polynephricus* 2 or 3 specimens", - this specimen was incorrectly designated a lectotype of *Cryptodrilus polynephricus* Spencer, 1895 by Jensz and Smith (1969: 90), as it was later stated to be a specimen of "*Perionychella (Vesiculodrilus) mortoni*" by Jamieson (1974: 286); although Jensz and Smith (1969) described this as 'a dissected entire specimen', it was found be the current author to be dissected but only in the posterior, therefore it is not clear how Jamieson (1974) could state categorically that it was *V. mortoni*, neither did he list it under his material examined for this taxon, (a mature specimen, previously undissected in the anterior, here dissected and shown to actually belong to

Vesiculodrilus mortoni subspp.); TM:K408, Newton Falls, Lenah Valley, 24.vi.1957, J.L. Hickman, (21 mature and 2 immature specimens, one previously dissected, one other dissected here); BM:1972:8:26-30, Lenah Valley, Newtown Falls, 24.vi.1947, J.L. Hickman, (five specimens, none dissected); BM(NH) 1972:8:18-25, Shoobridge Bend track (Mt Wellington ca. 42º55'S.147º15'E), 19.viii.1971, E.A. Bradbury, (eight specimens, inadequately preserved, macerated and in rather poor condition, some dissected).

Vesiculodrilus mortoni mortoni (Spencer, 1895)

Fig. 54.

Cryptodrilus mortoni Spencer, 1895: 36-37, figs 7-9; Jensz & Smith, 1969: 88.

Plutellus mortoni; Michaelsen, 1900: 176.

Woodwardiella mortoni ; Jamieson, 1970: 104,105.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974: 247-250.

Diporochaeta mortoni; Jamieson, 1994: 158, 175, 177.

Diporochaeta (=Perionychella) mortoni; Jamieson, 1994: 179.

MATERIAL EXAMINED

SYNTYPE: MOV:F40083 (formerly NMV:G83), labeled "*Cryptodrilus mortoni*, Tasmania A. Morton 1892" and "C. sp 4. T. 1892 A.M." [in Spencer's hand], (mature specimen, previously dissected, 50 mm long and coiled, refractory and darkened in alcohol yielding little useful information). Between February and August, 1892, Mr A. Morton of the Tasmanian Museum collected much material that was described by Spencer (1895) all of it from Mt Wellington, it is therefore probable that this specimen is from this location. Only one syntype was recognized by Jensz & Smith (1969:88), and this constitutes the single name-bearing type of the taxon under Article 73.2 of ICZN (1999) as no other type material is know (but see MOV:F40041 listed under *V. mortoni montis*).

SPECIMEN: TM:K418, Mt Wellington, ca. 42º55'S.147º15'E, 13.i.1954, J.L. Hickman, (a previously undissected mature specimen, from the type locality and conforming to Spencer's description on most points, here dissected and figured).

Vesiculodrilus narcissus Blakemore, 2000

Fig. 55.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:831, Barren Rock Falls Reserve, SE Tasmania, EN 208 867, 350 m, 18.viii.1992, R.D. D'Orazio and M. Cooper,dry sclerophyll, (drawn and dissected).

PARATYPE: (P1) 14:3138, same collection data as H, (mature, dissected); (P2) 14:3317, Tunnack, ca. 42º25'S.147º30'E, 21.ii.1996, R.J. Blakemore, moist soil beside track, (mature, dissected).

Vesiculodrilus octothecatus Blakemore, 2000

Fig. 56.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3299, Mt Barrow, N Tasmania, EQ 353 212, 750 m, R.D. D'Orazio, M. Cooper, and Paul, rainforest, (mature, dissected and sketched).

PARATYPES: none.

Vesiculodrilus oeconomicus Blakemore, 2000

Fig. 57.

MATERIAL EXAMINED

HOLOTYPE: 14:0740 (H), Wallaby Creek, Dalgarth Forest Reserve, N Tasmania, DQ 734 329, 30.vi.1992, R.D. D'Orazio, rainforest, (mature, drawn and dissected).

PARATYPES: all with same collection details as (H), 14:3069 (P1), (mature, dissected); 14:3070 (P2), (mature, dissected); 14:3071 (P3), (mature, dissected); 14:3072 (P4), (mature, dissected); 14:3073 (P5), (mature, dissected); 14:3074 (P6-15), (ten specimens, one mature posterior amputee (P6) plus two subadults and seven juveniles).

Vesiculodrilus parattah Blakemore, 2000

Fig. 58.

Perionychella (Vesiculodrilus) hobartensis (part); Jamieson, 1974: 241-245.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3507, Parattah, SE Tasmania, ca. 42º20'S.147º25'E, 21.ii.1996, R.J. Blakemore, over fence in open eucalypt woodland, (mature dissected and sketched).

PARATYPES: (P1) TM:K294, Parattah, ca. 42º20'S.147º25'E, 18.viii.1954, Prof. V.V.Hickman and Dr J.L. Hickman, "under moss, in earth at base of cliff, also in earth along sides of logs", (mature specimen, previously dissected, here reinspected and sketched); (P2) TM:K295, same details as P1 (posterior amputee, dissected); (P3) TM:K296, same details as P1, (mature, dissected); (P4) TM:K297, same details as P1, (anterior amputee, not previously dissected); (P5) 14:3508, same details as H, (mature, undissected).

SPECIMENS: 14:3509, same details as H, (32 specimens in various life stages, some slightly damaged); TM: K298, same details as P1, (one subadult and two immature specimens; 6 other specimens in this batch are actually *Notoscolex campestris* (Spencer, 1895)).

Vesiculodrilus pennyae Blakemore, 2000

Fig. 59.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3274, Scout Hut, Forester River, NE Tasmania, EQ575 544, 40 m, 10.x.1990, QVM collection, ex litter, (mature specimen, dissected and drawn).

PARATYPES: none.

Vesiculodrilus pollex Blakemore, 2000

Fig. 60.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3781, Crotty, Kelly Basin Rd at Allan's Creek, Darwin, W Tasmania, CP 857 228, "UGR 8013", 17.iii.1973, QVM collection, (mature specimen, dissected and drawn).

PARATYPE: (P) ANIC:RB.98.1.26, same details as H, (mature, posterior regenerate at 86, dissected).

Vesiculodrilus prospectus Blakemore, 2000

Fig. 61.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:664, Colebrook, Coal River Gorge Nature Reserve, SE Tasmania, EN 325 965, 310m, 17.viii.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll in gully, (mature, dissected and figured).

PARATYPE: (P) 14:3143, same collection details as H, (subadult that agrees externally and internally).

Vesiculodrilus pulchellus Blakemore, 2000

Fig. 62.

MATERIAL EXAMINED

HOLOTYPE: (H), 14:0015, Melaleuca SW Tasmania, Half-woody Hill, DM 338-889, 80 m, wet forest, 5.iii.1992, Louise F. McGowan, wet forest, (mature specimen, figured and dissected).

PARATYPES: none.

Vesiculodrilus quadruparus Blakemore, 2000

Fig. 63.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1715, Dazzler Range, Kerrisons Road, N Tasmania, EQ 755 376, 415 m., 29.vi.1992, R.D. D'Orazio and A. Mitchell, wet sclerophyll, (mature, dissected and figured). PARATYPE: (P) 14:1123, same details as H, (mature, dissected).

Vesiculodrilus recessus Blakemore, 2000

Fig. 64.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1762, Retreat, N Tasmania, EQ 144 481, R.D. D'Orazio, dry sclerophyll, Forestry Tasmania, TSF 61 site, (aclitellate mature specimen, dissected and drawn).

PARATYPE: none.

Vesiculodrilus santaclairis Blakemore, 2000

Fig. 65.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3307, Mt. Olympus, at Echo Point, Lake St Clair, C Tasmania, ca. 42º05'S.146º10'E, 13.x.1995, R.J. Blakemore, in beech forest, (mature posterior amputee, dissected and drawn).

PARATYPES: (P1) 14:3308, same details as H, (mature); (P2) 14:3309, same details as H (mature, posterior amputee); (P3) 14:3310, same details as H, (mature).

Vesiculodrilus symmetricus Blakemore, 2000

Fig. 66.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3551, Mt Oakleigh, Pelion Valley, C Tasmania, DP 209 370, 870 m, edge of wet forest, 10.ii.1992, QVM collection, (mature, missing tip of tail, dissected and figured).

PARATYPES: none.

Vesiculodrilus tasmanianus (Fletcher, 1887)

Fig. 67, Fig. 68.

Notoscolex tasmanianus Fletcher, 1887b: 607-611.

Megascolides tasmanianus; Spencer, 1895: 33-34.

Plutellus tasmanianus; Michaelsen, 1900: 175; Michaelsen, 1907b: 159.

Pinguidrilus tasmanianus; Jamieson, 1974: 263-265, figs. (mislabeled "*tasmanicus*") 25B (p.294), 32B (p.325) [not located on maps].

MATERIAL EXAMINED

LECTOTYPE: (designated by Jamieson, 1974) MOV:F42112 (previously NMV:G2112), labeled "*Megascolides tasmanicus* (sic) Fl[etcher] Jar 2 [or Jan 2nd?] from MUZD [Melbourne University Zoology Department]", Fletcher gives the type locality as Thomas's Plains, NE Tasmania, (mature specimen in five or more fragments, the anterior in reasonable condition although partly damaged by previous dissection with some organs removed and missing from jar, re-inspected here).

PARALECTOTYPES: Australian Museum: W.1263-1271, W.1476, (those specimens of this Fletcher Collection series that I had the chance to view were in rather poor condition, most broken in pieces). [Note: a letter from Elizabeth Pope, Curator of Worms, to the Director of the Australian Museum dated 18.iii.1970 requested that specimen W.1264 (at least) be "written off" as it had disintegrated - approval for this by the Trustees was signed on 21.iv.1970].

SPECIMENS: 14:3105, Weldborough, EQ 756 395, 2.ix.1990, R. Mesibov, from base of eucalypt, (weakly clitellate mature specimen, dissected and illustrated here); 14:3109 "No. 3401 Giant Earthworm. From Weldborough. Donor - Mr J. McCrackan, April 13th, 1909", (mature specimen); 14:2335, Frome Dam, Moorina, ca. EQ 760 440, 18.ix.1974, C. Taylor, "On the surface", (mature specimen); 14:3114 (previously QVM:1963:18:1), "nr. Pipers Heads [N Tasmania?], 12.ii.1963, R. Woolhouse, *Pinguidrilus tasmanianus*, Det: Jamieson, 1973", (mature specimen, dissected); 14:3122, Weldborough, EQ 756 395, 2.ix.1990, R. Mesibov, from base of eucalypt, (mature specimen); 14:1590, Tom's Gully, FQ 900 218, 320m, 27.vii.1992, R. D. D'Orazio & M. Cooper, in wet sclerophyll forest, (mature posterior-amputee, dissected); 14:3115, Binalong Bay, 768 255, 1.ix.1993, T. Woolnaught, (mature, dissected); 14:3119-3120, same details as 14:3115, (two mature specimens, one damaged); 14:0893, Mt Cameron nr. Pioneer, EQ 886 483, 175 m, 20.vii.1992, R.D. D'Orazio and M. Cooper, (three immature specimens agreeing with this species, two dissected); 14:0842, Hogarth Rd., NE Tasmania, EQ 521 356, 7.vii.1992, R.D. D'Orazio, (four immature specimens, two possibly this species); 14:3140, "16 km beyond Derby on road to Weldborough, [ca. EQ 750 400], 15.x.1985, Mrs Holmes", "*Pinguidrilus tasmanianus*, Prep: T. Scarbourough; Det: G.R. Dyne"; "Found 1½ mls [ca. 2.4 km] off the road in claybank in gravelly country in wet forest. Large worms were deep in clay in burrows...", (mature in two halves, dissected and drawn); 14:3141, same collection details as 14:3140,

(damaged sub-adult, 155 mm); 14:3144, same collection details as 14:3140, (cocoon, ca. 17.5 x 30 mm, figured); 14:3110, same collection details as 14:3140 additionally "Kept alive for 11 days", (five specimens - three matures, one a posterior-amputee, a sub-adult and an immature); 14:3573, same details as 14:3110, (mature posterior amputee, dissected, plus two tails); 14:3287, St Columba Falls, EQ 800 280, 24.i.1996, S.A.McI. and R.J. Blakemore, collected on surface of track in rain in wet sclerophyll forest, (weakly clitellate mature); ANIC:RB.97.3.9, same collection details as 14:3287, (mature, dissected); ANIC:RB.97.2.1, just north-west of Weldborough, ca. EQ735 405, 14.i.1997, Sean Blake, collected when forest trail roadbuilding, (mature); TM:K1539, same collection details as ANIC:RB.97.2.1, (mature); 14:3574, Binalong Bay, FQ 080 320, 26.i.1997, Ian Bell, (mature, dissected).

Vesiculodrilus tunnackensis (Jamieson, 1974)

Fig. 69.

Perionychella (Vesiculodrilus) tunnackensis Jamieson, 1974: 253, figs. 14, 16X.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K312, Tunnack, ca. 42º25'S.147º30'E, under logs and stones, damp conditions, 18.viii.1954, J.L. Hickman, (previously dissected specimen, redescribed and redrawn).

PARATYPE: (P) BM:1972:8:32, "Tunnack, Aug 1954, V.V. Hickman and J.L. Hickman, under logs and stones", (mature, previously dissected).

SPECIMEN: (S1) 14:3667, Brookerana Reserve, E. Tasmania, EP 709 193, 590 m., 11.viii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected).

Vesiculodrilus ventralis Blakemore, 2000

Fig. 70, Fig. 71.

Vesiculodrilus ventralis Blakemore, 2000b:7-8, fig 3.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3336, Bonnet Bay, Lake Pedder, SW Tasmania ca. 42º55'S.146º10'E, 431150 5248260, 310 m, 12.iv.1996, R.J. Blakemore, M. Driessen and M. Anderson, under rocks on hillslope above creek, (mature specimen, dissected and figured).

PARATYPES: (P1) 14:3337, same collection details as H, (mature specimen, dissected); (P2) 14:3464, Mt Cawthorne, Lake Pedder, 427897 5249337, 310 m, 12.iv.1996, R.J. Blakemore, M. Driessen and M. Anderson, in sand and debris on beach, (mature posterior amputee, dissected); (P3) 14:3446, Maria Creek, Lake Pedder, 442000 5250600, 310 m, 11.iv.1996, R.J. Blakemore, along creek in sand/roots, (aclitellate mature, possibly an amputee as pygomere

setose, dissected); (P4) 14:3447, same details as P3, (immature that argees externally); (P5-6) 14:1858, Maydena, SE Tasmania, Mueller Road, site 3, DN 542 598, 540 m, 12.x.1993, R.D. D'Orazio and D.E. Soccol, from moorland swamp, (mature posterior amputee and complete mature, both dissected, plus two unregistered tails).

SPECIMEN: 14:3362 (S1), Mt. Solitary, Lake Pedder, 438800 5244500, 310 m, 11.iv.1996, R.J. Blakemore, (damaged mature specimen that is possibly the same species).

Vesiculodrilus zeehan Blakemore, 2000

Fig. 72.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1533, Heemskirk Rd, Zeehan, W. Tasmania, CP 568 669, 185 m, 27.vii.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (mature specimen with tip of tail missing, dissected and drawn).

PARATYPES: none.

Amphimiximus delicans Blakemore, 2000

Fig. 73.

MATERIAL EXAMINED

HOLOTYPE: QVM:14:3733, Baldocks Cave State Forest Reserve, Mole Creek, N Tasmania, DP 444 958, 430 m, 1.ix.1992, R.D. D'Orazio, "travelled 6 km along South Mole Creek Road", wet sclerophyll/rainforest, (mature, dissected and figured; an odd specimen ex 14:0378).

PARATYPES: none.

Amphimiximus stumpyi Blakemore, 2000

Fig. 74, Fig. 75.

MATERIAL EXAMINED

HOLOTYPE: QVM:14:2027, Stumpys Bay, Mt William National Park, Gladstone, NE Tasmania, FQ 029 739, 10m, 12.i.1994, R.D. D'Orazio and D.E. Soccol, dry sclerophyll, (mature, bisected, dissected and figured). (Note: this sample contains a phial with spermathecae removed from H, plus a small damaged specimen of a different species).

PARATYPES: ANIC:RB.97.5.11 (P1), same details as H, (mature aclitellate, possible posterior-amputee, dissected and figured); TM:K1557 (P2), same details as H, (sub-adult, dissected); QVM:14:2027 (P3), same details as H (sub-adult, dissected).

Diporochaeta ateramnis Blakemore, 2000

Fig. 76.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1309, Black River Reserve near Sisters Beach, NW Tasmania, 150 m, CQ 655 603, 150m, 20.iv.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (mature, dissected and drawn).

PARATYPE: (P) 14:3311, same collection details as H, (slightly damaged mature, dissected).

Diporochaeta coccyx Blakemore, 2000

Fig. 77.

MATERIAL EXAMINED

HOLOTYPE: (H), 14:1025, Cuckoo Falls, Legerwood, NE Tasmania, EQ 516 342, 415 m, 7.vii.1992, R.D. D'Orazio, rainforest 200 m along track to falls, (mature, dissected and sketched).

PARATYPES: (P1) ANIC:RB.98.1.8, same details as H, (mature, dissected); (P2) TM:K1563, same details as H, (mature, dissected).

Diporochaeta diadema Blakemore, 2000

Fig. 78.

Diporochaeta diadema Blakemore, 2000b:8-10, fig 4.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3495, Coronets, Lake Pedder shoreline, SW Tasmania ca. 42º55'S.146º10'E, 437900 5248800, 310 m, 11.iv.1996, R.J. Blakemore, in litter under eucalypts beside creek, (mature complete, dissected, figured).

PARATYPES: 14:3496 (P1), same details as H, (mature posterior amputee, dissected and figured); (P2) 14:3497, same details as H, (mature, posterior regenerate); (P3) 14:3498, same details as H, except under leaves on lake's edge, (mature, posterior amputee, dissected); (P4-11) 14:3462, same details as (P3), (eight specimens: three mature, posterior amputees, five immatures, one a posterior regenerate plus an unregistered tail); (P12-13) 14:3499, same details as (P3), (two subadults, both complete); (P14-20) 14:3463, same details as (H), (seven specimens: one mature tail regenerate; two subadults, one posterior amputee; one juvenile; and three immature posterior amputees).

Diporochaeta gordoni Blakemore, 2000

Fig. 79.

Diporochaeta gordoni Blakemore, 2000b:10-11, fig 5.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3385, laneway off Island Road, Lake Gordon south, SW Tasmania, 438800 5258900, 310 m, 14.iv.1996, R.J. Blakemore, under myrtle/Huon pine forest litter and beside creek on shoreline, (mature specimen, missing tip of tail, dissected and figured).

PARATYPES: all same details as (H): (P1) 14:3386, (mature, posterior-amputee, dissected); (P2) 14:3387, (mature dissected); (P3) 14:3388, (mature, dissected); (P4) 14:3389, (mature, posterior-amputee); (P5) 14:3390, (mature); (P6) 14:3391, (mature); (P7) 14:3392, (aclitellate mature); (P8) 14: 3393, (mature); (P9) 14:3394, (clitellate, posterior-amputee); (P10) 14:3395, (aclitellate mature); (P11) 14:3396, (aclitellate mature); (P12-14) 14:3397, (aclitellate mature, posterior-amputee and two immatures plus several unregistered tail portions).

Diporochaeta hellyeri (Jamieson, 1974)

Fig. 80.

Perionychella (Vesiculodrilus) hellyeri Jamieson, 1974: 238-241, Figs. 9B (p. 235), 16N, O (p. 256).

MATERIAL EXAMINED

HOLOTYPE: TM: K284, Hellyer Gorge, 41º20'S.147º35'E, 28.v.1954, J.L. Hickman, (previously dissected specimen, here redescribed and redrawn);

PARATYPES: (P1-P2) BM(NH): 1972.8.10-11, same locality (two matures, both previously dissected, here reinspected); AM: W5192-5193 (P3-4), same locality as H, (specimens not inspected).

SPECIMENS: none - two specimens from Mt Arthur (TM:K284-286) included in the type description are now attributed to *Diporochaeta iseo*.

Diporochaeta iseo Blakemore, 2000

Fig. 81, Fig. 82.

Perionychella (Vesiculodrilus) hellyeri (part.) Jamieson, 1974: 238-241.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3295, near Scottsdale, ca. 41º10'S.147º35'E, NE Tasmania, in Forestry Tasmania "Cuckoo" soil pit, 25.i.1996, R.J. and S.A.McI. Blakemore, (mature, dissected and figured).

PARATYPES: (P1) 14:3296, same details as (H), (posterior amputee, dissected); (P2) 14:2018, Winnaleah, Banca Road, NE Tasmania, 11.i.1994, R.D. D'Orazio and D.E.Soccol, dry sclerophyll, (mature, dissected and figured); (P3-4) 14:3099, Tombstone Creek Reserve, NE Tasmania, EQ577 163, 640 m, 25.vi.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll along Esk Forest Road, (two mature posterior amputees, undissected); (P5) 14:1467, same details as (P3-4), (mature dissected and figured); (P6) 14:3100, same details as (P3-4), (mature dissected and figured); (P7) 14:3198, same details as (P3-4), (mature dissected and figured); (P8-11 14:3630, summit of Ben Lomond, , NE Tasmania, 41º35'S.147º40'E, ca EQ 568 005, 1,500 m23.iii.1997, R.J. Blakemore, , in alpine heath at edge of a sink hole, (three matures, dissected, one figured one posterior regenerate, plus an immature specimen); (P12) TM:K285, Mt Arthur, 41º15'S.147º20'E, 3.iii.1971, A.J. and J.A. Dartnall, in rainforest, (small posterior amputee, previously undissected - included as 'Material examined', but not designated paratype, in Jamieson's description of *Diporochaeta hellyeri*, here dissected and figured); (P13) TM: K286, same details as (P12 K286) (much damaged and coiled posterior amputee that is of little use except to confirm external characters like setal counts); (P14) 14:1443, Griffin Forest Reserve, NE Tasmania, EQ 687 088, 23.vi.1992, R.D. D'Orazio, wet sclerophyll gully at edge of pines, (mature dissected and sketched); (P15) ANIC:RB.98.1.27, same details as P14, (mature, dissected); (P16) 14:3782, same details as P14, (anomalous mature with two anterior segments deleted, dissected).

Diporochaeta kershawi (Jamieson, 1974)

Fig. 83a., Fig. 83b.

Perionychella (Perionychella) kershawi Jamieson, 1974: 229-230, Figs. 5B (p. 224), 16E (p. 256).
Diporochaeta kershawi; Jamieson, 1994: 175-177.

MATERIAL EXAMINED

HOLOTYPE: (H monotypic) TM:K262, under a rotting log near the old Breiseis Tin Mine dam, Derby, NE Tasmania, 41º10'S.147º50'E, 19.ix.1971, R.C. Kershaw, (previously dissected specimen that was already partially macerated, here redescribed and redrawn).

SPECIMENS: 14:1115, Emu Rd., Weldborough, NE Tasmania, EQ 781-408, 540 m, 21.vii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll to rainforest, (mature specimen, dissected and drawn); 14:3065, same details as 14:1115, (three mature specimens); 14:895, Frome Road, Moorina, NE Tasmania, EQ 762 443, 420 m, 21.vii.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (three mature specimens, one a posterior amputee).

Diporochaeta lacustris Blakemore, 2000

Fig. 84.

Diporochaeta lacustris Blakemore, 2000b: 11-12, fig 6.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3431, Maria Creek, Lake Pedder west, SW Tasmania ca. 42º55'S.146º10'E, ca. 441700 5251000, 310m, 11.iv.1996, R.J. Blakemore, in wet soil along creek, (mature specimen, dissected and figured, fig. 6).

PARATYPES: (P1) 14:3442, same details as (H), (mature, posterior amputee, dissected); (P2) 14:3443, Cripps Point, Lake Pedder east, 429000 5242900, 310 m, 12.iv.1996, M. Anderson, under button grass near creek, (mature, posterior amputee, dissected); (P3) 14:3444, same details as (P2), (mature, complete, dissected, plus eight unregistered tails); (P4-15) 14:3433, same details as (H), (twelve specimens: ten matures - three posterior amputees, and two subadults - one posterior amputee); (P16-20) 14:3435, same details as (H), except in sand in creek bed, (five complete matures and an unregistered tail).

Diporochaeta monogyna Blakemore, 2000

Fig. 85.

MATERIAL EXAMINED

HOLOTYPE: (H), 14:1026, Hogarth Road, Legerwood, NE Tasmania, EQ 521 356, 290 m, 7.vii.1992, R.D. D'Orazio, rainforest, (mature, dissected, figured).

PARATYPES: (P1) ANIC:RB.98.1.9, same details as H, (mature, slightly macerated in mid-body, dissected); (P2) TM:K1564, same details as H, (mature, slightly macerated in mid-body, dissected); (P3) 14:3739, Cuckoo Falls, NE Tasmania, EQ 516 342, 415 m, 7.vii.1992, R.D. D'Orazio, rainforest, (mature, dissected and sketched).

Diporochaeta montisarthuri (Jamieson, 1974)

Fig. 86.

Perionychella (Vesiculodrilus) montisarthuri Jamieson, 1974: 246-247, Figs, 12A (p. 244), 15H (p. 254), 16S (p. 256).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K309, 41º15'S.147º20'E, Mt Arthur, east side from rainforest, 15.x.1971, A.J. Dartnall and R.C. Kershaw, (mature specimen previously dissected ventrally, here reinspected and refigured).

SPECIMENS: none.

Diporochaeta moroea (Spencer, 1895)

Fig. 87.

Perichaeta morœa Spencer, 1895: 49, Figs. 40-42; Jensz & Smith, 1969: 107.

Diporochaeta moroea; Michaelsen, 1900: 207.

Perionychella (subgenus?) moroea; Jamieson, 1974: 257-258.

MATERIAL EXAMINED

LECTOTYPE: MOV:F40292 (previously NMV:G292), labelled "P[erichaeta]. sp2. T[asmania]", collected Lake St Clair, [ca. 42º05'S.146º10'E], Jan. 1893, (by W. Baldwin Spencer?), (aclitellate mature, missing the tip of its tail, previously dissected with part of the gut removed, reinspected here).

This specimen is herein designated a lectotype, under the article 74 of ICZN (1999).

SPECIMENS: none found despite resurvey by the author.

Diporochaeta pulvilla Blakemore, 2000

Fig. 88.

MATERIAL EXAMINED

HOLOTYPE: (H), 14:2836, Birchs Inlet, W Tasmania, CN 753 878, Spero map 7912, 10 m, 16.x.1993, Jane Griffith, (mature with tip of tail missing, dissected, figured).

PARATYPE: (P) 14:3640, same details as H, (an immature that superficially agrees, slightly macerated in mid-body, dissected and agrees internally except for undeveloped sex organs).

Diporochaeta rubertumula Blakemore, 2000

Fig. 89.

Diporochaeta rubertumula Blakemore, 2000b:13-14, fig 7.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3410, Red Knoll Lookout, south Lake Pedder, SW Tasmania ca. 42º55'S.146º10'E, 440600 5234600, 400m, 8.iv.1996, QVM, (mature, possibly a posterior amputee as the body appears truncated, dissected and figured).

PARATYPES: all with same collection details as (H): (P1) 14:3411, (mature, posterior amputee, dissected); (P2) 14:3412, (mature, the last 24 segments are abruptly pale and thinner, possibly a posterior regenerate although this may also be a normal characteristic); (P3) 14:3413, (mature, posterior amputee, dissected); (P4) 14:3414, (mature, posterior amputee); (P5) 14:3415,

(mature, complete); (P6) 14:3416, (mature, aclitellate); (P7) 14:3417, (aclitellate, posterior amputee); (P8-9) 14:3418, (two specimens both aclitellate, posterior amputees, plus 14 unregistered tails and bits).

Diporochaeta setosa Blakemore, 2000

Fig. 90.

Diporochaeta setosa Blakemore, 2000b:13-14, fig 8.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3382, Stillwater under Hermit, Lake Pedder east, SW Tasmania ca. 42º55'S.146º10'E, 428200 5258200, 310 m, 14.iv.1996, R.J. Blakemore, in sandy soil on shoreline, (mature specimen, dissected and figured).

PARATYPES: (P1) 14:3459, Mt Cawthorne, 427897 5249337, 310m, 12.iv.1996, R.J. Blakemore and M. Driessen, in beach sand and muddy soil, (mature, dissected); (P2) 14:3442, Cripps Point, 429000 5242900, 310 m, 12.iv.1996, M. Anderson, under button grass near creek, (mature, posterior amputee, dissected and figured); (P3) 14:3422, Bell Basin, 419600 5259700, 310 m, 9.iv.1996, R.J. Blakemore, under button grass, (single mature specimen in 2 halves); (P4) 14:3383, same details as (H), (mature specimen, damaged in anterior, dissected); (P5-6) 14:3460, same details as (P1), (two mature posterior amputees, plus two unregistered tails); (P7) 14:3465, same details as (P1), (mature posterior amputee); (P8) 14:3338, Bonnet Bay, 431150 5248260, 310 m, 12.iv.1996, R.J. Blakemore, M. Driessen, M. Anderson, under stones on hillslope, (mature, dissected).

Diporochaeta soccoli Blakemore, 2000.

Fig. 91.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1933, Banca Rd., Winnaleah, NE Tasmania, EQ 670 596, 180 m, 19[11?].i.1994, R.D. D'Orazio and D.E. Soccol, dry sclerophyll, (complete mature, figured and dissected, sample also contained a tail portion).

PARATYPES: (P1) 14:3093, same details as H, (mature posterior amputee, dissected); (P2) 14:3094, same details as H, (mature, posterior amputee).

Diporochaeta stronach Blakemore, 2000

Fig. 92.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3292, collected near Scottsdale ca. 41º10'S.147º30'E on road to Derby, NE Tasmania, EQ 510 362, ca. 420 m, in Forestry Tasmania "Stronach" soil under wet forest litter, 25.i.1996, R.J. and S.A.McI. Blakemore, (complete mature, dissected and figured).

PARATYPES: none.

Diporochaeta sucta Blakemore, 2000

Fig. 93.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3587, Christmas Hills, west of Smithton, NW Tasmania, CQ 309 667, 60 m, 6.xii.1990, R. Mesibov, (mature, posterior amputee, dissected figured).

PARATYPE: (P1) 14:3746, same details as H, (mature, dissected); (P2) 14:3747, same details as H, (mature, posterior amputee).

Provescus crottyi Blakemore, 2000

Fig. 94.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3780, Crotty, Kelly Basin Road at Allen's Creek, Darwin, W Tasmania, U.G.R. 8013.856228, (CP 856 228, ca. 42°5'S.145°33'E), 17.iii.1973, QVM collection, (mature, dissected and figured).

PARATYPES: none.

Megascolides cataractus Blakemore, 2000

Fig. 95.

MATERIAL EXAMINED

HOLOTYPE: 14:1442, Hardings Falls Forest Reserve, E Tasmania, EP 914 663, 260 m, 5.viii.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (mature specimen, dissected and figured).

PARATYPE: (P) ANIC:RB.00.1.11, same details as (H), (mature, posterior amputee, dissected; a tail in sample does not belong to specimen).

Megascolides catenastagnis Blakemore, 2000

Fig. 96.

MATERIAL EXAMINED

HOLOTYPE: 14:670 (H), 5.2 km along “E” Road, Piccaninny Creek bridge, Chain of Lagoons, E Tasmania, FQ 029 847, 310 m, 4/5.viii.1992, R.D. D’Orazio and M. Cooper, wet sclerophyll, (mature, tail missing, dissected and figured).

PARATYPES: ANIC:RB.98.1.28 (P), same details as H, (mature, tip of tail missing, dissected).

Megascolides croesus Blakemore, 2000

Fig. 97.

MATERIAL EXAMINED

HOLOTYPE: 14:0380 (H), Mole Creek, Croesus Cave State Reserve, N Tasmania, DP 352 966, 300m, 2.ix.1992, R.D. D’Orazio, wet sclerophyll, (mature, dissected and figured).

PARATYPES: 14:3696 (P1), same details as H, (mature, dissected); 14:3697 (P2), same details as H, (mature, dissected); 14:3698 (P3), same details as H (mature); 14:3699 (P4), same details as H (mature); 14:3700 (P5), same details as H, (mature); 14:3701 (P6-P12), same details as H, (seven mature specimens).

Megascolides fontis Blakemore, 2000

Fig. 98.

MATERIAL EXAMINED

HOLOTYPE: 14:1714 (H), Four Springs Forest Park (owned by Forest Resources, it was logged in 1972), DQ 863-199, 180 m., 24.viii.1992, R.D. D’Orazio and M. Cooper, dry sclerophyll, (mature, dissected and figured).

PARATYPES: none.

Megascolides improbus Blakemore, 2000

Fig. 99.

MATERIAL EXAMINED

HOLOTYPE: 14:0014 (H), Melaleuca, SW Tasmanian, Half-woody Hill, DM 338-889, 80m in wet forest, 5.iii.1992, Louise F. McGowan, (mature, dissected and drawn).

PARATYPES: ANIC:RB.97.4.4 (P1), same sample as (H), (aclitellate mature, dissected); TM:K1553 (P2), same details as (H), (mature, dissected); 14:3639, (P3-4), same details as (H), (two aclitellates, P3 dissected, P4 abnormal); 14:0047 (P5-6), Melaleuca, SW Tasmania, edge of Melaleuca lagoon, DM 321-921, 0-1m in leaf litter, 4.iii.1992, L.F. McGowan, (P5 mature,

dissected, P6 abnormal subadult dissected); 14:3642 (P7-8), “Melaleuca, L.F.M.”, (two specimens, P7 posterior amputee, dissected and P8 mature undissected).

Megascolides intestinalis Blakemore, 2000

Fig. 100.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:962, Lake Rowallan, 1.7 km along Dublin Road from Little Fisher River Road, N. Tasmania, DP 381 825, 590 m, 6.x.1992, R. D’Orazio and M. Cooper, rainforest from banks of creek, (mature posterior amputee, dissected and drawn).

PARATYPES: none.

Megascolides jotaylorae Blakemore, 2000

Fig. 101.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1653, 3.5km along Peters Road, Georges Bay, E Tasmania, EQ 939 445, 170 m, 28.vii.1992, R.D. D’Orazio and M. Cooper, wet sclerophyll, (mature posterior amputee, figured and dissected).

PARATYPES: (P1) ANIC:RB.98.1.13, same details as H, (complete mature, dissected); (P2) TM:K1567, same details as H, (mature, dissected); (P3) 14:3743, Peters Road, NE Tasmania, EQ 939 446 (slightly different grid-reference), 170 m, 28.vii.92, R.D. D’Orazio and M. Cooper, (mature, dissected); (P4) ANIC:RB:98:1:14, same details as P3, (mature); (P5) TM:K1568, same details as P3, (mature); (P6) 14:3744, same details as P3, (subadult); (P7-10) 14:1652, Wild Pig Hill, NE Tasmania, EQ 489 962, 160 m, 28.vii.1992, R.D. D’Orazio and M. Cooper, dry sclerophyll, (three matures and one juvenile, one mature dissected); (P11-14) 14:3745, same details as P6-9, (four matures).

SPECIMENS: 14:1654, Badger Marsh, NE Tasmania, EQ 975 368, 120 m, 27.vii.1992, R.D. D’Orazio and M. Cooper, dry sclerophyll, (four mature specimens that superficially agree, one dissected agrees internally); 14:1651, Pioneer, Mt Cameron Water Race Reserve, NE Tasmania, EQ 8866 483, 175 m, 20.vii.1992, R.D. D’Orazio and M. Cooper, wet sclerophyll, (six mature specimens that superficially agree, one dissected agrees internally too).

Megascolides laffani Blakemore, 2000

Fig. 102.

MATERIAL EXAMINED

HOLOTYPE: 14:3501 (H), Railton, ca. 41º20'S.146º26'E, NW Tasmania, 10.vi.1996, M. Laffan, Forestry Tasmania site, (mature, dissected and figured).

PARATYPES: none.

Megascolides maestus Blakemore, 1997

Fig. 103.

Megascolides maestus Blakemore, 1997a:1704-1707, fig. 8.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3327, Dismal Swamp Nature Reserve, NW Tasmania, 40º59'S 144º51'E, 8.ix.1987, QVM, (complete mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.96.12.1, Dismal Swamp, approximately 400m along eastern reserve track, 3.xii.1996, R.J. Blakemore, (complete mature, dissected); (P2) TM:K1531, same details as P1, (mature in two halves, dissected); (P3) 14:3570, Dismal Swamp, gully west of turn off beside Bass Highway, 40º58'S 144º51'E, 3.xii.1996, R.J. Blakemore, (mature, caudal tip missing).

Megascolides oppidanus Blakemore, 2000

Fig. 104.

MATERIAL EXAMINED

HOLOTYPE: 14:1403 (H), Queenstown, W Tasmania, CP 787 315, 35m, 10.viii.1993, R.D. D'Orazio and D.E. Soccol, sampled from Cool Temperate Rainforest at side of car park along Mt Jukes Road leading to John Butters Power Station located, (mature, dissected and drawn).

PARATYPES: none.

Megascolides orthostichon (Schmarda, 1861)

Fig. 105.

Hypogaeon orthostichon Schmarda, 1861: 12, Plate 18, fig. 159.

Lumbricus orthostichon; Hutton, 1883: 586; Fletcher, 1886a: 524.

? Hypogaeon orthostichon; Beddard, 1891: 278.

"Hypogaeon orthostichon"; Beddard, 1892a: 129; Benham, 1949: 350.

Megascolides orthostichon; Beddard, 1892a: 130; Beddard, 1895: 496; Michaelsen, 1907: 161; Lee, 1959: 349; Lee, 1962: 175-176, figs. 11, 12 [possibly a different species].

Notoscolex orthostichon; Michaelsen, 1900: 189.

TYPE MATERIAL: Hamburg Museum:8615, listed by Reynolds & Cook (1976: 148), although Beddard (1892a) inspected type material in the Vienna Museum, dissecting one specimen,

and Beddard (1895: 496) later noted "I had only the type of Schmarda, which it was necessary to respect."

OTHER MATERIAL: BM:1904:10:5:488/490, non-type material, of unknown provenance from the British Museum Beddard Collection, (two clitellate matures, one entire and one dissected along the dorsal mid-line, plus three aclitellate specimens); these specimens were inspected by Lee (1962), but whether they were the correct taxon is uncertain, and as they are not type material they have no name-bearing function.

Megascolides salmo Blakemore, 2000

Fig. 106.

MATERIAL EXAMINED

HOLOTYPE: 14:3595 (ex 14:1606), Salmon River, NW Tasmania, CQ 199 534, 50 m., 17.v.1993, R.D. D'Orazio and D.E. Soccol, sampled where Salmon River crosses Salmon River Road, wet sclerophyll, (mature, dissected and figured).

PARATYPES: none.

Megascolides sanctorum Blakemore, 2000

Fig. 107.

MATERIAL EXAMINED

HOLOTYPE: 14:1656, St Patricks Head State Reserve, Irish Town Road, E Tasmania, FP 026 988, 430 m, 4.viii.1992, R.D. D'Orazio and M. Cooper, sampled from dry sclerophyll recovering from fire, location details: "Enter gravel road opposite road to Lower GermanTown Rd. once the wire gate has been crossed go 100m and turn right along track which enters bush; travel 4.5km along this track until at the base of hill", (mature posterior amputee, dissected and figured).

PARATYPES: (P1) ANIC:RB.98.1.12, same details as H, (mature, missing tip of tail, dissected); (P2) 14:1655, St Marys Pass State Reserve, Lower German Town Road, E. Tasmania, FP 002 989, 220 m, R.D. D'Orazio and M. Cooper, wet sclerophyll, location details: "Stopped at bridge 1.3km from sealed road", (complete mature, dissected); (P3) TM:K1566, same details as (P2), (mature, dissected); (P4-11) 14:1655, same sample as P2), (eight matures that superficially agree).

Megascolides tener Blakemore, 2000

Fig. 108.

MATERIAL EXAMINED

HOLOTYPE: 14:3650 (H), Warra, Forestry Tasmania LTER site, ca. 43º04'S.146º40'E, SE Tasmania, 6.viii.1997, Forestry Tasmania/ANU collection, "site 3, steep coup", wet sclerophyll, (mature, dissected and figured).

PARATYPES: ANIC:RB.97.5.2 (P1), same details as (H), (mature, dissected); TM:K1554 (P2), same details as H, (mature, dissected); 14:3651 (P3 - P7), same details as (H), (two matures, one subadult and one immature that all superficially agree).

Megascolides tortuosus Blakemore, 2000

Fig. 109.

MATERIAL EXAMINED

HOLOTYPE: 14:3524 (H ex 14:709), Mt Roland, NW Tasmania, Belstone Road to Minnow Creek, DQ 429 078, 300 m, 24.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll forest, (mature, dissected and figured).

PARATYPES: 14:709 (P1-2), same details as (H), (two matures, inspected); 14:3526 (P3-4 ex 14:706), Mt Roland, Union Bridge Rd., DQ 446 088, 240 m., R.D. D'Orazio and M. Gittus, "Travelled 7.2km passed Mersey River bridge to road along pines, stopped on short spur road", wet sclerophyll, (two matures, one dissected).

Megascolides umbonis Blakemore, 2000

Fig. 110.

MATERIAL EXAMINED

HOLOTYPE: 14:0026 (H), Melaleuca, SW Tasmania, DM 328 904, 5.iii.1992, Louise F. McGowan, under button grass on SW Track, (mature, dissected and drawn).

PARATYPES: 14:0026 (P1), same sample as (H), (mature, dissected); 14:0027 (P2-12), same details as (H), (P2, mature dissected; P3 mature posterior regenerate; P4 mature; P5, aclitellate mature; P6-P7, subadults; P8-P12 immatures, P12 a posterior regenerate after 30; sample also contains an immature *Aporodrilus* specimen); 14:0024, same details as (H), (weakly clitellate mature, posterior regenerate after segment 80, dissected; sample also contains two *Aporodrilus* sub-adults).

Megascolides xanthus Blakemore, 2000

Fig. 111.

MATERIAL EXAMINED

HOLOTYPE: 14:3104 (H ex 14:3102), Scamander Forest Reserve, E Tasmania, FQ 015 123, 100 m, 27.vii.92, R.D. D'Orazio and M. Cooper, "Travelled 10.8km from Tasman Highway and stopped along Pitts Road", wet sclerophyll, (mature posterior amputee, figured and dissected).

PARATYPES: ANIC:RB.98.1.11 (P1), same details as (H), (complete mature, dissected); TM:K1565 (P2), same details as (H), (mature, dissected); 14:3731 (P3-4), Baldocks Cave State Reserve, N Tasmania, DP 444 958, 430 m. 1.ix.1992, R.D. D'Orazio, "Travelled 6kms along South Mole Creek Road", wet sclerophyll/rainforest, (two matures, both dissected); ANIC:RB.98.1.10 (P5), Toms Gully, NE Tasmania, FQ 900 218, 320 m, 27.vii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, sketched and dissected); 14: 286 (P6-8), Trafalgar Flats, NE Tasmania, EQ 875 178, 300 m, 29.vii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (two matures and one juvenile that agree superficially, plus a tail); 14:1022 (P9), Evercreech Forest Reserve, EQ 812 162, 350 m, R.D. D'Orazio, 23.vi.1992, wet sclerophyll, (aclitellate mature posterior amputee, dissected).

SPECIMENS: 14:280, same details as (H), (twelve matures, four aclitellate matures and five juveniles that superficially agree, some of these specimens are easily broken in the mid-body); 14:0378, same details as (P3-4), (five matures plus four immatures); 14:281, same details as (P5), (five matures that agree externally). 14:1021, same details as (P5), (five matures that agree externally).

Zacharius evansi (Jamieson, 1974)

Fig. 112.

Perionychella (Vesiculodrilus) evansi Jamieson, 1974: 236-237, Figs. 9A, 15C, 16K.

MATERIAL EXAMINED

HOLOTYPE: TM:K282 (H), Lake St. Clair, 146°10'E.42°05'S, Feb. 1941, J.W. Evans, "9065", (mature, previously dissected and in two pieces - the internal organs had been removed and discarded at segment 15 and only the lhs prostate was present; what remains of the specimen is redescribed and refigured).

PARATYPE: BM(NH): 1972:8:8 (P), same locality, Tasmanian Biological Survey: J20, Feb. 1941, (mature specimen damaged anteriorly, cut at mid-clitellum and also partially destroyed by dissection).

SPECIMENS: none found despite searches of the type locality by the current author.

Zacharius weldboroughi (Jamieson, 1974)

Fig. 113.

Perionychella (Perionychella) weldboroughi Jamieson, 1974: 230-232, Figs. 7A, 16F.

Diporochaeta weldboroughi; Jamieson, 1976: 11 (repeating Jamieson, 1974: 260); Jamieson, 1994: 158 (repeating Jamieson, 1976: 11).

MATERIAL EXAMINED

HOLOTYPE: TM:K263 (H, monotypic), 1.6 miles (2.5 km) from eastern end of Weldborough Pass, NE Tasmania, ca. 147°55'E.41°10'S, 26.viii.1953, J.L. Hickman, (mature, previously dissected, refigured).

SPECIMENS: none found despite searches of the locality by the current author.

Woodwardiella tesselatus (Spencer, 1895)

Fig. 114.

Cryptodrilus tesselatus Spencer, 1895: 40-41, figs. 16-18; Jensz & Smith, 1969: 91.

Plutellus tessellatus ; Michaelsen, 1900: 170-171 (incorrect subsequent spelling of *tesselatus*).

Woodwardia tessellatus ; Michaelsen, 1907: 162.

Woodwardiella ? tessellatus; Jamieson, 1974: 266.

Cryptodrilus tesselatus (sic) Spencer, 1896 [sic]; Jamieson, 1974: 266.

Woodwardiella ? tesselatus (sic); Jamieson, 1974:266.

[Note: under ICZN (1999) Articles 32 and 33.5, the name "tesselatus" is preserved as the correct original spelling and is not considered an inadvertent error of transliteration or latinization by Spencer as he titled his figures 16-18 with the same spelling].

MATERIAL EXAMINED

TYPES: Not present in MOV and presumed lost (Jensz & Smith, 1969).

SPECIMENS: none found despite surveys of the type-locality by the current author.

Woodwardiella tiki Blakemore, 2000

Fig. 115.

MATERIAL EXAMINED

HOLOTYPE: 14:3106 (H), Weldborough, EQ 756 395, NE Tasmania, 2.ix.1990, R. Mesibov, from base of eucalypt, (weakly clitellate mature specimen, drawn and dissected).

PARATYPES: ANIC:RB.97.2.3 (P1), same collection details as H, (weakly clitellate mature); TM:K1541 (P2), Sideling, EQ 350 310, 14.xii.1983, M. Jessup "In wet forest", (aclitellate mature, dissected); 14:3123 (P3), Sideling Range, NE Tasmania, 11.viii.1991, QVM, (aclitellate mature posterior amputee, dissected); 14:1046 (P4), same details as P3, (aclitellate mature, dissected); 14:3577 (P5), Sideling Range, 26.vi.1993, QVM, (mature, damaged around

clitellar region, dissected); 14:3124 (P6), South Springfield, NE Tasmania, EQ 388 287, 560 m, 3.vi.1992, R.D. D'Orazio, rainforest, (slightly damaged sub-adult, dissected).

Woodwardiella vandiemensis Blakemore, 2000

Fig. 116.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3289, Scottsdale, NE Tasmania, 41º10'S.147º30'E, ca. EQ 450 400, ca. 325 m, 25.i.1996, S.A.McI. & R.J. Blakemore, from pit dug in 'Stronach' granitic soil in wet sclerophyll forest, (weakly clitellate mature, drawn and dissected).

PARATYPES: (P1) 14:3116, Scottsdale, 41º10'S.147º30'E, EQ 503 382, 3.x.1994, QVM, (aclitellate mature specimen in two halves at segment 100, dissected); (P2) ANIC:RB.97.2.4, same collection details as P1, (sub-adult with anterior damaged, dissected); (P3) TM:K1542, same collection details as P1, (sub-adult, dissected); (P4-10) 14:3290, same collection details as H, (three sub-adults, one dissected and four immatures, one dissected).

Perionychella dilwynnia (Spencer, 1895)

Fig. 117.

Perichaeta dilwynnia Spencer, 1895:50-51, figs. 46-48; Jensz & Smith, 1969: 104.

Diporochaeta dilwynnia ; Michaelsen, 1900:204.

Perionychella (Vesiculodrilus) dilwynnia ; Jamieson, 1974: 234-236, figs. 8B (p. 232), 16J (p. 256).

Perionychella (Vesiculodrilus) obliquae (*?*part.) Jamieson, 1974: 250-251, Figs, 13B, 16V.

Perionychella dilwynnia; Blakemore, 2000b: 15-16, fig. 9.

MATERIAL EXAMINED

TYPE MATERIAL: Not present in NMV, presumed lost (Jensz & Smith, 1969: 104). No new material has been located from the Dee Bridge type-locality, despite collection efforts by the author.

SPECIMENS: (S1) 14:3335, Bell Basin, Lake Pedder north, 310 m, 28.iii.1996, A. Osborne and N. Forteath, (mature specimen, dissected and figured); (S2) 14:3469, Sprent Basin, Lake Pedder north, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, under Ti-tree on edge of lake, (mature, posterior amputee, dissected); (S3) 14:3470, same details as (S1), (aclitellate mature); TM:K266-274, BM:1972:8:4-7, Tarraleah, central Tasmania, 146º25'E.42º20'S., 27.v.1954, J.L. Hickman, over pipeline, (twelve mature specimens and a tail portion); AM:W5202 (ex-specimen of *Perionychella obliquae* not designated type material although forming part of the type

description), Port Davey, Kelly's Basin, 43º20'S.145º55'E, Jan 1940, Tasmanian Biological Survey J17, C.D. King, (mature, posterior amputee, previously dissected with spermatheca removed and missing from jar, re-inspected here).

Perionychella eruca Blakemore, 2000

Fig. 118.

MATERIAL EXAMINED

HOLOTYPE: 14:2837 (H), Birchs Inlet, SW Tasmania, CN 753 878, 16.x.1993, J. Griffith, rainforest, (mature dissected, figured).

PARATYPES: 14:3539 (P1-3), same details as H, (three specimens, one mature, one aclitellate mature and one immature, all dissected).

Perionychella irregularis (Spencer, 1895)

Fig. 119.

Perichaeta irregularis Spencer, 1895: 53-54, figs 52-54; Jensz and Smith, 1969: 106.

Diporochaeta irregularis; Michaelsen, 1900: 206.

Perionychella (Perionychella) irregularis; Jamieson, 1974: 228-229, Fig. 6C (and 16G - a figure of a spermatheca from segment 9 removed from the lectotype).

MATERIAL EXAMINED

LECTOTYPE: NMV: G288 labeled "King River, Tasmania. Coll: C.G. Officer, Jan. 1894 - TYPE" and "Peri sp X 15 King R[iver] T[asmania] Mr C. G. Officer Jan/[18]94", (ca. 42º10'S.145º40'E), (mature specimen in good condition but previously dissected, only in the anterior, and with spermathecae in segment 9 now removed and missing from the jar). Lectotype designation by Jensz & Smith (1969: 106).

PARALECTOTYPES: none.

OTHER MATERIAL: 14:3537, Pelion Valley, Forth River NW side, DP 173 674, 725 m, 13.ii.1992, QVM, rainforest, (mature, dissected and drawn); 14:3538, same details as 14:3537, (mature and sub-adult, both dissected).

Perionychella lacustris (Stephenson, 1924)

Fig. 120.

Perionyx lacustris Stephenson, 1924: 546-547.

Perionychella (Vesiculodrilus) lacustris ; Jamieson, 1974: 245-246, figs, 1 [mislabeled *P.(P.) lacustris*], 7B (p. 231), 16I (p. 256).

TYPE MATERIAL (not examined here): Syntypes BM(NH): 1924.10.21.1-5, obtained at the Great Lake, Tasmania (ca. 41º55'S.146º45'E), in September, 1914 by Prof. Dendy, found under stones in water at the margin of the lake, (Stephenson received fourteen specimens - not all mature, - all much softened, and several in two pieces; he dissected one of the deposited specimens and Jamieson dissected another).

MATERIAL EXAMINED

SPECIMENS: TM: K265, Lyell Highway, 5 miles from Bronte towards Hobart, 42º15'S.146º35'E, 24.v.1954, J.L. Hickman, (mature, posterior amputee with regeneration of last three segments, previously dissected with some organs loose in the body cavity, here reinspected and figured); BM(NH): 1972:8:2, same details as TM:K265, (specimen now desiccated and yielding little useful information).

Perionychella myrtea Blakemore, 2000

Fig. 121.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3091, Lake Rowallan, C Tasmania, ca. 41º44'S.146º14'E, Lake Bill track, 9.ix.1992, QVM, in myrtle-grove, (aclitellate mature, dissected, figured).

PARATYPES: none.

Perionychella richea (Spencer, 1895)

Fig. 122, Fig. 123.

Perichaeta richea Spencer, 1895: 49-50, figs. 43-45; Michaelsen, 1900: 204; Jensz & Smith, 1969: 107.

Perichaeta richae (sic); Jamieson, 1974: 223.

Perionychella (subgenus?) richea ; Jamieson, 1974: 258-259, (Note: Jamieson (1974: 258) in his synonymy for *Perichaeta richea* appears to have confused this species with both of Spencer's *P. dilwynnia* and *P. scolecoidea*).

Perionychella (Perionychella) hickmani Jamieson, 1974: 226-228, figs. 1 (mislabelled *P.(V.) hickmani*), 6A,B, 16C,D. **Syn. nov.**

Perionychella (Vesiculodrilus) obliquae Jamieson, 1974: 250-251, Figs, 13A, 16U. **Syn. nov.**

MATERIAL EXAMINED

SYNTYPES: not present in the NMV and presumed lost (Jensz & Smith, 1969: 107).

NEOTYPE: 14:3300 (N), Lake St Clair, 42º05'S.146º10'E, Mt Olympus, near Echo Point, 13.x.1995, R.J. Blakemore, in beech forest litter, (mature, with tip of tail damaged, dissected and figured).

Note: In the interest of nomenclatural stability, this freshly collected specimen from the original type-locality is here designated a neotype, under ICZN (1999) Article 75, as no type-material is known to exist and, for reasons given below, the specimen is considered consistent with the taxon described by Spencer.

SPECIMENS: ANIC:RB.00.1.19, same details as 14:3300, (mature, agreeing superficially); 14:3301, same details as 14:3300, (mature, dissected); 14:3302, same details as 14:3300, (four matures, two dissected, and a tail); 14:3303, same details as 14:3300, (five matures, one dissected, plus one subadult and one immature); 14:3540, Lake Bill Track from Lake Rowallan, C Tasmania, ca. 41º44'S.146º14'E, 9.ix.1991, QVM, in myrtle grove, (mature, figured and dissected); 14:3541, 3542, same details as 14:3540, (one mature and one subadult, both dissected, plus an immature of a different species); 14:3083,3084, same details as 14:3540, (two matures, both dissected, one figured); 14:608, Cradle Mountain Road, NW Tasmania, CP 949 986, 670 m, 16.vi.1993, R.D. D'Orazio and D. E. Soccol, peat swamp, (six matures, one dissected, one anterior amputee, plus a subadult of a different species); 14:0102, Pelion Valley, 420900 5366000, Feb, 1992, QVM, (clitellate mature, from batch of 45 specimens agreeing with *P. richea*, this one an anterior regenerate from segment 6, having only three replacement head segments, dissected); 14:583, Julius River Forest Reserve, Smithton, NW Tasmania, CQ 345 421, 110 m, 18.v.1993. R. D. D'Orazio and D. Soccol, cool temperate rainforest, (seven specimens, one mature dissected and drawn); 14:974, Mole Creek, Lake McKenzie Rd., N Tasmania, DP 373 924, 700 m, 5.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll/rainforest at Martha Creek, (mature specimen, dissected and drawn); 14:711, Nietta, NW Tasmania, Jean Brook Forest Reserve, DQ 193 116, 525 m, 25.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll over creek, (16 specimens, 12 mature); 14:1996, Castra, NW Tasmania, DQ 304 274, 285 m, 19.i.1994, R.D. D'Orazio and D. Soccol, (three specimens); 14:1997, Castra, same details, (five specimens plus two tails); 14:1999, Castra, DQ 228 224, 480 m, 19.i.1994, R.D. D'Orazoi and D.E. Soccol, (four matures); 14:2001, Castra, same details, (three specimens, one mature); 14:2008, Castra, Gaunts Rd., DQ 228 213, 485 m, 19.i.1994, R.D. D'Orazio and D. Soccol, (eight specimens); 14:2009, Castra, same details, (six specimens);

TM:K260 (ex-holotype of *Perionychella hickmani*), Fern Glade, Emu River, Burnie, N. Tasmania, 41º05'S. 145º55'E, 24.viii.1954, J.L. Hickman, (mature, previously dissected, re-inspected and refigured); BMNH:1972:8:12 (ex-P1 of *Perionychella hickmani*), Hellyer Gorge,

41º20’S.145º35’E, 28.v.1954, J.L. Hickman, (mature, dissected, re-inspected); TM:K261 (ex-P2 of *Perionychella hickmani*), Parrawe, 41º20’S. 145º35’E, 25.viii.1954, J.L. Hickman, (partially dissected); BM:1972:8:13 (ex-P3 of *Perionychella hickmani*), Lake St Clair, 42º05’S. 146º20’E, Feb 1941, (aclitellate mature, in two bits, previously dissected with some spermathecae removed and missing from jar, re-inspected); BM:1972:8:14 (ex-P4 of *Perionychella hickmani*), same details, (aclitellate, in two halves but undissected);
TM:K301 (ex-holotype of *Perionychella obliquae*), 2 miles inland, south of Interview River, NW Tasmania, 41º35’E.144º55’S, 31.xii.1953, W. Jackson, (mature specimen damaged by previous dissection with intestine removed, redrawn); BMNH:1972:8:31 (ex-paratype of *Perionychella obliquae*), same details, (large mature posterior-amputee, macerated and damaged by dissection with several internal organs removed and missing from jar, re-inspected). Note: the Port Davey, SW Tasmania, specimen attributed to *P. obliquae* is no longer considered conspecific (see Remarks below).

Perionychella strzeleckii Blakemore, 2000

Fig. 124.

MATERIAL EXAMINED

HOLOTYPE: 14:3754 (H), Flinders Island, Mt Strzelecki National Park, ER 925 485, 500 m, 2.xi.1992, QVM, (clitellate mature, dissected, figured).

PARATYPES: all with same details as H, ANIC:RB.98.1.17 (P1), (mature, dissected); TM:K1570 (P2), (mature, dissected); 14:3755 (P3), (mature, dissected); 14:3756 (P4), (mature, dissected; 14:3757 (P5), (mature).

Perionychella variegata Blakemore, 2000

Fig. 125.

Perionychella variegata Blakemore, 2000b: 17, fig 10.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3340, Sprent Basin, north Lake Pedder, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, in loam in Banksia/Ti-tree scrub on edge of lake, (mature specimen, dissected and figured).

PARATYPE: (P1) 14:3341, same details as H (posterior amputee, dissected); 14:3485, same details as H, (an immature, agreeing superficially).

SPECIMENS: 14:0074-0077 from Pelion Valley, Central Tasmania, QVM, (several mature and subadult specimens that comply with this taxon).

Tassiedrilus griffithae Blakemore, 2000

Fig. 126.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3641, Birchs Inlet, S.W. Tasmania, CN 753 878, 16.x.1993, J. Griffith, (mature dissected, figured).

PARATYPES: none.

Hypolimnus pedderensis (Jamieson, 1974)

Fig. 127.

Perionychella (Vesiculodrilus) pedderensis Jamieson, 1974: 251, figs. 12C (p. 244), 16W (p. 256).

Perionychella pedderensis; Dyne, 1991: 2, fig. 1.

Diporochaeta pedderensis; Driessen, 1999: 333, fig. 2.

Hypolimnus pedderensis; Blakemore, 2000b:18-20, fig 11.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K311, Lake Pedder, 146°12'E. 42°57'S, 25.ii.1971, P. Tyler, labelled thus: "Collected by Dr Peter Tyler on main beach of Lake Pedder, near where Maria Creek came to the lake. Dr P. Tyler pers. comm. 15.ii.1991, R.H. Green" - "sorted from interstitial fauna" (complete mature specimen, coiled and slightly damaged, previously dissected in the anterior only, re-inspected, re-figured). (Note: the type specimen was in good condition when last inspected by the author, but has subsequently been handled and re-figured by an artist in Driessen, 1999)

Notoscolex acanthodriloides (Jamieson, 1974)

Fig. 128.

Pseudocryptodrilus acanthodriloides Jamieson, 1974: 298-299; figs. 26A, B, 32S.

Megascolides acanthodriloides; Blakemore, 1997: 1706: 2000c: 197.

MATERIAL

HOLOTYPE: TM:K355 (H), Great Lake, Central Highlands, 41º55'S.146º45'E, 26.v.1954, J.L. Hickman, (mature, previously dissected with rhs spermathecae and rhs prostate removed and missing from jar, here re-inspected and re-sketched).

PARATYPES: TM:K356 (P2), same details as H, (aclitellate, previously dissected); TM:K357 (P3), same details as H, (aclitellate, dissected); TM:K358 (P4), same details as H, (aclitellate, undissected); TM:K359 (P5), same details as H, (aclitellate, undissected); BM:

1973:2:31-33 (P1, 11, 13), same details as H, (not found in Natural History Museum, London, Miranda Lowe pers. com.); AM:W5320-5321 (P7, 12), same details as H, (not inspected).

Notoscolex bidiverticulatus (Jamieson, 1974)

Fig. 129.

Oreoscolex bidiverticulatus Jamieson, 1974: 305-307, figs. 27A, 32J (p.325).

Notoscolex bidiverticulatus; Blakemore, 1997a: 1706.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K362, Fern Glade, Emu River, Burnie, 24.viii.1954, J.L. Hickman, (mature, mutilated by previously dissection with rhs spermatheca and lhs prostate removed and missing from jar, here re-inspected and re-figured).

PARATYPE: BM:1973:2:35 (P1), same details as H, (not located in British Museum, per. obs.).

Notoscolex campestris (Spencer, 1895)

Fig. 130.

Crytodrilus campestris Spencer, 1895: 39, figs. 13-15; Jensz & Smith, 1969: 86.

Notoscolex campestris ; Michaelsen, 1900: 192; 1910: 102.

Oreoscolex campestris ; Jamieson, 1974: 307-309, figs. 28A [segments misnumbered], 32K.

MATERIAL EXAMINED

SYNTYPES: NMV: G48, Parattah, SE Tasmania, collected by W.B. Spencer, February, 1893, in damp earth under logs, (one dissected entire worm, four complete specimens and one fragment, all in poor, shriveled condition yielding little useful information).

SPECIMENS: TM:K298, Parattah, 147º25'E.42º20'S., 18.viii.1954, V.V. and J.L. Hickman, under moss, in earth at base of cliff, also in earth along edges of logs, (nine specimens, six specimens here attributed to *N. campestris*, the largest of which is figured and dissected for the present description, plus three immatures probably of a *Vesiculodrilus* sp.; all these specimens were apparently included by Jamieson (1974: 243) under his wide characterization of *Vesiculodrilus hobartensis* (Spencer, 1895)); TM:K363-367, same details, (five specimens inspected by Jamieson); BM:1973:2:36-41, same details, (six specimens); AM:W5324-5328, same details, (five specimens, not re-inspected here).

Notoscolex dorazioi Blakemore, 2000

Fig. 131.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1491, Dalgarth Forest Reserve, N Tasmania, EQ 722 325, 30.vi.1992, R.D. D'Orazio, wet sclerophyll, (mature, dissected and drawn).

PARATYPES: (P1, P4) ANIC RB.97.5.9, Champion Reserve, NW Tasmania, 3 km along Pumping Station Road Forth, DQ 372 372, 40 m, R.D. D'Orazio and M. Cooper, wet sclerophyll, (two matures, one dissected); (P2, P5) TM:K1555, same details as P1, (two matures, one dissected); (P6) 14:810, same details as P1, (mature, sketched and dissected); (P7) 14:3655, same details as P1, (mature, sketched and dissected); (P8) 14:3057, same collection details as H, (dissected); (P9-14) 14:3058, same collection details as H, (one mature and four sub-adults); (P15) 14:886, Lower Wilmot, NW Tasmania, 5km from bridge at ALMA SRA towards Lower Wilmot, DQ 346 277, 240 m, 31.viii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, sketched and dissected); (P16) 14:709, Mt Roland, Minnow Creek, N Tasmania, Belstone Road until Minnow Creek, DQ 429 078, 300 m, 24.xi.1992, R.D.D. and M. Gittus, wet sclerophyll forest, (mature, sketched and dissected). dissected); (P17) 14:3523, same details as P16, (mature, dissected).

SPECIMENS: all superficially agree, 14:1495, same collection details as H, (six subadult or immature specimens); 14:3656, same details as P1, (18 subadult or immature specimens); 14:886, same details as P15, (six matures and two immatures); 14:1461, Dazzler Range, N Tasmania, EQ 764 349, 330 m, 29.vi.1992, R.D.D'Orazio and A. Mitchell, poor remnant rainforest, (seven matures, one dissected, and five immatures); 14:1466, Dazzler Range, EQ 756 389, 510 m, 29.vi.1992, R.D.D'Orazio and A. Mitchell, rainforest, (three matures, one dissected, and two immatures); 14:469, Lake Paloona Road, NW Tasmania, DQ 373 298, 75 m, 25.xi.1992, R.D.D'Orazio and M. Gittus, dry sclerophyll, (twelve matures and subadults, one dissected, and four immatures); 14:458, Mt Roland, Sheffield, DQ 406 115, 390 m, 23.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (mature, not well preserved, dissected); 14:164, Dazzler Range, EQ 755 376, 415 m, 29.vi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (three immatures); 14:3525 + 14:706, Mt Roland, Short Spur Rd., DQ 446 088, 240 m, 24.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (mature, dissected, plus twelve matures and two immatures); 14:371, Eugenena, Arboretum Nature Trail, NW Tasmania, DQ 414 357, 50 m, 26.viii.1992, R.D.D. and M.C., wet sclerophyll, (two aclitellate matures, both sketched and dissected - while agreeing superficially, both have annular calciferous glands most developed in segment 15, and one has a few supernumerary setae on two tail segments).

Notoscolex duplex Blakemore, 2000

Fig. 132.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:358, Coal River Gorge Nature Reserve, 6km along Rhydaston Rd, SE Tasmania, EN 325 965, 310 m, 17.viii.1992, R.D. D'Orazio and M. Cooper, sampled from dry sclerophyll gully, (mature specimen, dissected and drawn).

PARATYPES: (P1) 14:1713, Spinning Gum Forest Reserve, SE Tasmania, EN 393 950, 460 m, 17.viii.1992, R.D.D and M.C., (mature, sketched and dissected); (P2) 14:3678, same details as P1, (mature, dissected); (P3) 14:3679, same details as P1, (mature, dissected); (P4-8) 14:3680, same details as P1, (five matures); (P9) 14:3666, Tooms White Gum Reserve, EP 701 226, 600 m, 11.viii.1992, R.D.D. and M.C., remnant rainforest, (mature dissected); (P10-12) 14:3686-3688, same details as P9, (mature, dissecte, a juvenile and an immature); (P13) 14:356, Brookerana Reserve, EP 709 193, 590 m, 11.viii.1992, R.D.D and M.C., wet sclerophyll, (mature, dissected); (P14) 14:3685, same details as P13, (mature, dissected).

Notoscolex geevestoni Blakemore, 2000

Fig. 133.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1720, Geeveston, South Weld Rd., 6 kms passed Tahune Forest Reserve, SE Tasmania, DN 755 347, 235 m., 13.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, macerated in midbody, dissected and figured).

PARATYPES: (P1) ANIC:RB.00.1.14, same details as (H), (mature dissected); (P2) 14:3712, same details as (H), (mature, posterior amputee, dissected); (P3-7) 14:3713, same details as (H), (five specimens, four matures, P6 aclitellate, plus one juvenile that superficially agrees); (P8) 14:0426, same details as (H), (four specimens, one aclitellate mature, dissected, plus three juveniles two of which superficially agree).

Notoscolex gogensis Blakemore, 2000

Fig. 134.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3776, Gog Range, N Tasmania, DQ 560 055, 230 m, 16.xii.1991(?), R.M. (Bob Mesibov) and T.S. (Tammy Scarborough), wet sclerophyll on flowline, (mature missing tail, sketched and dissected).

PARATYPES: none.

Notoscolex huoni Blakemore, 2000

Fig. 135.

MATER,AL EXAMINED

HOLOTYPE: (H) 14:3605, Geeveston, South Weld Road 6km passed Tahune Forest Reserve, SE Tasmania, DN 755 347, 235 m., 13.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected and figured).

PARATYPE: (P) ANIC:RB.00.1.15, same details as (H), (mature dissected).

Notoscolex index Blakemore, 2000

Fig. 136.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:629, Geeveston, SE Tasmania, 1.65km along Peppers Road to site, DN 857 252, 260 m, 12.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected and drawn).

PARATYPE:(P) ANIC:RB.00.1.16, same details as H, (mature, disected);

SPECIMEN: 14:3060, same details as H, (an immature).

Notoscolex irregularis (Spencer, 1895)

Fig. 137.

Cryptodrilus irregularis Spencer, 1895: 34-35, figs. 1-3; Jensz & Smith, 1969: 88.

Notoscolex irregularis; Michaelsen, 1900: 191.

Oreoscolex irregularis; Jamieson, 1974: 309-310, figs. 28C [only partly figured and segments misnumbered], 32L.

MATERIAL EXAMINED

LECTOTYPE: NMV: G46, labeled: "Crypto. Sp 1. Tasm. C. irregularis" and "Table Cape, Tasmania Jan/[18]92" (a previously dissected and mature specimen designated by Jensz and Smith and stated to be in reasonable condition, now damaged around the male field and with several internal organs removed and missing from jar).

PARALECTOTYPES: none, although Jensz and Smith state the type description suggests that more were found.

SPECIMENS: 14:1259, Sisters Beach, Tram Rd. picnic area, CQ 892-572, 34 m, 19.iv.1993, R.D. D'Orazio and D.E. Soccol, (mature posterior regenerate, dissected and sketched); TM: K368-369, Table Cape, 24.viii.1954, J.L. Hickman, (two specimens); BM(NH): 1973:2:42, same details as TM: K368-369, (large mature, undissected).

Notoscolex leai Michaelsen, 1910

Fig. 138.

Notoscolex leai Michaelsen, 1910: 99-102, figs. 18, 19.

Oreoscolex leai; Jamieson, 1974: 310-311.

MATERIAL EXAMINED

TYPES: missing from Hamburg Museum (Reynolds & Cook, 1976: 126).

SPECIMENS: none found.

Notoscolex liffeyi Blakemore, 2000

Fig. 139.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0170, Liffey Forest Reserve, N. Tasmania, DP 763 827, 920 m., 2.vii.1992, R.D. D'Orazio and L.F. McGowan, rainforest, (mature, posterior amputee, dissected and figured).

PARATYPES: (P1) 14:3702, same details as H, (mature, dissected); (P2) 14:3703, same details as H, (mature, dissected); (P3-4) 14:3704, same details as H, (two aclitellate matures).

Notoscolex longus (Jamieson, 1974)

Fig. 140.

Oreoscolex longus Jamieson, 1974: 311-313, figs. 27B (p. 304), 32N,O (p. 325).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K370, Cox's Bight, 146º15E.43º30'S, Nov.1938 and Jun. 1939, C.D. King, Tasmanian Biological Survey, (mature, damaged by previous dissection, re-figured and re-inspected).

PARATYPES: (P1, P5) BM: 1973:2:43-44, same details as H, (P1 subadult, dissected); (P2) TM:K371, same details as H, (aclitellate, previously undissected); (P3) TM:K372, same details as H, (aclitellate, undissected); (P4) TM:K373, same details as H, (clitellate, dissected); (P6) AM:W5329, same details as H, (not inspected).

Notoscolex officeri (Spencer, 1895)

Fig. 141, Fig. 142.

Cryptodrilus officeri Spencer, 1895: 44-45, Figs. 28-30; Jensz & Smith, 1969: 90.

Trinephrus officeri; Michaelsen, 1900: 186-187.

Notoscolex officeri; Michaelsen, 1907: 162.

Cryptodrilus ? officeri; Jamieson, 1974: 280-282.

Oreoscolex sexthecatus Jamieson, 1974: 315-317, figs. 29A, 32P,Q.

MATERIAL EXAMINED

TYPES: NMV: G80, King River Valley, January 1894, C.S. Officer, recorded on MOV catalogue card as having four specimens that are not now in jar and are presumed lost (Jensz & Smith, 1969: 90).

Note: despite new material described here, I refrain from designating a neotype as none were obtained from the King River type-locality.

SPECIMENS: (S1-3) 14:1283, Cradle Mountain Road, just passed Hellyer Mine road to where creek crosses highway, CP 949 986, 670 m, 16.vi.1993, R.D. D'Orazio and D. Soccol, peat swamp, (three mature specimens having same distribution of genital markings, one dissected and figured); (S4-6) 14: 3260, same details 14:1283, (three mature specimens, one dissected and drawn, one a posterior amputee also dissected); (S7-8) 14:3259, same details as 14:1283, (two mature specimen, one a posterior amputee, the other dissected and drawn); (S9) 14: 0055, Pelion Valley, 417700 5367500, QVM, (one mature, dissected and figured); (S10-14) 14:1271, Cradle Mountain Rd., CP 901 976, 680 m, 16.vi.1993, R.D. D'Orazio and D.E. Soccol, cool temperate rainforest, (mature, dissected; plus one subadult and three immatures); 14:1278, Cradle Mountain Rd., CP 970 989, 610 m, 15.vi.1993, R.D. D'Orazio and D.E. Soccol, cool temperate rainforest, (two immatures that superficially agree); 14:1272, Cradle Mountain Rd., CP 901 976, 680 m, 16.vi.1993, R.D. D'Orazio and D.E. Soccol, (three immatures that superficially agree); 14:2523, Waratah, NW Tasmania, CQ 702 064, 680 m, 22.ix.1990, R. Mesibov, (subadult specimen, dissected and sketched);

(S15) TM:K378 (*Oreoscolex sexthecatus* ex-Holotype), Lake St Clair, R.W. Kerr, Feb. 1941, (weakly clitellate, posterior amputee at about segment 27, macerated, heavily parasitized, and much damaged by previous dissection with spermatheca, prostates, and intestine removed and several of these organs missing from jar).

Notoscolex pardus Blakemore, 2000

Fig. 143.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1414, Queenstown, just entered Franklin-Gordon Wild Rivers National Park, W Tasmania, CP 860 213, 200 m, 10.viii.1993, R.D. D'Orazio and D. Soccol, wet sclerophyll on slope, (mature specimen, dissected and drawn).

PARATYPES: (P1) 14:3261, same details as H, (mature dissected); (P2) 14:3262, same details as H, (mature).

Notoscolex peculiaris (Jamieson, 1974)

Fig. 144.

Oreoscolex peculiaris Jamieson, 1974: 313-315, figs. 28B (p. 306), 32M (p. 325).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K374, Mt Wellington, Shoobridge Bend Track, 147º15'E.42º55'S, 19.viii.1971, B. Jamieson and E.A. Bradbury, 580 m, in loam and clay in eucalypt - fern woodland, (macerated mature, much damaged by previous dissection).

PARATYPES: (P1) BM: 1973:2:45, same details as H, (macerated and damaged by dissection); (P2) TM:K375, same details as H, (mature, posterior regenerate, undissected); (P3) BM:1973:2:46, same details as H, (macerated, only dissected in posterior); (P6) TM:K376, same details as H, (aclitellate, damaged in mid-body, undissected); (P7) TM:K377, same details as H, (mature, damaged in mid-body, undissected); AM:W5330 (P4), same details as H, (not inspected).

SPECIMENS: 14:3522, Mt Wellington, Shoobridge Bend Track, 147º15'E.42º55'S., 21.ii.1996, R.J. Blakemore, from wet forest soil, (16 specimens, seven matures - two dissected, three subadults and six immatures that superficially agree).

Notoscolex penguini Blakemore, 2000

Fig. 145.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1985, Penguin, N Tasmania, DQ 188 445, 75 m, 20.i.1994, R.D. D'Orazio and D.E. Soccol, (mature specimen, figures and dissected).

PARATYPES: (P1) 14:3263, same details as H, (mature posterior amputee, dissected); (P2) 14:3264, same details as H, (mature posterior amputee, dissected).

Notoscolex pilus Blakemore, 1997

Fig. 146, Fig. 147, Fig. 148.

Notoscolex pilus Blakemore, 1997a: 1701-1704, figs 6 & 7.

Notoscolex dinephrus Blakemore, 2000b: 20-21, fig 12. **Syn. nov.**

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3325, Dismal Swamp Nature Reserve, NW Tasmania, 40 59'S.144º51'E, 8.ix.1987, QVM, (mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.96.11.8, same collection data as H, (mature, dissected); (P2) TM:K1530, Belmont Rd, Waratah, NW Tasmania, 41º23'S 145º32'E, 31.v.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, dissected); (P3) 14:3326, same details as P2, (mature); (P4) 14:3566, same details as P2, (weakly clitellate mature, possibly posterior regenerate, dissected; plus an unregistered immature that superficially agrees); (P5) 14:2524, Wombat Hill near Waratah, NW Tasmania, 41º29'S 145º27'E, 22.ix.1990, R. Mesibov, (mature, dissected); (P6) ANIC:RB.96.11.14, same details as P5, (mature); (P7) ANIC:RB.96.11.15, same details as P5, (mature, dissected); (P8) TM:K1533, same details (mature); (P9), same details (mature, dissected); (P10) 14:3567, same details as P5, (mature); (P11) 14:3568, same details as P5, (sub-adult); (P12) 14:3569, same details as P5, (sub-adult); (P13) 14:0111, Frog Flats, Pelion Valley, NW Tasmania, 41º48'S.146º02'E, 13.ii.1992, QVM, (mature, dissected and figured); (P14) 14:0124, near Old Pelion Hut, Pelion Valley, NW Tasmania, 41º48'S.146º03'E, 12.ii.1992, QVM, (mature).

SPECIMENS: (S1) 14:3352 (ex-H of *N. dinephrus*), Sprent Basin, Lake Pedder north, DN 175 633, 310 m, 9.iv.1996, R.J. Blakemore, Banksia/Ti-tree on edge of lake, (mature, dissected and figured); (S2) 14:3481 (ex-P1 of *N. dinephrus*), same details as S1, (subadult, dissected); (S3) 14:3482 (ex-P2 of *N. dinephrus*), same details as S1, (aclitellate posterior amputee); (S4) 14:3490 (ex-P3 of *N. dinephrus*), Bell Basin, Lake Pedder north, DN 406 346, 310 m, 9.iv.1996, R.J. Blakemore, under Ti-tree, (mature, complete but damaged in the midbody);

(S5) 14:0028: Melaleuca, South Coast Track, DM 328 904, 10m, 5.iii.1992, Louise F. McGowan, from button grass, (mature, dissected and sketched); (S6) 14:2833, Birchs Inlet, W Tasmania, CN 751 878, 10 m, 17.x.1993, P. Swiatkouski, rainforest hand collected, (mature dissected, figured); (S7) 14:3643, same details as S6, (mature, dissected); (S8) 14:3644, same details S6, (abnormal mature with extra pair of spermathecae and all pores and organs displaced posteriorly by one segment count possibly due to heteromorphic regeneration of anterior segments).

Notoscolex salutigerulus Blakemore, 2000

Fig. 149.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3773, Gog Range, DQ 461 058, 530 m, R.M. and T.S. (Bob Mesibov and Tammy Scarborough?), wet sclerophyll, (mature, possibly posterior regenerate as last eight segments narrower, figured and dissected).

PARATYPES: (P1) 14:3777, Montagu Swamp, Montagu, CQ 287 547, 30 m, 28.xii.1990, R. Mesibov, (mature, dissected); (P2-4) 14:3778, Christmas Hills, NW Tasmania, CQ 309 667, 60 m, 6.xii.1990, R. Mesibov, (two matures, one dissected, plus one subadult).

Notoscolex simsoni (Spencer, 1895)

Fig. 150.

Megascolides simsoni Spencer, 1895: 45-46, Figs. 31-33; Jensz & Smith, 1969: 101-102.

Trinephrus simsoni ; Michaelsen, 1900: 186.

Notoscolex simsoni ; Michaelsen, 1907: 162; 1910: 97-99.

Cryptodrilus simsoni ; Jamieson, 1974: 294-296, Figs 19C (p 273), 25A (p 294), 31N, O (p. 323), Table 11.

MATERIAL EXAMINED

LECTOTYPE: (L) MOV:F40182 (previously NMV:G182), labelled: "Megascolides simsoni Launceston Tas Coll. A. Simson 1892"; "Mega Simsoni (=C. sp 2. Tas)"; "Crypto. Sp 2. Tasm.", and "Aug Simson Launceston 2/92", (posterior amputee in good condition but dissected, presumably by Jamieson as Jensz and Smith (1969: 101) state it was an entire undissected specimen).

PARALECTOTYPES: none present in MOV.

SPECIMENS: 14:1300, Blackwell Rd., NW Tasmania, CQ 790 352, 250m, 19.iv.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, dissected); 14:3779, Urks Loop track, N Tasmania, DP 367 975, 560 m, 16.ix.1992, R.D. D'Orazio, wet sclerophyll, (mature specimen, dissected, plus one perichaetine specimen of another species); 14:3653, Birralee, N Tasmania, DQ 840 175, 4.ix.1994, QVM, (eight specimens, three matures, two subadults, one juvenile and one immatures - one damaged mature dissected); ANIC:RB.97.5.8, Birralee, N. Tasmania, DQ 837 161, 4.ix.1994, QVM, , rough pasture (mature, dissected); TM: K352-354 (Jamieson's specimens 1-3), Fern Dene, Ironcliff Road near Penguin, 13.x.1954, collector unknown, (one mature posterior amputee tagged "1", previously undissected; one mature tagged "2", dissected; one mature tagged "3", undissected); BM(NH): 1973:2:29-30 (Jamieson's specimens 5 and 8), same details as TM: K352-354, (two matures, one a posterior amputee, dissected).

Notoscolex triplex Blakemore, 2000

Fig. 151.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:802, Tooms White Gum Reserve, E Tasmania, 31.5km along McKays Road, EP 701 226, 600 m, 11.viii.1992, R.D. D'Orazio and M. Cooper, rainforest, (mature, dissected and drawn).

PARATYPE: (P) 14:3689, same details as H, (aclitellate mature, dissected).

Notoscolex wellingtonensis (Spencer, 1895)

Fig. 152.

Cryptodrilus wellingtonensis Spencer, 1895: 43-44, Figs. 25-27; Jensz & Smith, 1969: 92-93.

Notoscolex wellingtonensis; Michaelsen, 1900: 192-193; 1910: 102.

Oreoscolex wellingtonensis; (part.) Jamieson, 1974: 317-318, Figs 29B [segments miscounted], 32R.

MATERIAL EXAMINED

LECTOTYPE: NMV: G75, labeled in Spencer's hand: "Hobart from A. Morton Esq. Aug/92", "C. sp 11 T.", in the jar is a metal tag (from Tasmanian Museum?) "TM S1048", (a previously dissected specimen in poor condition, coiled, hardened and providing little information).

Note: because of its poor condition, Jensz and Smith (1969) recorded this specimen as a syntype rather than a lectotype; however, as no other syntypes are known they are deemed to have actually designated it as the lectotype under Article 74.6 of ICZN (1999). Jamieson's (1974:318) "topotypic" designation has no regulation under ICZN.

SPECIMENS: TM: K379, Domain, Hobart, 14.viii.1954, J.L. Hickman, (Jamieson's specimen 1, previously dissected mature); AM:W5331, same collection data as TM: K379 (Jamieson's specimen 2, not re-inspected here).

[Note: BM(NH):1973:2:47 (Jamieson's specimen 3), from Kelly's Basin, Port Davey is a large, dissected mature that differs substantially from Spencer's species - its genital markings consist of two elongate bands in 12/13 and 20/21 that are wider than bb, and its spermathecal diverticula are small and clavate rather than sessile multiloculate; in these respects it fails to conform to the type description, is probably a new species, and the Port Davey distribution for *N. wellingtonensis* can therefore be disregarded].

Nexogaster quaterni Blakemore, 2000

Fig. 153.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0560, Yolla, Blackwell Road, NW Tasmania, CQ 790 352, 250 m, 9.iv.1993, R.D. D'Orazio and D.E. Soccol, sampled 5.5 km along road in rainforest, (mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.00.1.22, same details as H, (mature, dissected); (P2) 14:3716, same details as H, (mature posterior regenerate in last 17 segments, disected); (P3) 14:3717, same

details as H, (mature); (P4) 14:3718, same details as H, (mature); (P5) 14:3719, same details as H, (mature); (P6-11) 14:0561, Yolla, Blackwell Road, Wynyard, NW Tasmania, CQ 786 351, 250 m, 9.iv.1993, R.D. D'Orazio and D.E. Soccol, samples a further 1.5 km along road (i.e., 7 km) in rainforest, (four matures and two juveniles, one mature dissected); (P12-18) 14:1061, Hellyer Gorge Reserve, NW Tasmania, CQ 836 294, 310 m, 31.v.1993, R.D. D'Orazio and D.E. Soccol, (seven matures, one dissected).

Nexogaster sexies Blakemore, 1997

Fig. 154.

Nexogaster sexies Blakemore, 1997a: 1698-1701, fig. 5.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3320, Marrawah, N.W. Tasmania, 41°01'S 144 44'E, 7th September 1987, "Killara" property , S. Pilkington, (mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.96.11.9, same details as H, (mature, dissected); (P2) TM:K1529, same details as H, (mature); (P3) ANIC:RB.96.11.10, same details as H, (mature, aclitellate); (P4), 14:3324, same details as H, (mature specimen, dissected); (P5) 14:3571, New Paddock at "Killara", 24th June 1993, R.J. Blakemore, J. Buckerfield, S. Pilkington, (mature specimen); (P6) ANIC:RB.96.12.2, same details as P5, (mature, dissected); (P7), TM:K1534, same details as P5, (mature).

Cryptodrilus polynephricus Spencer, 1895

Fig. 155.

Cryptodrilus polynephricus Spencer, 1895: 35-36, figs. 4-6; Jamieson, 1972b: 169-172, figs. 6D and 7E, 7F, 7G; Blakemore, 2000c: 213.

Trinephrus polynephricus : Michaelsen, 1900: 185-186.

Megascolides polynephricus ; Michaelsen, 1907: 161.

Cryptodrilus polynephricus polynephricus (part.) ; Jamieson, 1974: 282-288, figs. 21A, 22, 24A, 31H.

Perionychella (Vesiculodrilus) mortoni (part.); Jamieson, 1974: 248.

(Non *Cryptodrilus polynephricus urethrae* Jamieson, 1974: 288-291; see *Aporodrilus urethrae* Blakemore, 2000).

[Non *Cryptodrilus polynephricus polynephricus* ad *urethrae* Jamieson, 1974: 291-293, figs. 21B, 24B, 31I; under Article 1.3.4 of ICZN (1999) intrasubspecific entities, such as this "morph", are excluded from the provisions of the Code].

MATERIAL EXAMINED

NEOTYPE: QVM 14:3512, Mt Wellington, 147º15'E.42º55'S, Shoobridge Bend Track, 21.ii.1996, R.J. Blakemore, under rocks and leaf litter, (mature specimen, dissected and figured). This specimen is herein designated neotype under Article 75 of ICZN (1999) in order to clarify the taxonomic status of *Cryptodrilus polynephricus* - it is consistent with Spencer's original description, with Jamieson's characterization of an incompletely mature paralectotype, and is from the type locality.

[Note: From specimens not previously recognized as types, Jensz & Smith (1969: 90) had designated MOV:F40041 (previously NMV:G41) as lectotype, but this mature specimen, 95mm long with 140 segments and previously undissected in the anterior (which, despite this, was claimed by Jamieson (1974: 286) to be "*Perionychella (Vesiculodrilus) mortoni"*), has on inspection by the present author been demonstrated to be in fact a subspecies of *Vesiculodrilus mortoni* and, as it could not be a syntype of *Cryptodrilus polynephricus*, it loses its status as lectotype under Article 74.2 of ICZN. Dr B.J. Smith has agreed that this specimen's invalid designation was inadvertent, and, although the sample jar had labels stating "Mt Wellington, July 1892 A. Morton, C sp 3", and, in Spencer's hand, "C. sp. 3. T." and "*C. polynephricus* 2 or 3 specimens", it has clearly at some stage been misplaced].

PARALECTOTYPES (designations by Jensz & Smith, 1969: 90): MOV:G1436, four complete specimens from Mt Wellington, July 1892, A. Morton, formerly included with NMV:G41, for which the museum register lists lodgment of five specimens - one, now F40041, was separated off by Jensz and Smith (1969) with details given for MOV:F40041 above. The four remaining paralectotypes, listed in reasonable condition, were initially described by Jamieson (1972b:170) as aclitellate without genital markings; however, only three "incompletely mature" specimens were redescribed by Jamieson (1974: 286, 288), at least one of which had by this time acquired "normal" markings. In November, 1995, none of these specimens were traceable in MOV, and were later found to be on outstanding loan to Queensland University (T. Stranks, MOV Curator of Invertebrates, pers. comm. 3.vi.1996).

MOV: G40, an entire specimen dissected (presumably by Spencer), now in badly dried condition and of little use for study, with two Spencer labels: "C sp 3 T. - Parattah Feb./'92". (ca. 147º25'E.42º20'S) and "C sp 3 T. (Mt Wellington) AM/'92" (147º15'E.42º55'S).

[Taxonomic note: as paralectotypes do not regain their status as syntypes if the lectotype is lost and they have no name-bearing status (under Articles 73.2.2, 74F of ICZN, 1999), this specimen would have been eligible for designation as neotype although its poor state of preservation compelled giving preference to fresh material].

SPECIMENS: (Note: apart from the author's fresh material from Mt Wellington, several of the specimens listed here are in poor state and cannot be unequivocably identified with *C. polynephricus*, they are listed nevertheless since several formed a part of Jamieson's descriptions and have not yet been shown to belong to other taxa).

14:3513, Mt Wellington, 147º15'E.42º55'S, Shoobridge Bend Track, 21.ii.1996, R.J. Blakemore, same details as neotype, (17 specimens that superficially agree, including several immatures, one dissected to confirm internal anatomy); 14:3086, Lake Rowallan, C Tasmania, ca. 41º44'S.146º14'E, Lake Bill track, 9.ix.1992, QVM, in myrtle-grove, (clitellate mature, dissected and sketched); BM:1973:2:11-14 (Jamieson's specimens 1-4), Fern Tree, Hobart, 147º15'E.42º55'S, 17.viii.1954, Dr J.L. Hickman, in fern glade under logs, (four specimens. Note: the original label in this jar in Hickman's hand states "**Fern Glade, Fern Tree, 17/8/54, under logs. J.L.H.**", a second typed label added by Jamieson has "**Fern Glade, Emu R., Burnie. Under logs. J.L. Hickman. 17.V.1954. Ident: B.G.M. Jamieson**" - this latter location and date are erroneous; a further Jamieson label says "*C. p. p.* with bladders and ureter", pers. obs.); BM:1973:2:15-16 (Jamieson's specimens 5-6), Tarraleah, 146º25'E.42º20'S, 27.v.1954, Dr J.L. Hickman, over pipeline [referring to the hydroelectric channels], (two mature specimens, undissected; Note: there is an inconsistency in these registrations as the next sample, 14:1926, that was donated to QVM contains the same Jamieson specimen numbers); 14:1926, Tarraleah, over pipeline, 146º25'E.42º20'S, 27.v.1954, Dr J.L. Hickman, labeled "Specs 5,6. Ident: BJ", (only one specimen in the jar, a mature tagged "6", dissected); 14:1967 (formerly Jamieson's T39-40, specimens 12-13), Mt Wellington, Hobart, 147º15'E.42º55'S, 27.x.1955, Dr J.L. Hickman, (two mature specimens, one previously dissected in the anterior only and with some internal organs removed and missing from jar, the other sectioned only in the tail; as Jamieson based his description on specimen 12, it is surprising that it was not dissected caudally); (Note: Jamieson's specimens 16 and 17, BM:1973:2:17-18, "from the top of Mt Wellington under stones, JLH, 13.xi.1954", are smaller specimens with genital markings in 10/11,11/12 in setal a lines and are not here considered conspecific); 14:1969, (formerly BJ: 41-42?, Jamieson's specimens 10-11, tagged "*ad urethrae*"), Collinsvale near Hobart, 147º15'E.42º50'S, 9.xi.1955, Dr J.L. Hickman, in myrtle forest, (two matures, dissected); BM:1973:2:19 (Jamieson's specimen 24), Waterworks Rd, Hobart, 147º20'E.42º50'S, 17.viii.1954, Dr J.L. Hickman, under stones, (mature, dissected; Note: this is the same date that Dr J.L.Hickman collected specimens from Fern Tree, Hobart, see BM:1973:2:11-14 above); TM:K334 (Jamieson's specimen 37), Lenah Valley, Hobart, 147º10'E.42º50'S, 31.viii.1953, Dr J.L. Hickman, under stones on banks of New Town Creek, (one mature specimen, previously dissected in the anterior only, here fully dissected and

described, plus an unregistered, undissected, subadult); TM:K339 (Jamieson's specimen 43) and K340 (Jamieson's specimen 42), tagged "*ad urethrae*", Florentine Valley, 146º25'E.42º35'S, 7.iii.1956, Mr. J.M. Gilbert, surface soil under litter in *Eucalyptus regnans* forest under stones, (two matures, one previously undissected apart from a nick in the tail, both redescribed here); TM:K414 (Jamieson's "*Perionychella (Vesiculodrilus) mortoni"*), from Eaglehawk Neck, 147º55'E.43º00'S, 13.v.1954, Dr J.L. Hickman, (sample contained two specimens: specimen "1" is now in *Vesiculodrilus metandris* Blakemore, 2000, specimen "2" is a single damaged specimen, 212 mm long, that is possibly *C. polynephricus*); TM:K415 (Jamieson's "*Perionychella (Vesiculodrilus) mortoni*"), supposedly from "Fern Glade, Burnie" but most probably from Fern Tree, Hobart as a similar calamitous error was also made for specimens BM:1973:2:11-14 of *C. polynephricus* noted above, (sample contains two specimens: specimen "1" is now in *V. mortoni montis* Blakemore, 2000, specimen "2" a previously undissected specimen in poor condition that is possibly *C. polynephricus*); TM:K416 (Jamieson's "*Perionychella (Vesiculodrilus) mortoni*"), from Sandy Bay, Hobart, (a previously undissected subadult, 210 mm long, that is possibly *C. polynephricus*); BM:1973:2:20-23 (Jamieson's specimen 46), Tyenna River (formerly Russell River), 146º40'E.42º45'S, 16.ii.1939, Tasmanian Biological Survey, J12, C.D. King, labeled "Only specimen 46 (BMNH 1975.2.20) is positively C. p.p. ad urethrae B.Jamieson", (four macerated specimens that provided little useful information).

Cryptodrilus ramosus Blakemore, 2000

MATERIAL EXAMINED

See sub-species.

Cryptodrilus ramosus copiafluvis Blakemore, 2000

Fig. 156.

MATERIAL EXAMINED

HOLOTYPE: 14:3657, Plenty River, Uxbridge, sampled where river crosses beneath road, SE Tasmania, DN 885 549, 470 m., 11.x.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (mature specimen, dissected and figured).

PARATYPES: ANIC:RB.97.5.10 (P1), same details, (mature, aclitellate, possibly posterior regenerate, dissected); TM: K1556 (P2), same details, (mature, aclitellate, dissected); 14:1850 (P3), same details, (mature, dissected).

Cryptodrilus ramosus monsagris Blakemore, 2000

MATERIAL EXAMINED

HOLOTYPE: 14:1862, Mt Field National Park, SE Tasmania, DN 764 747, 200 m., 13.x.1993, R.D. D'Orazio and D.E. Soccol, walked the length of Russell Falls Trail sampling in 3 spots from wet sclerophyll/rainforest, (mature specimen, dissected).

PARATYPES: (P1-2) ANIC:RB.00.1.10, same details, (mature, posterior amputee @ 48, dissected, plus a juvenile, dissected).

Cryptodrilus spenceri Blakemore, 2000

Fig. 157.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3517, Tunnack, SE Tasmania, 147º30'E.42º25'S, 21.ii.1996, R.J. Blakemore, in woodland soil, (mature specimen, dissected and drawn).

PARATYPES: (P1) 14:3518, same details, (mature, posterior regenerate, dissected); (P2) 14:3519, same details, (aclitellate mature, undissected); (P3) 14:3520, same details, (aclitellate mature, slightly damaged, dissected); (P4-8) 14:3521, same details, (five immature specimens agreeing superfically).

Aporodrilus ? albertisii (Cognetti de Martiis, 1910)

Fig. 158.

Megascolides Albertisii Cognetti de Martiis, 1910: 329-331, Figs. 3-6.

Notoscolex albertsi [sic] ; Jamieson, 1971: 73, 78.

Cryptodrilus albertisi ; Jamieson, 1974: 270-271.

TYPES: a single sub-adult collected from Mt Wellington, Feb., 1878 by Sig. Enrico D'Albertis and Dott. Odouardo Beccari, (this type specimen not located according to Reynolds & Cook, (1976: 67)).

SPECIMENS: none found.

Aporodrilus avesiculatus **(**Jamieson, 1974**)**

Fig. 159, Fig. 160.

Cryptodrilus avesiculatus Jamieson, 1974: 271-273, Fig. 18B [segments misnumbered], 31A (p. 322).

Aporodrilus avesiculatus; Blakemore, 2000b: 4.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K319 Kelly's Basin, Port Davey, SW Tasmania, 145°53'E.43°17'S, Tasmanian Biological Survey J17 Mr C.D. King, Jan 1940, (mature specimen in rather poor condition, previously dissected, with spermatheca removed and missing from jar).

PARATYPES: (P1) BM:1973:2:5, same details as H, (mature, dissected); (P2) TM:K320, same details as H, (undissected in anterior); (P3) TM:K321, New Harbour, SW Tasmania, 146º10'E.43º31'S, C. Davis, no date, (from original label, cf. Jamieson, 1974: 273 "146º70'E.43º30'S", "Mr C.D. King"), tagged "P3", (undissected in anterior); (P4) TM:K322, same details as P3, tagged "P4", (mature, undissected; Note: these two specimens were mixed between the labeled jars, but since they were tagged , the correct specimens are in the correct jars as stated here); (P5) AM:W5206, same details as P3-4, (mature, posterior amputee, previously dissected, re-inspected here); (P6) AM:W5207, same details as P3-4, (mature, damaged, undissected).

SPECIMENS: (S1-3) 14:3101, Melaleuca, Celery Top Island, SW Tasmania, DM 309 977, 4.iii.1992, L.F. McGowan, in rainforest, (three specimens, one mature dissected and sketched, one mature posterior regenerate, one subadult); (S4) 14:3636, Melaleuca, Half-woody Hill, DM 338 889, 5.iii.1992, L.F. McGowan, in wet forest, (mature posterior-amputee, dissected and figured); (S5-10) 14:0043, Melaleuca, Celery Top Island, DM 309 977, 4.iii.1992, L.F. McGowan, in rainforest, (six specimens, three matures one dissected and figured, one subadult, and two immatures that superficially agree); (S11-18) 14:0044, Melaleuca, Half-woody Hill, DM 338 889, 5.iii.1992, L.F. McGowan, in wet forest, (eight specimens, five matures, one dissected, two subadults, one immature); (S19-31) 14:0045, Melaleuca, DM 339 889, 80m, 5.iii.1992, L.F. McGowan, base of Eucalypt, (thirteen specimens, ten matures and three subadults); (S32) 14:0042, , Melaleuca, nr. Half-woody Hill, DM 339 909, 1.iii.1992, L.F. McGowan, in low scrub, (immature); (S33) 14:3646 (ex 14:1914), Cox Bight, 146º15'E.43º30'S, DM 386 851, "Cox's Bight TBS Nov. 1935 Jb8 and June 1939 J9, C.D. King", labeled on UQ paper "Not *O. longus* from 18/1", tagged "3", (previously dissected mature, one of three specimens, the others are placed in *Gastrodrilus kingi* Blakemore, 2000).

Aporodrilus brunyensis **(**Jamieson, 1974**)**

Fig. 161.

Cryptodrilus brunyensis Jamieson, 1974: 273-275, Fig. 19A, 31B, C (p. 322).

Aporodrilus brunyensis; Blakemore, 2000b: 4.

MATERIAL EXAMINED

HOLOTYPE: TM:K323 (H), Bruny Island, 147°,15'E.43°22'S, 10.iv.1971, Mr A.J. Dartnall, from rainforest at summit of Mt Mangana, (mature, dissected and drawn, penial setae possibly removed).

PARATYPE: BM: 1973:2:6 (P), same details as H, (mature, dissected with some spermathecae removed and missing from the jar, penial setae possibly also removed).

Aporodrilus dombrovskisi Blakemore, 2000

Fig. 162.

Aporodrilus dombrovskisi Blakemore, 2000b: 21-22, fig 13.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3351, Sprent Basin, Lake Pedder north, DN 175 633, 310 m, 310 m, 9.iv.1996, R.J. Blakemore, in Ti-tree litter on edge of lake, (a mature specimen, dissected and figured).

PARATYPES: (P1) 14:3406, same details as (H), (mature, dissected); (P2) 14:3424, same details as (H), (mature posterior amputee, dissected); (P3) 14:3425, Scott's Peak, Huon Campsite, Lake Pedder south, DN 433 345, 320 m, 8.iv.1996, QVM, in peaty layer over clay in rainforest, (mature, dissected); (P4) 14:3426, same details as (P3), (mature, posterior amputee); (P5-6) 14:3427, same details as (P3), (two immatures, one dissected); (P7) 14:3440, Maria Creek, Lake Pedder, 442300 5250500, 315 m, 11.iv.1996, R.J. Blakemore, in Smithton peppermint *Eucalyptus nitida* woodland litter, (mature anterior amputee plus an unregistered tail); (P8-9) 14:3483, Bell Basin, Lake Pedder north, 419600 5259700, 310 m, 9.iv.1996, R.J. Blakemore, in Ti-tree litter, (two mature specimens).

Aporodrilus doveri Blakemore, 2000

Fig. 163.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3771, Dover, 4.4km from Adamson Rd/Creekton Rd intersection to Creekton Rivulet, SE Tasmania, DN 922 983, 110 m, 20.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected).

PARATYPE: (P) ANIC.RB.98.1.22, same details as H, (aclitellate mature, dissected).

Aporodrilus enteronephricus **(**Jamieson, 1974**)**

Fig. 164.

Cryptodrilus enteronephricus Jamieson, 1974: 277-280, Fig. 2, 20, 31E-G (p. 322).

Aporodrilus enteronephricus; Blakemore, 2000b: 4.

MATERIAL EXAMINED

HOLOTYPE: TM:K325 (H), Dee Bridge, C Tasmania, Lyell Highway, 146º38'E.42º24'S., 24.v.1954, Dr J.L. Hickman, (mature, previously dissected with spermatheca missing, re-inspected and sketched).

PARATYPES: (P1) BM:1973:2:9, Marlborough Highway, C. Tasmania, (near Bronte), 146º30'E.42º10'S., 26.v.1954, Dr J.L. Hickman, (mature, dissected); (P3) BM:1973.2.10, Lyell Highway, 5 miles from Bronte towards Hobart, 146º35'E.42º15'S., 24.v.1954, Dr J.L. Hickman, (mature, dissected with internal organs removed and missing from jar); (P6) TM:K326, same details as P1, (mature, dissected, sample also contains four unregistered immatures); (P7) TM:K327, same details as P1, (mature, undissected); (P8) TM:K328, same details as P1, (subadult, undissected); (P9) TM: K329, same details as P1, (subadult posterior amputee, undissected); (P10) TM:K330, same details as P1, (mature, dissected).

NON-TYPE SPECIMENS: QVM:14:1928 (formerly BJ: T28-32, "P11-15"), Tarraleah over pipeline, 146º25'E.42º20'S, 27.v.1954, Dr J.L. Hickman, (five specimens, two dissected); 14:3265, Pump House Point, Lake St Clair, 146º15'E.42º05'S., 140 m, 12.x.1995, R.J. Blakemore, from base of an eucalypt, (two specimens, one mature dissected, and an immature).

MATERIAL NOT EXAMINED: (P4-5) AM:W5211-5212, Tarraleah, Lyell Highway, 146º25'E.42º20'S, Dr J.L. Hickman, 22.v.1954.

Aporodrilus fuscus Blakemore, 2000

MATERIAL EXAMINED

See sub-species.

Aporodrilus fuscus fuscus Blakemore, 2000

Fig. 165.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0030, Half-woody Hill, Melaleuca SW Tasmania, DM 339 889, 80 m, 5.iii.1992, L.F. McGowan, base of eucalypt, (mature specimen figured and dissected).

PARATYPES: (P1) ANIC:RB.97.3.10, same details as H, (mature dissected); (P2) TM:K1548, same details as H, (mature specimen, abnormal as several midbody segments fused or half duplicated, dissected); (P3) 14:3633, same details as H, (mature, dissected); (P4) ANIC:RB.97.3.11, same details as H, (mature); (P5) TM:K1549, same details as H, (mature); (P6-7) 14:3632, same details as H, (three matures, two aclitellate); (P9-P14) 14:0029, Celery Top

Island, Melaleuca DM 309 977, 4.iii.1992, L.F. McGowan, rainforest, (four matures and two subadults); (P15-P19) 14:0032, Half-woody Hill, Melaleuca SW Tasmania, DM 338 889, 5.iii.1992, L.F. McGowan, wet forest, (three slightly damaged matures, one dissected, and two subadults plus two fragments); (P20-22) 14:0046, same details as H, (three subadults, one dissected).

Aporodrilus fuscus violaceus Blakemore, 2000

Fig. 166.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0031, near Half-woody Hill, Melaleuca SW Tasmania, DM 339 909, 15 m, 1.iii.1992, L.F. McGowan, low scrub, (mature specimen figured and dissected).

PARATYPES: (P1) ANIC:RB.97.4.2, same details as H, (mature dissected); (P2) TM:K1550, same details as H, (mature specimen, tail missing, dissected); (P3) 14:3637, same details as H, (mature); (P4) ANIC:RB.97.4.3, same details as H, (mature posterior amputee); (P5) TM:K1551, same details as H, (mature); (P6-10) 14:3638, same details as H, (two matures, one subadult and two immatures).

Aporodrilus hartzi Blakemore, 2000

Fig. 167.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3783, Geeveston, SE Tasmania, Keoghs Creek, Keoghs Road, DN 828 218, 180 m, 14.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected).

SPECIMENS: 14:0657, same details as H, (seven specimens that are superficially similar but are insufficiently diagnosed for inclusion as paratypes).

Aporodrilus melaleucus Blakemore, 2000

Fig. 168.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3634, Half-woody Hill, Melaleuca SW Tasmania, DM 339 889, 80 m, 5.iii.1992, L.F. McGowan, base of eucalypt, (mature specimen figured and dissected).

PARATYPES: (P1) ANIC:RB.97.4.1, Half-woody Hill, Melaleuca SW Tasmania, DM 338-889, 5.iii.1992, L.F. McGowan, wet forest, (mature, dissected); (P2) 14:3635, same details as (P1), (mature posterior amputee, dissected); (P3) TM:K1552, same details as (H), (mature, dissected).

Aporodrilus monogynus Blakemore, 2000

Fig. 169.

Aporodrilus monogynus Blakemore, 2000b: 23-24, figs. 14, 15.

Cryptodrilus polynephricus urethrae (part.); Jamieson, 1974: 288-291, figs 23A, 24C, 31K-L.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3331, Island Road, Lake Gordon south, 438800 5258900, 310 m, 14.iv.1996, R.J. Blakemore, in humus of Huon pine forest, (mature posterior amputee, dissected and figured).

PARATYPES: (P1) 14:3437, Maria Creek, Lake Pedder, 442000 5250600, 310 m, 11.iv.1996, R.J. Blakemore, in litter under *Eucalyptus nitida* woodland, (mature, dissected and figured); (P2) 14:3398, same details as H, (mature lacking tail); (P3) 14:3399, same details as H, (mature, dissected); (P4) 14:3400, same details as H, (mature); (P5) 14:3401, same details as H, (subadult); (P6) 14:3402, same details as H, (immature plus two unregistered tails); (P7) 14:3428, Bonnet Bay, Lake Pedder, 431150 5248260, 310 m, 12.iv.1996, R.J. Blakemore, M. Driessen, M. Anderson, Ti-tree along creek, (mature, dissected plus several unregistered immatures and bits); (P8-9) 14:3438, same location as P1, (two matures); (P10-13) 14:3439, same location as P1, (four immatures); (P14) 14:3458, same details as P7, (mature).

SPECIMENS: BM(NH):1973:2:24 (ex-P1 *A. urethrae*) , Arve Valley (not "Arne"), SE Tasmania, 146º50'E.43º05'S., 10 mls [16 km] from Geeveston (not "Greeveston"), 11.xi.1955, J.L. Hickman, (mature, dissected); TM:K343 (ex-P3 of *A. urethrae*), Arve Valley, 16 km from Geeveston, 146°50'E.43°05'S, 11.xi.1955, J.L. Hickman, labeled "P3", (mature, previously dissected, but only after clitellum); TM:K344 (ex-P4 of *A. urethrae*), same details as K343, labeled "P4", (mature, undissected); TM:K345 (ex-P5 of *A. urethrae*), same details as K343, labeled "P5", (mature, undissected); TM:K346 (ex-P22 of *A. urethrae*), same details as K343, "P22", (mature, dissected); TM:K347 (ex-P23 of *A. urethrae*), same details as K343, "P23", (aclitellate mature, undissected); TM:K348 (ex-P24 of *A. urethrae*), same details as K343, "P24", (mature, undissected); TM:K349 (ex-P25 of *A. urethrae*), same details as K343, "P25", (mature, undissected); TM: unregistered, same details as K343, possibly the missing "P26", (mature, undissected);

14:409, Mole Creek, N Tasmania, DP 362 942, 540 m, 5.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (two matures, one dissected); 14:1678, Fairy Glade State Reserve, N Tasmania, DP 766 883, 740 m, 2.vii.1992, R.D. D'Orazio and L.F. McGowan, rainforest, (mature); 14:1706, Mt. Roland, N Tasmania, DQ 446 089, 240 m, 24.xi.1992, R.D. D'Orazion and M. Gittus, wet sclerophyll, (three matures and one subadult); 14:1707, Liffey Forest Reserve, N Tasmania, DP

762 827, 920 m, 2.vii.1992, R.D. D'Orazio and L.F. McGowan, rainforest, (four matures; plus one posterior amputee, dissected has paired female pores and = *A. urethrae*); 14:1709, Lake Barrington, NW Tasmania, DQ 325 133, 370 m., 25.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (three matures; plus one subadult and a mature of *A. urethrae* and one subadult of a different species).

MATERIAL NOT EXAMINED

AM:W5313 (ex-P8 of *A. urethrae*), Florentine, 4.viii.1955, J.M. Gilbert, rainforest soil, "P8", (this specimen is figured in Jamieson, 1974: fig 23A with a single female pore); AM:W5317 (ex-P12 of *A. urethrae*), Florentine Valley, 14-19?.viii.1955, J.M. Gilbert, under pieces of wood and bark, "P12", (this specimen is stated by Jamieson, 1974:290 to have a single female pore).

Aporodrilus nubigenus Blakemore, 2000

Fig. 170.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3514, Mt Wellington, Shoobridge Bend Track, 147º15'E.42º55'S , 580 m, 21.ii.1996, R.J. Blakemore, (mature specimen, dissected and drawn).

PARATYPES: (P1) ANIC:RB.00.1.17, same details as (H), (mature, dissected); (P2) 14:3516, same details as (H), (mature with tip of tail missing, dissected).

Aporodrilus olympus Blakemore, 2000

Fig. 171.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3304, Mt Olympus, Lake St Clair, 13.x.1995, R.J. Blakemore, beech forest, (mature, dissected and drawn).

PARATYPES: (P1) ANIC:RB.00.1.13, same collection data as H, (mature, undissected); (P2) 14:3306, same collection data as H, (mature, dissected).

Aporodrilus rubicundus Blakemore, 2000

Fig. 172.

Aporodrilus rubicundus Blakemore, 2000b: 25-26, figs. 16, 17.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3342, Coronets, Lake Pedder east, 437900 5248800, 310 m, 11.iv.1996, R.J. Blakemore, in Banksia/Ti-tree woodland on lake edge, (a mature specimen, in 2 halves, dissected and figured).

PARATYPES: (P1) 14:3339, Sprent Basin, Lake Pedder, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, in Banksia/Ti-tree on lake edge, (mature, dissected); (P2) 14:3347, Bell Basin, Lake Pedder, 310 m, 6.iv.1996, A. Osborne and N. Forteath, (mature); (P3) 14:3343, same details as (H), (subadult); (P4) 14:3344, same details as (H), (juvenile); (P5-6) 14:3345, same details as (H), (two immatures); (P7-8) 14:3419, Ti Tree Cove, Lake Pedder, 445500 5235400, 310 m, 8.iv.1996, QVM, in matted roots and litter on lake's edge, (two matures, one dissected); (P9) 14:3421, same details as (P7-8), (a subadult, plus an unregistered tail); (P10) 14:3420, same details as (P7-8), (aclitellate mature, dissected and figured).

Aporodrilus semisilvus Blakemore, 2000

Fig. 173.

MATERIAL EXAMINED

HOLOTYPE: 14:0023, Half-woody Hill, Melaleuca, SW Tasmania, DM 339 889, 80 m, 5.iii.1992, L.F. McGowan, base of eucalypt, (aclitellate mature specimen figured and dissected).

PARATYPES: none.

Aporodrilus urethrae (Jamieson, 1974)

Fig. 174.

Cryptodrilus polynephricus urethrae Jamieson, 1974: 288-291. figs. 21C, 23B, 31J, M.

(Non *Cryptodrilus polynephricus polynephricus* ad *urethrae* Jamieson, 1974: 291-293, figs. 21B, 24B, 31I, = *Cryptodrilus polynephricus*).

Aporodrilus urethrae; Blakemore, 2000b: 4.

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K341, ANM (a forestry company, not "Arne") Road, Styx River Bridge, near Maydena, SW Tasmania, 146º35'E.42º50'S., 24.ix.1958, Mr Don Frankcombe (not "Frankombe"), labeled "Anm Road. E[ast] side of Styx River bridge approx. 1000' [300 m] into rainforest", (mature specimen, previously dissected with some internal organs removed and missing from jar).

PARATYPES: (P6) BM:1973:2:25, Florentine Valley, SW Tasmania, 146º25'E.42º35'S., 7.iii.1956, Mr J.M. Gilbert, surface soil under litter in *E. regnans* forest, under stones, (dissected and damaged specimen); (P7) TM: K350, Florentine, 146º25'E.42º35'S., 21.vii.1955, Mr J.M.

Gilbert, (poor specimen that is macerated and dissected); (P16-17) BM:1973:2:26-28, Maydena, SW Tasmania, 146º40'E.42º45'S., 15.x.1960, J.L. Hickman, (two macerated specimens that provide little useful information plus an unregistered juvenile); (P21) TM: K351, Snowy Range, 146º40'E.43º00'S., 19.i.1939, Tasmanian Biological Survey: J18, Mr C.D. King, 3,300 m, (specimen in poor condition tagged "P21", plus two other unregistered specimens also in poor condition which may or may not be the same species);

TYPE-MATERIAL NOT EXAMINED: (P2) TM:K342, same details as (H), (specimen not found in Tasmanian Museum – Liz Turner, curator of invertebrates pers. comm.); (P9) AM:W5314, Florentine, 4.viii.1955, Mr J.M. Gilbert, rainforest soil, (specimen stated by Jamieson, 1974:291 to have last hearts in 12 rather than 13); (P10-11) AM:W5315-5316, Florentine Valley, 14-19?.viii.1955, Mr J.M. Gilbert, under pieces of wood and bark.

SPECIMENS: QVM: 14:3090, Lake Rowallan, C Tasmania, 46º12'E.41º45'S., 9.ix.1992, QVM, from myrtle grove, (mature posterior amputee, dissected and drawn); 14:1707, Liffey Forest Reserve, N Tasmania, DP 762 827, 920 m, 2.vii.1992, R.D. D'Orazio and L.F. McGowan, wet sclerophyll, (mature posterior amputee, dissected, plus three matures with single female pore = *A. monogynus*); 14:1709, Lake Barrington, NW Tasmania, DQ 325 133, 370 m., 25.xi.1992, R.D. D'Orazio and M. Gittus, rainforest, (one subadult and one mature, plus four matures of *A. monogynus* and one subadult of a different species).

Aporodrilus warrai Blakemore, 2000

Fig. 175.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3652 Warra, Forestry Tasmania LTER site, ca. 43º04'S.146º40'E, SE Tasmania, 8.viii.1997, Forestry Tasmania/ANU collection, "Control plot Pit 7 0-15cm", wet sclerophyll, (mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.97.5.3, same details as H, (mature, dissected).

Note: specimens preserved in 80% ethanol only (no formalin used) therefore can be used for molecular analysis; original sample also contained a third specimen possibly of a similar small species but material insufficient for full description.

Gastrodrilus dartnalli (Jamieson, 1974)

Fig. 176.

Cryptodrilus dartnalli Jamieson, 1974: 275-277, figs. 2 [mislocated on map], 19B (p. 273), 31D (p. 322).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K220, Melaleuca Inlet, Port Davey, 146°10'E.43°23'S, Dec. 1967, A.J. Dartnall, (aclitellate, posterior amputee in poor, macerated, condition, previously dissected with internal organs removed and missing from jar, re-inspected, re-figured).

PARATYPES: (P1) TM:K324, same details as H, tagged "2", (mature, macerated in mid-body, previously undissected in anterior but sectioned after clitellar region with prostate removed and missing from jar); (P2-3) BM:1973:2:7-8, New Harbour, SW Tasmania, 146º10'E.43º30'S, 17.i.1938, C.Davis [not 146º70'E (sic) nor "Mr C.D. King", as stated by Jamieson], (both specimens were of similar external appearance, only one had been dissected and was somewhat damaged internally with internal organs removed and missing from jar, but it clearly had intestinal gizzards in ca. 22-31); (P4-6) AM:W5208-5210, same details as (P2-3), tagged "P4-6", (three matures, only one clitellate, none previously dissected; clitellate specimen here dissected and found to have gizzards in 23-32).

SPECIMENS: ("P7-8") 14:1913 (previously BJ: T26-27), labeled "New Harbour, S.W. Tasmania, 27/1/38 C. Davis" (original label), i.e., same details as (P2-3), and "*C(?) dartnalli*" [on University of Queensland tag], "P2[7?]-8" [on Australian Museum tag], (both specimens darkened and rather brittle in alcohol, one clitellate and previously dissected, the other aclitellate and dissected here); (S1) ANIC:RB.00.1.20 (ex:14:0040 *G. iosem* sample), Melaleuca, South Coast Track, DM 328 904, SW Tasmania, 5.iii.1992, L.F. McGowan, under button grass, (mature, 130 mm long, dissected).

Gastrodrilus driesseni Blakemore, 2000

Fig. 177.

Gastrodrilus driesseni Blakemore, 2000b: 26-28, fig. 18.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3332, Cripps Point, Lake Pedder, SW Tasmania, 429000 5242900, 310 m, 12.iv.1996, M. Driessen, creek bank under trees, (mature specimen, dissected and figured).

PARATYPES: (P1) 14:3333, same details as H, (mature, dissected); (P2) 14:3334, same details as H, (mature specimen); (P3) 14:3346, Coronets, Lake Pedder shore at 437900 5248800, 310 m, R.J. Blakemore, 11.iv.1996, under button grass on shoreline, (mature posterior-amputee); (P4) 14:3348, Scotts Peak, Lake Pedder south, 444300 5234300, 310 m, 17.iv.1996, R.J. Blakemore, from creek opposite hut in sandbars, (mature specimen, dissected); (P5) 14:3349, same details as P4, (mature specimen); (P6) 14:3350, same details as P4, (six immature specimens, one dissected); (P7) 14:3356, Mt Solitary, Lake Pedder, 438000 5244500, 310 m,

11.iv.1996, R.J. Blakemore, in button grass at 20-30 cm depth and from loose pebbles and debris on shore, (mature specimen, dissected); (P8) 14:3357, same details as P7, (mature specimen); (P9) 14:3358, same details as P7, (mature, dissected); (P10) 14:3359, same details as P7, (two anterior portions of matures, one dissected); (P11) 14:3360, same details as P7, (immature specimen); (P12-18) 14:3405, Coronets, Lake Pedder, 437900 5248800, 310 m, 11.iv.1996, R.J. Blakemore, under button grass on lake edge, (seven specimens: two mature posterior amputees, three subadults, two immatures and an unregistered tail); (P19) 14:3407, Sprent Basin, Lake Pedder north, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, under Ti-tree litter, (mature posterior amputee); (P20) 14:3408, same details as P19, (mature posterior amuptee, dissected); (P21) 14:3409, same details as P19, (complete subadult); (P22-23) 14:3457, same details as P19, (four mature specimens, one dissected); (P24) 14:3363, Stillwater below Hermit, Lake Pedder east, 428200 5258200, 310 m, 14.iv.1996, R.J. Blakemore, under stones on shoreline, (mature, dissected); (P25) 14:3364, same details as P24, (four mature specimens, one tail-less, plus a tail); (P26) 14:3404, Bell Basin, Lake Pedder north, 310 m, 7.iv.1996, N. Forteath and A. Osborne, under Huon pines, (mature specimen, dissected); (P27) 14:3423, same details as P19, (mature posterior amputee plus two immatures); (P28) 14:3429, same details as P19 but under button grass, (mature); (P29) 14:3430, Maria Creek west, Lake Pedder, 441700 5251000, 310 m, 11.iv.1996, R.J. Blakemore, in sand in creek bed, (mature specimen); (P30) 14:3434, same details as P29, (six immatures); (P31) 14:3422, Sprent Basin, Lake Pedder, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, under Ti-tree on edge of lake, (damaged subadult); (P32-36) 14:3484, same details as P31, (five specimens, one mature posterior amputee, dissected; one juvenile posterior amputee, three immatures and an unregistered tail); 14:3361, same details as P7, (a cocoon, figured).

Gastrodrilus iosem Blakemore, 2000

Fig. 178.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0040, Melaleuca, SW Tasmania, South Coast Track, DM 328 904, 5.iii.1992, L.F. McGowan, under button grass, (mature, in two halves, dissected and figured). (Note; other specimen, ANIC:RB.00.1.20, removed to *G. dartnalli*).

PARATYPES: (P1) ANIC:RB.00.1.21, Melaleuca, Wilson's Tin Mine, DM 320 913, 10.iii.1992, collector: Wilson, under button grass, (mature, dissected); (P2-3) 14:0041, same details as P1, (two matures, one dissected).

SPECIMENS: (S1-2) 14:2096, labelled "Coll. C. King Loc. New Harbour SW Tas", "*Cryptodrilus* sp in *simsoni* group (no bladders)" and "Probably *Cryptodrilus dartnalli* Ident: BJ" [on University of Queensland tags], (two matures that are darkend in alcohol, in poor condition, one dissected and agrees internally); 14:0025, Melaleuca, South Coast Track, SW Tasmania, DM 328-904, button grass, 5.iii.1992, L.F. McGowan, (five subadults about 100 mm long, one dissected and agrees internally).

Gastrodrilus kingi Blakemore, 2000

Fig. 179.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1914, Cox Bight, SW Tasmania, 146°15'E.43°30'S, Tasmanian Biological Survey, November 1938 JG8 and June 1938 J9, C.D. King, (mature dissected, figured).

PARATYPE: (P) ANIC:RB.00.1.22, same details as H, (mature, dissected).

Caecadrilus flindersi Blakemore, 2000

Fig. 180.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3761, Flinders Island, Brougham Sugar Loaf, NE Tasmania, ER 666 845, xi.1992, QVM, (mature missing tip of tail, dissected, figured).

PARATYPES: (P1) 14:3762, same details as H, (mature, dissected); (P2) ANIC:RB.98.1.19, same details as H, (mature, dissected); (P3) TM:K1572, same details as H, (mature, dissected); (P4) 14:3763, same details as H, (aclitellate mature missing tip of tail, dissected).

Caecadrilus strzelecki Blakemore, 2000

Fig. 181.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3758, Flinders Island, Mt Strzelecki, NE Tasmania, ER 925 485, 500 m, 2.xi.1992, QVM, (mature missing tip of tail, dissected, figured).

PARATYPES: (P1) ANIC:RB.98.1.18, same details as H, (mature, dissected); (P2) TM:K1571, Flinders Island, Mt Strzelecki near summit, NE Tasmania, ER 925 485, 1.xi.1992, QVM, (mature, dissected); (P3-5) 14:3759, same details as H, (three matures); (P6-8) 14:3760, same details as H, (one aclitellate mature, one subadult, dissected, and a juvenile that agrees superficially).

Caecadrilus walkersi Blakemore, 2000

Fig. 182.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3764, Flinders Island, Walkers Lookout, NE Tasmania, ER 921 653, 410 m, 4.xi.1992, QVM, (mature, dissected, figured).

PARATYPES: (P1) ANIC:RB.98.1.20, same details as H, (aclitellate mature, dissected); (P2) TM:K1579, same details as H, (mature missing tip of tail, dissected); (P3) 14:3765, same details as H, (mature missing tip of tail, dissected); (P4) 14:3766, Flinders Island, Walkers Lookout, NE Tasmania, ER 918 653, 350 m, 4.xi.1992, QVM, (mature missing tip of tail, dissected, figured); (P5) 14:3767, same details as P4, (mature); (P6-10) 14:3768, same details as H, (five matures).

Anisochaeta alba Blakemore, 2000

Fig. 183.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1688, Tasman Peninsula, Balts Road, (ca. 2.5 km along?), SE Tasmania, 8.ix.1992, R.D. D'Orazio, wet sclerophyll with rainforest species, (mature, dissected and drawn).

PARATYPES: (P1) TM:K1566, same details as H, (mature dissected); (P2) ANIC:RB.98.1.16, same details, (mature dissected); (P3) 14:3752, same details, (mature); (P4-P7) 14:3753, same details, (two matures and two juveniles that agree superficially).

Anisochaeta andrea Blakemore, 2000

Fig. 184.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3533, "Peartree Cottage" at 100, Esplanade, Middleton, SE Tasmania, 147º15'E.43º14'S, 10.xi.1996, Rob Blakemore, Andrea Kitto, Bruce Kemp and Clive Crossley, under grass on slope below stand of native woodland, (dissected and drawn).

PARATYPES: all with same details as H, (P1) ANIC:RB.96.11.11, (mature, dissected); (P2) TM:K1583, (mature, dissected); (P3) 14:3534, (mature, dissected); (P4) ANIC:RB.96.11.12, (mature); (P5) TM:K999, (mature); (P6), 14:3535, (subadult, this sample also contains 6 damaged mature specimens, one of which was dissected).

Anisochaeta brevis Blakemore, 2000

Fig. 185.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0992, Dover, SE Tasmania, along Esperance River Rd. until the first bridge, DN 899 082, 140m, 19.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, tip of tail missing, dissected and drawn).

PARATYPES: (P1) 14:3669, same details as H, (mature dissected); (P2) 14:3671, Dover, 0.5km along Riawunna Rd to site from Blue Gum Saddle intersection, DN 906-162, 225m, 19.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected); (P3) 14:3672, same details as P2, (mature, dissected); (P4) 14:3670, same details as H, (subadult, dissected); (P5-P8) 14:1705, Dover, 400m down Stubbs Link Road, DN 962 077, 155m, 21.x.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (four matures, two dissected).

SPECIMEN: 14:1703, same details as P2-3, (mature anterior-amputee @ 5, 210 long with 222 segments, dissected, possibly aberrant as agrees internally except intestinal origin in ½17 rather than 19).

Anisochaeta burniensis (Jamieson, 1974)

Fig. 186.

Megascolex burniensis Jamieson, 1974: 319-321, figs. 30B, 32F.

MATERIAL EXAMINED

HOLOTYPE: TM:380, Fern Glade, Emu River, Burnie, N Tasmania, 145º55'E.41º05'S, 24.viii.1954, J.L. Hickman, (mature, dissected).

PARATYPES: none

SPECIMENS: none, despite searches of the type-locality by the current author; although labeled by Jamieson as "Fern Glade, Emu River, Burnie, 24.viii.1954, J.L. Hickman" there is some possibly its from Fern Tree, near Mt Wellington, Hobart as for *C. polynephricus*.

Anisochaeta cethana Blakemore, 2000

Fig. 187.

MATERIAL EXAMINED

Holotype: 14:0680 (H), Mt Roland, 1.4km along Cockatoo Road to dense wet patch of forest, N Tasmania, DQ 304 051, 640m, 24.xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (mature with tip of tail missing, dissected and sketched).

PARATYPES: ANIC:RB.98.1.5 (P1 ex 708), Mt Roland, Minnow Creek, NW Tasmania, DQ 429 078, 300m, 24.xi.1992, R.D. D'Orazio and M. Gittus, (mature, dissected and sketched); TM:K1562 (P2), same details as P1, (mature dissected).

Anisochaeta clavi Blakemore, 2000

Fig. 188.

Anisochaeta clavi Blakemore, 2000b: 28-29, fig 19.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3468, Sprent Basin, Lake Pedder north, 417600 5263100, 310 m, 9.iv.1996, R.J. Blakemore, under Ti-tree litter at edge of the lake (mature specimen, dissected and figured).

PARATYPES: none

Anisochata corinna Blakemore, 2000

Fig. 189.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3050 (ex 14:1051), Corinna, W Tasmania, Little Hunter Creek, 600m along from Timbs Creek, first area of forest Corinna Road enters into, CP 445 910, 200 m, 2.vi.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, dissected and sketched).

PARATYPES: (P1) 14:3727, same details as H, (mature, dissected); (P2) 14:3725, same details as H, (mature, posterior amputee, dissected); (P3) 14:3726, same details as H, (mature, posterior amputee).

Anisochaeta floris Blakemore, 2000

Fig. 190.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0945, Bruny Island, SE Tasmania, Gravel Reserve No. 0133, EN 290 287, 60m, 28.ix.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature, dissected and drawn).

PARATYPES: none.

Anisochaeta greeni Blakemore, 2000

Fig. 191.

Megascolex montisarthuri (part.), Jamieson, 1974: 321-323.

MATERIAL EXAMINED

HOLOTYPE: 14:3668 (H), Lilydale - Mt Arthur, EQ 180 311, 190m, 13.xii.1972, R.H. Green, (mature dissected and figured).

PARATYPES: TM:K382 (P1), Mt Arthur, N Tasmania, 41º15'S.147º20'E, 15.x.1971, A.J. Dartnall, and R.C. Kershaw, from east side of mountain, (undissected mature); TM:K383 (P2), same details as P1 (an undissected mature); 14:3668 (P3), Mt Arthur, EQ 180 311, 190m, 13.xii.1972, R.H. Green, (aclitellate mature); BM:1973:2:48-52 (P4-P8), Mt Arthur, 41º15'S.147º20'E, 15.x.1971, A.J. Dartnall, and R.C. Kershaw, from east side of mountain (P4 and P5 dissected).

SPECIMENS: TK:K384-394, same details as P1, (not inspected here); AM:W5332-5338, same details as P1, (not inspected here); 14:0494, Mt Arthur, EQ 231 303, 990 m, 1991, R. Mesibov, subalpine rainforest, (mature, dissected); 14:3004, same details 14:0494, (mature); 14:3005 same details 14:0494, (mature); 14:3006, same details 14:0494, (mature); 14:1030, same details 14:0494, (5 matures, 1 subadult, 1 immature); 14:0495, Mt Arthur, EQ 246 310, 750 m, 1991, R. Mesibov, wet sclerophyll, (3 subadults); 14:0490, Mt Arthur, EQ255 317, 630 m, 1991, R. Mesibov, rainforest along creek, (4 matures); 14:0496, Mt Arthur, EQ239 281, 840 m, 1991, R. Mesibov, wet sclerophyll, (6 matures).

Anisochaeta isla Blakemore, 2000

Fig. 192.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0943, Bruny Island, South Bruny Range, SE Tasmania, 9.5 kms along Lockleys Road from Adventure Bay, EM 251 909, 350m, 29.ix.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll regrowth, (mature, posterior amputee, dissected and drawn).

PARATYPES: none.

Anisochaeta magna Blakemore, 2000

Fig. 193.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1602 Smithton, Roger River Forest Reserve along Buffs Road, NW Tasmania, CQ 331 524, 50 m, 17.v.1993, R. D'Orazio and D.E. Soccol, wet sclerophyll, (mature, posterior-amputee, dissected and drawn).

PARATYPES: (P1-3) 14:3040, same collection details as (H), (three sub-adults, all posterior-amputees, P3 dissected, plus a tail portion).

Anisochaeta martha Blakemore, 2000

Fig. 194.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:0397, Mole Creek, Martha Creek, Mersey Forest Road, N Tasmania, DP 352 922, 400m, R.D. D'Orazio, rainforest with very shaley soil, (mature, tip of tail missing, dissected and drawn).

PARATYPES: (P1) ANIC:RB.98.1.23, Mt Careless State Forest, along Saxon's Creek, N Tasmania, DQ 802 283, 420 m, 24.viii.1992, R.D. D'Orazio and M. Cooper, rainforest, (mature dissected); (P2) TM:K1581, same details as P1, (mature, dissected); (P3-4) 14:0472, same details as P1, (two matures that agree superficially); (P5-7) 14:1130, Moorina, Liffey Forest Reserve, 763 827, 920 m, 2.vii.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (three matures, one dissected); (P8-10) 14:1137, Fairy Glade Reserve, N Tasmania, DP 766 883, 740m, R.D. D'Orazio and L.F. McGowan, rainforest, (three matures, one dissected); (P11) 14:1140, Mole Creek, 7.6km along Lake MacKenzie Road and onto Snake Creek Road going left at every junction, DP 391 896, 590m, 5.x.1992, R.D. D'Orazio and M. Cooper, rainforest, (mature dissected); (P12) 14:1132, Lower Wilmot, Ingram Creek, Wilmot Road, NW Tasmania, DQ 346 277, 240m, 31.viii.1992, R.D. D'Orazio and M. Cooper, wet sclerophyll, (mature dissected); (P13-14) 14:1133, Paradise, Minnow Creek along Union Bridge Rd on right, NW Tasmania, DQ 447 806, 260m, 26.viii.1992, R.D. D'Orazio and M. Cooper, rainforest, (two matures, one dissected); (P15) 14:1138, Railton, Redwater Creek, DQ487 195, 200m, 25.viii.1992, R.D. D'Orazio and M. Cooper, rainforest, (mature dissected); (P16-17) 14:1131, Blackwood Creek, Weston's Rivulet, 892 758, 375m, 16.vii.1992, R.D. D'Orazio and M. Cooper, rainforest, (two matures, one dissected); (P18-19) 14: 0377, Needles, Chugleigh, Lobster Falls track, N Tasmania, DQ 608 008, 360m, 1.ix.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (two matures, one dissected, sample also contains three immatures); (P20-24) 14:0171, Liffey Falls Reserve, 813 845, 530m, 2.vii.1992, R.D. D'Orazio and L.F. McGowan, wet sclerophyll, (two matures, one dissected, and four juveniles); (P25-33) 14:172, 14:1135, 14:1136, Fairy Glade Reserve, same details as P8-10, (nine matures that agree superficially); (P34) 14:1134, Mt Careless State Forest, same details as P1-4, (mature); (P35) ANIC:RB.98.1.24, Gog Range, DQ 461 058, 530m, 16.xii.1991, R. Mesibov and Tammy S., wet sclerophyll, (mature, dissected); (P36) TM:K1582, same details as P35, (mature); (P37) 14:3772, same details as P35, (mature); (P38-39) 14:3775, Gog Range, DQ 560 055, 230 m, R.M. and T.S., wet sclerophyll on flowline, (two specimens); (P40-42), 14:3775, Gog Range, DQ 557 055, 260 m, dry sclerophyll, R.M. and T.S., (three specimens, one dissected); (P43-47) 14:1139, Mt Roland, Sheffield, NW Tasmania, DQ 381 126,

235m, 23.xi.1992, R.D. D'Orazio and M. Cooper, dry sclerophyll, (four matures, one dissected, plus one juvenile); (P48) 14:2014, Castra, Gaunts Road, NW Tasmaia, 485 m, DQ 228 213, 19.i.1994, R.D. D'Orazio and M. Cooper, (mature, dissected and sketched).

Anisochaeta mawbanna Blakemore, 2000

Fig. 195.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:2264, Black River off Mawbanna Road, NW Tasmania, "Down near yabby burrow, log track near old sawmill", 17.iii.1975, P.S., T.W., P.F.; [second label states "Monkmana Light T.tree, 15.iii.1975, T.W., P.F., P.S."], (mature, dissected).

PARATYPES: none.

Anisochaeta metandris Blakemore, 2000

Fig. 196.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1702, Port Arthur, Mt Arthur, Tasman Peninsula 3.7km from A9, SE Tasmania, EN 654 204, 375m, 8.ix.1992, R.D. D'Orazio, wet sclerophyll, (mature, dissected and drawn).

PARATYPES: (P1) 14:3676, same details as H, (mature dissected); (P2) 14:3677, same details as H, (mature dissected).

Anisochaeta montisarthuri (Jamieson, 1974)

Fig. 197.

Megascolex montisarthuri Jamieson, 1974: 321-323; Figs. 30A, 32G.

MATERIAL EXAMINED

HOLOTYPE: TM:K381 (H), Weldborough Pass, NE Tasmania, 41º10'S.147º55'E, 26.viii.1953, J.L. Hickman, 1.6 miles from eastern end of pass, (mature specimen, dissected).

PARATYPE: none.

SPECIMENS: none, although Jamieson's original description confused the Weldborough type-locality of the holotype (having the same collection details as Jamieson's monotypic *Perionychella weldboroughi*) with that of the remaining 25 paratypes from Mt Arthur (having the same collection data as Jamieson's monotypic *Perionychella montisarthuri*). Herein, these latter 'paratype' specimens, which differ morphologically from the holotype, are separated off to *Anisochaeta greeni* Blakemore, 2000, leaving *A. montisarthuri* with a rather unfortunate name.

Anisochaeta portusarturi Blakemore, 2000

Fig. 198.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1127, Port Arthur, Tasman Peninsula, Mt Arthur 3.7km from A9, SE Tasmania, EN 654 204, 8.ix.1992, R.D. D'Orazio, wet sclerophyll, (mature, dissected and drawn).

PARATYPES: (P1) 14:1129, same details as H, (mature dissected); (P2) ANIC:RB.98.1.15, same details, (mature, tail missing, dissected); (P3) TM:K1569, same details, (aclitellate mature); (P4-P6) 14:1125, same details, (two subasults and one immature that agree superficially); (P7-10) 14:1126, same details, (one subadult and three juveniles that agree superficially).

Anisochaeta proandris Blakemore, 2000

Fig. 199.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1704, Tasman Peninsula, Long Bay Creek, Fortescue Road 600m beyond Coronation Rd junction on the right, SE Tasmania, EN 708 269, 8.ix.1992, R.D. D'Orazio, wet sclerophyll, (mature, dissected and drawn).

PARATYPES: none.

Anisochaeta scottsdalei Blakemore, 2000

Fig. 200.

MATERIAL EXAMINED

HOLOTYPE: 14:3291 (H), Scottsdale, NE Tasmania, EQ 503 382 (ca. 41°10'S.147°30'E), ca. 325 m, wet sclerophyll in "Stronach" soil, 25.i.1996, S.A.McI. & R.J. Blakemore, (mature dissected and figured).

PARATYPES: none

Anisochaeta simpsonorum Blakemore, 1997

Fig. 201.

Anisochaeta simpsonorum Blakemore, 1997: 1695-1698, figs. 3, 4.

MATERIAL EXAMINED

Holotype: QVM:14:3275 (H), Dismal Swamp Nature Reserve, NW Tasmania, 40 59'S 144 51'E, 8.ix.1987, QVM, (mature, posterior amputee, dissected and figured).

PARATYPES: ANIC:RB.96.11.6 (P1), Walking Track off Bass Highway, near Dismal Swamp, 40°57'S 144 49'E, 24.vi.1993, J.C. Buckerfield & R.J. Blakemore, (mature, posterior amputee, dissected and figured); TM:K1526-1528 (P2-4), Belmont Rd., Waratah, NW Tasmania, 41°23'S 145 32'E, 31.v.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (three matures, P2 dissected and figured); ANIC:RB.96.11.7 (P5-P8), same details P2-4, (four matures); QVM:14:1075 (P9-11), same details P2-4, (three matures, P11 dissected, plus 3 unregistered juveniles); QVM:14:3529 (P12), "Killara" property, Marrawah, N.W. Tasmania, 41°01'S 144 44'E, 7.ix.1987, S. Pilkington, (mature); QVM:14:3530 (P13), Wombat Hill near Waratah, NW Tasmania, 41°29'S 145°27'E, 22nd September 1990, R. Mesibov, (mature, posterior amputee, dissected); ANIC:RB.96.12.3-5 (P14-16), 1.5 Km along forest track in Crown land east of "Killara" property, Marrawah, 41°01'S 144 44'E, 4.xii.1996, R.J. Blakemore, (three matures, one dissected); TM:K1535-1537 (P17-19), same details P14-16, (three matures, one dissected); QVM:14:3572 (P20), same details P14-16, (1 mature, dissected; sample also contains 9 sub-adult and immature specimens that superficially agree); QVM:14:3052 (P21), Little Hunter Creek, Corinna Rd., W Tasmania, 41°36'S 145 08'E, CP 445 910, 200m, 2.vi.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, dissected, separated off 14:1052 which contained 18 specimens); QVM:14:1048 (P22), Corinna, Pieman River State Reserve, NW Tasmania, CP 403 875, 40m, 41°39'S 145 05'E, 2.vi.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, dissected).

SPECIMENS: 14:1055, Belmont Road, Waratah, NW Tasmania, CQ 769 174, 390 m, 31.v.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (aclitellate mature dissected); 14:3053, same details as 14:1055, (six subadults that superficially agree); 14:1058, Tullah, Huskisson River, Lower Pieman Road, NW Tasmania, CP 703 785, 160 m, 1.vi.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (fourteen specimens, two dissected agree internally); 14:1060, Waratah, Heazlewood River, Mount Cleveland Road, NW Tasmania, CQ 618 109, 210 m, 31.vi.1993, R.D. D'Orazio and D.E. Soccol, (ten specimens, one dissected); 14:2293, Balfour, Franklands Plain, NW Tasmania, CQ 239 402, 160 m, 20.xii.1990, R. Mesibov, (mature posterior amputee, dissected).

Anisochaeta stumpysinensis Blakemore, 2000

Fig. 202.

MATERIAL EXAMINED

HOLOTYPES: 14:1941 (H), Stumpys Bay, Mt. William National Park, Gladstone, 3.6kms from NP2 turning down to Stumpys Bay and to camp site 3, NE Tasmania, FQ 029 739, 10m, R.D. D'Orazio and D.E. Soccol, dry sclerophyll, (mature, dissected and figured).

PARATYPES: ANIC:RB.98.1.25 (P1), Cape Naturaliste, NE Tasmania, 14.viii.1991, QVM, creek and heath, (mature, tip of tail missing, dissected); 14:1941 (P2), same details as H, (juvenile, dissected).

Anisochaeta tamara Blakemore, 2000

Fig. 203.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3028, Retreat, N Tasmania, EQ 451 160, TSF 64, 2.v.1992, R.D. D'Orazio, dry sclerophyll, (mature, dissected).

PARATYPES: (P1) 14:3029, same details as H, (mature); (P2) 14:3030, same details as H, (mature); (P3-P5) 14:3031, same details as H, (matures).

SPECIMENS: 14:3032, same details as H, (three matures and two immatures that superficially agree); 14:3033, Retreat, N Tasmania, EQ 464 290, TSF 60, 2.v.1992, R.D. D'Orazio, dry sclerophyll, (three matures and one subadult); 4:3034, ditto 14:3033, (two matures and two juveniles); 14:3035, ditto 14:3033, (one mature and two immatures).

Anisochaeta tasmanica (Spencer, 1895)

Fig. 204.

Perichaeta tasmanica Spencer, 1895: 47-48, Figs. 37-39.

Megascolex tasmanicus ; Michaelsen, 1900: 217.

Megascolex tasmanicus ; Jamieson, 1974: 324-326, figs 30C, 32H, I [Note: Jamieson's Specimen 1 was previously undissected, therefore it is not known whence his figured spermathecae came].

MATERIAL EXAMINED

SYNTYPES: NMV: F40289 (previously G289), labeled [in Spencer' hand], "Peri sp1. Tas", Emu Bay, Jan, 1892 (five specimens: one previously dissected in two halves, one entire dissected, and three previously undissected matures specimens - in reasonable condition but hardened in alcohol, plus one tail).

SPECIMENS: TM: K395 (S1), Table Cape, 24.viii.1954, J.L. Hickman, (previously undissected specimen, here dissected and figured); 14:2871 (S2-5), Christmas Hills, NW Tasmania, CQ 309 667, 60m ,6.xii.1990, R. Mesibov, (four specimens: 3 matures, one dissected here, and an immature that superficially agrees).

Anisochaeta vincula Blakemore, 2000

Fig. 205.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3658, Detention Hills, NW Tasmania, QVM, collection from "Paddock on forest edge" [no other information], (mature, tail missing, dissected and sketched).

PARATYPES: (P) 14:3659, same details as H, (mature, dissected).

Anisochaeta zeehan Blakemore, 2000

Fig. 206, Fig. 207.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1551, Zeehan, 4 km along Granville Harbour Road, W Tasmania, CP 379 689, 27.vii.1993, D'Orazio and D.E.Soccol, coastal heath, (mature, dissected, and sketched).

PARATYPES: (P1) 14:3037, Pieman River State Reserve, NW Tasmania, CP 403 875, 40 m, 2.vi.1993, R.D. D'Orazio and D.E.Soccol, rainforest, (mature damaged posteriorly, dissected and drawn); (P2) 14:3036, same details as P1, (posterior amputee, dissected); (P3) 14:3038, same details as P1, (aclitellate mature); (P4) 14:1051, Corinna, W Tasmania, Little Hunter Creek, 600m along from Timbs Creek, first area of forest Corinna Road enters into, CP 445 910, 200 m, 2.vi.1993, R.D. D'Orazio and D.E.Soccol, rainforest, (mature dissected and sketched).

SPECIMENS: 14:1549, 14:3039, same sample as H, (posterior amputee plus four matures and one juvenile); 14:1561+1562, Henty River, CP 561 460, 50 m, 28.vii.1993, R.D. D'Orazio and D.E.Soccol, swamp, (thirteen mixed specimens + five matures); 14:603, 14:3041, Pieman River State Reserve, NW Tasmania, CP 403 875, 40 m, 2.vi.1993, R.D. D'Orazio and D.E.Soccol, (six mature specimens that agree externally plus three immature specimens); 14:3049, 14:3050, 14:3051, 14:1052, 14:3723 and 14:3724, Corinna Rd., NW Tasmania, CP 445 910, 200 m, 2.vi.1993, R.D. D'Orazio and D.E.Soccol, (twenty seven specimens that agree superficially, two dissected agree internally).

Aceeca dee Blakemore, 2000

Fig. 208.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3606, near Dee Bridge, 12.x.1995, R.J. Blakemore, (mature, dissected and drawn - separated off from numerous other specimens).

PARATYPES: (P1) ANIC:RB.00.1.18, same details as H, (mature, dissected).

Scolecoidea scolecoidea (Spencer, 1895)

Fig. 209a, Fig. 209b.

Perichaeta scolecoidea Spencer, 1895: 51-52, Figs. 49-51; Jensz and Smith, 1969: 108.

Diporochaeta scolecoidea ; Michaelsen, 1900: 207; Jamieson, 1994: 175.

Perionychella (subgenus?) scolecoidea ; Jamieson, 1974: 259.

MATERIAL EXAMINED

LECTOTYPE: NMV:G290, labeled "*Perichaeta scolecoidea* King River, Tasmania. Coll. C.G. Officer Jan 1894" and "Peri spX.14 King R.T. C.G. Officer Jan/94", approximately 145º40'E.42º10'S, ca. CP 880 320, (previously dissected entire aclitellate specimen in reasonable condition but refractory and unsuitable for illustration).

PARALECTOTYPES: NMV:G1422, labeled "King River, Tasmania. Coll. C.G. Officer Jan. 1894. Paratypes PRSV1 1895 Removed from G290. Paratype", (two specimens in reasonable condition but rather brittle, one complete and one previously dissected).

SPECIMENS: 14:0072, Pelion Valley, Pelion Gap, DP 217 649, ca. 146º02'E.41º48'S, 31.i.1992, D. Baker, (weakly-clitellate mature 50 mm, dissected); 14:0073, Pelion Valley, Mt Doris (Davis?) track, 31.i.1992, collected by Tasmanian Parks and Wildlife Service trackworkers, (D. Baker?), (weakly clitellate mature 57 mm long, dissected and drawn); ANIC:RB.00.1.3, Walls of Jerusalem, ca. DP 440 700, (31.i.1992?), collector David Baker (Tas.P.W.S.), (two aclitellate matures 55-60 mm); 14:3576, Mt Olympus, Lake St Clair, ca. DP 260 470, 13.x.1995, R.J. Blakemore, (sub-adult 35 mm, dissected, plus two immatures); 14:1435, Queenstown, Nelson River Bridge, CP 954 377, 330 m, 11.viii.1993, R.D. D'Orazio and D.E. Soccol, cool temperate rainforest, (two aclitellate sub-adults, 40 mm, one dissected, and an immature); 14:1852, Maydeena, 3.2km along Mueller Road to creek, just south of Mt Field National Park, SE Tasmania, 520 m, DN 625 610, , 12.x.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (mature, 45 mm., dissected and sketched).

Hickmaniella classica Blakemore, 2000

Fig. 210.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:1297, Mawbanna, Alarm River, 3.8kms along Newhaven Rd until river ran along road, NW Tasmania, CQ 706 632, 90 m, 20.iv.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (mature, dissected).

PARATYPE: (P) ANIC:RB.00.1.1, same details as H, (mature, dissected).

Hickmaniella faba Blakemore, 2000

Fig. 211.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3729, Christmas Hills, Smithton, NW Tasmania, CQ 309 667, 60 m, 6.xii. 1990, R. Mesibov, (mature, dissected, figured).

PARATYPES: (P1) ANIC:RB.98.1.6, same details as H, (mature, dissected); (P2) TM:K1563, same details as H, (mature, dissected); (P3) 14:3730, same details as H, (mature, dissected); (P4) ANIC:RB.98.1.7, same details as H, (mature, dissected).

SPECIMENS: 14:2873, original sample with same details as H, (ten matures and three immatures, possibly belonging to this taxon or some other *Hickmaniella* species as have similar body shape but none inspected in any detail, one dissected had nematodes in its spermathecae).

Hickmaniella gogi Blakemore, 1997

Fig. 212.

Hickmaniella gogi Blakemore, 1997a: 1690-1692, fig. 1.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3328, Gog Range, N. Tasmania, DQ 534 056, ca. 41 29'S.146°27'E, 27.viii.1991, QVM, other collection details not available, (mature, dissected and figured).

PARATYPES: (P1) ANIC:RB.96.11.1, same details as H, (mature, dissected); (P2) ANIC:RB.96.11.2, same details as H, (immature); (P3) 14:3319, same details as H, (immature, dissected); (P4) TM:K1523, Lake Rowallan, 6.2km along Little Fisher River Road until bridge, NW Tasmania, DP 419 824, ca. 41°42'S.146°18'E, 650 m, 6.x.1992, R.D. D'Orazio and M. Cooper, rainforest along river banks, (mature, dissected and figured); (P5-9) 14:0416, details same as P4, (five matures, one aclitellate); (P10-14) 14:0417, Lake Rowallan, 1.7km along Dublin Road from Little Fisher River Road junction, DP 381 825, ca. 41°42'S.146°15'E, 590 m, 6.x.1992, R.D. D'Orazio and M. Cooper, rainforest along creek, (five specimens - two clitellate, one aclitellate, two immature); (P15) 14:3532, Pelion Valley, Pelion Gap, NW Tasmania, 41°52'S 146°03'E, 31.i.1992, D. Baker, (mature, dissected); (P16-18) ANIC:RB.96.11.3, Mole Creek, 1.6km along Snake Creek Road going left, NW Tasmania, DP 391 895, ca. 41 37'S 146°16'E, 590 m, .x.1992, R.D. D'Orazio and M. Cooper, rainforest, (one mature and two sub-adults, one dissected); (P19-21) 14:0970, same details P16-18, (one mature and two sub-adults); (P22-23) TM:K1524-1525, Gowrie Park, O'Neils Road just over bridge at Gowrie Park, NW Tasmania, 41°26'S 146°14'E, , 23..xi.1992, R.D. D'Orazio and M. Gittus, wet sclerophyll, (one mature and one sub-adult, dissected); (P24-25) 14:0679, same details P22-23 (two sub-adults).

Hickmaniella noda Blakemore, 2000

Fig. 213.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:2303, Christmas Hills, Smithton, NW Tasmania, CQ 341 702, 20 m, 7.xii. 1990, R. Mesibov, "Swamp forest. Myrtle, Sassafras, Blackwood, Tea tree", (mature, dissected, figured).

PARATYPES: (P1) ANIC:RB.00.1.2, Frankland River track, CQ 251 313 - CQ 250 302, 110-220 m, , 18.xii.1990, R. Mesibov, from "Gallery forest alluvium through wet sclerophyll peaty sand" (mature, dissected); (P2-4) 14:3592, Roger River west, Montagu Swamp, CQ 287 547, 30 m, 29.xii.1990, R. Mesibov, "sclerophyll/T-tree swamp", (two subadults with weak markings, both dissected, plus an immature).

Hickmaniella opisthogaster Jamieson, 1974

Fig. 214.

Hickmaniella opisthogaster Jamieson, 1974: 301-302, figs. 18A (p. 270), 32C, D (p. 325), Pl. 64-66; Blakemore, 1997a: 1693-1695, fig. 2 (p. 1694).

MATERIAL EXAMINED

HOLOTYPE: (H) TM:K360, Parrawe, 41º18'S.145º35'E, 25.viii.1954, J.L. Hickman, (mature, previously dissected, re-inspected).

PARATYPES: (P1) BM:1973.2.34, same details as H (mature, dissected, inspected); (P2) TM:K361, same details as H, (immature, previously undissected, here dissected to confirm intestinal gizzard); (P3-4) AM: W5322-5323, Table Cape, 40º57'S 145º43'E, 24.viii.1954, J.L. Hickman (not inspected here).

SPECIMENS: 14:1619, Stephens Rivulet, Balfour Track Forest Reserve, NW Tasmania, CQ 279 439, 50 m, 18.v..1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (mature, dissected and sketched, sample also contains an immature); 14:1616, Bond Tier South, Dismal Swamp, NW Tasmania, CQ 193 626. 60 m, 19.v.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (five specimens, one immature); ANIC:RB.96.11.4, same details, (six matures, one dissected); 14:1260, Tram Road Picnic Area, Calder, NW Tasmania, 41º02'S.145º41'E, 19.iv.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (seven specimens); 14:1080, Hellyer Gorge Reserve, NW Tasmania, 41º17'S 145º37'E, 31.v.1993, R.D. D'Orazio and D.E. Soccol, (one mature and one immature); 14:1074; Belmont Road, Waratah, NW Tasmania, 41º23'S 145º32'E, 31.v.1993, R.D. D'Orazio and D.E. Soccol, rainforest, (three matures); 14:562, West Calder Road, Calder, NW Tasmania, 41º05'S 145º37'E, 19th April 1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (one specimen); 14:1613, Trowutta Caves State Reserve, Smithton, NW Tasmania, 41º04'S 145º06'E, 17.v.1993, R.D. D'Orazio and

D.E. Soccol, cool temperate rainforest, (one mature, dissected); 14:3277, Walking Track off Bass Highway, near Dismal Swamp, 40º57'S 144 49'E, 24.vi.1993, J.C. Buckerfield and R.J. Blakemore, (two matures); ANIC:RB.96.11.5, same details (two matures, one dissected); QVM:14:3554, Fern Glade Reserve, Burnie, NW Tasmania, 41º05'S 145 55'E, 3.xii,1996, R.J. Blakemore, from banks of Emu River, (three matures, one dissected).

Retrovescus capensis (Jamieson, 1974)

Fig. 215.

Perionychella (Perionychella) capensis Jamieson, 1974: 225-226, figs. 1, 5A, 16A,B.

Diporochaeta capensis ; Jamieson, 1994: 175-177.

Retrovescus capensis; Blakemore, 1998: 658-660, fig. 2.

MATERIAL EXAMINED

HOLOTYPE: (H) TM: K259, Table Cape, north-west Tasmania, CQ 740 770, 40º57'S.145º44'E., 24.viii.1954, J.L. Hickman, (previously dissected, redrawn).

PARATYPE: (P) BM: 1972:8:3, same details as H, (posterior amputee, previously dissected).

OTHER MATERIAL: none found (despite current author's resurvey of type-locality and inspection of much other material collected from the region).

Retrovescus mesibovi Blakemore, 1998

Fig. 216.

Retrovescus mesibovi Blakemore, 1998: 660-662, fig. 3.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3591, Christmas Hills, north-west Tasmania, CQ 309 667, 40º55'S.144º59'E., 60 m, 6.xii.1990, R. Mesibov, (mature, dissected and drawn).

PARATYPES: none.

Retrovescus plomleyi Blakemore, 1998

Fig. 217.

Retrovescus plomleyi Blakemore, 1998: 656-658, fig. 1.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3588, Christmas Hills, north-west Tasmania, CQ 309 667, 40º55'S.144º59'E., 60 m, 6.xii.1990, R. Mesibov, (mature, dissected and drawn).

PARATYPES: all with same collection details as (H), ANIC:RB.97.2.5 (P1), (mature, dissected); TM:K1543 (P2), (mature, dissected); 14:3589 (P3), (mature); TM:K1544 (P4), (mature); ANIC:RB.97.2.6 (P5), (mature); 14:3590 (P6-16), (11 specimens: 9 matures - 2 posterior amputees, P6 dissected - plus 2 sub-adults).

Retrovescus simplex Blakemore, 1998

Fig. 218.

Retrovescus simplex Blakemore, 1998: 662-664, fig. 4.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3564, Salmon River, north-west Tasmania, CQ 200 534, 41º03'S.144º50'E., 4.xii.1996, R.J. Blakemore, from silt beside creek, (mature, dissected and drawn).

PARATYPES: (P1) ANIC:RB.97.2.7, same collection details as H (slightly damaged mature, dissected); (P2) TM:K1545, same collection details as H (mature, dissected); (P3-5) 14:3593, same collection details as H (two matures, one slightly desiccated, plus an aclitellate sub-adult); (P6-7)14:3594 (ex 14:1606), Salmon River, north-west Tasmania CQ 199 534, 50 m, 17.v.1993, R.D. D'Orazio and D.E. Soccol, wet sclerophyll, (sub-adult, dissected, plus an immature).

Anisogaster quini Blakemore, 2000

Fig. 219.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3048, Cradle Mountain, 4.1kms along Beecroft Road to river, N Tasmania, CP 995 034, 680 m, 16.vi.1993, R.D. D'Orazio and D.E. Soccol, peat swamp, (mature, dissected and drawn).

PARATYPES: (P1) ANIC:RB.98.1.2, same details as H, (posterior amputee, dissected and drawn); (P2) TM:K.1559, same details as H, (mature, dissected); (P3-4) 14:3044-5, same details as H, (mature, posterior amputee, and mature, posterior regenerate?); (P5) ANIC:RB.98.1.3, same details as H, (aclitellate mature); (P6) TM:K1561, same details as H, (aclitellate mature); (P7-16) 14:3722, 14:1282, Cradle Mt Road, just passed Hellyer Mine road to where creek crosses highway, N Tasmania, CP 994 986, 670 m, 16.vi.1993, R.D. D'Orazio and D.E. Soccol, peat swamp, (ten mostly mature specimens, five dissected).

SPECIMENS: 14:607, same details as H, (two juveniles).

Anisogaster remora Blakemore, 2000

Fig. 220.

MATERIAL EXAMINED

HOLOTYPE: (H) 14:3046, Cradle Mountain, 4.1kms along Beecroft Road to river, NW Tasmania, CP 995 034, 680 m, 16.vi.1993, R.D. D'Orazio and D.E. Soccol, peat swamp, (mature, dissected and drawn).

PARATYPES: (P1) 14:3047, same details as H, (mature, dissected); (P2) ANIC:RB.98.1.4, same details as H, (mature, posterior amputee, dissected); (P3) TM:K.1560, same details as H, (mature, posterior amputee); (P4) 14:3721, same details as H, (aclitellate mature, dissected).

Allolobophora chlorotica **(**Savigny, 1826)

Unregistered QVM sample, collected by Hobart Field Naturalists Society, 4-5.x.1995, in dark soil, (two specimens, dissected and figured). Many other specimens are in the QVM collection.

Allolobophoridella eiseni (Levinsen, 1884)

14:3452, Strathgordon, Lake Pedder, 13.iv.1996, R.J. Blakemore, from garden soil (mature dissected, described by Blakemore, 2000b: 33-34). This was the first record of this species from Australia.

Aporrectodea caliginosa (Savigny, 1826) (syn. *A. turgida* (Eisen, 1874)

14:3449, from Strathgordon, Lake Pedder, 13.iv.1996, R.J. Blakemore, in garden soil, (mature dissected and figured, see Blakemore, 2000c: 31-32 for description). Many other specimens are held in the QVM collection. Widely distributed in Tasmania. Easily confused with *A. limicola* (Michaelsen, 1890), *A. caliginosa* is a species-complex with the following morphs being recognized as separate species or sub-species by some authors (cf. *A. trapezoides*, *A. attemsi*), (see Sims & Gerard, 1985: 56-57, 61; Easton, 1983; Blakemore, 1999).

Aporrectodea longa (Ude, 1885)

Abundant in Tasmania, many samples in QVM collection, also reported from every Australian State (see Blakemore, 1994a; 1997d; 1999). The author was involved in collection this and other lumbricid species from Woolnorth, NW Tasmania in 1993. This species may easily be confused with *A. norcturna* morphs of *A. trapezoides* and with the French species *A. giardi* (Ribaucourt, 1901) (see Sims & Gerard, 1985: 64). A French sub-species is *A. longa ripicola* (Bouché, 1972).

Apporectodea rosea (Savigny, 1826)

Frequently found in disturbed habitats in Tasmania, (see Blakemore, 1994a; 1999). Several specimens lodged in QVM collection including samples from Rocherlea and Invermay. This species is placed in *Aporrectodea* by some authorities (eg. Easton, 1983: 477; Sims & Gerard, 1985; cf. Gates, 1972), but an argument for its retention in *Eisenia* as in Michaelsen (1900) was made by Blakemore (1994a: 250-251) based on the position of its dorsal and spermathecal pores, and the uncertain systematic importance of colouration. Gates (1974) provides four pages of synonymies for this taxon (see also Easton, 1983: 477).

Aporrectodea trapezoides (Dugès, 1828)

Widely distributed in Tasmania and Australia, particularly in more tropical regions (see, Blakemore, 1999). This is considered part of an *A. caliginosa* species-complex, by some authors (eg. Easton, 1983; Sims & Gerard, 1985; cf. Gates, 1972: Reynolds, 1977). The following morphs being recognized as separate species or sub-species (cf. *A. caliginosa*), (see Easton, 1983; Sims & Gerard, 1985: 57):

Dendrobaena attemsi (Michaelsen, 1902)

A report of this species from Tasmania, made by non-specialists, is unconfirmed as no authoritative source was cited and voucher specimens are not available (see Blakemore, 1999). Sims and Gerard (1985: 68) note that this species, which can easily be confused with parts of the *A. caliginosa* species-complex and with *A. limicola*, is "rare" - known only from a single record in Britain. A sub-species is *D. attemsi decipiens* (Michaelsen, 1910).

Eisenia hortensis **(Michaelsen, 1890)**

14:3660, Ben Nevis, RS0440, Evandale, vi/vii.1997, collector Jim Young, from farm property, (mature, dissected and figured). This is the first confirmation of this species from Australia (see Blakemore, 1999). This taxon is placed in *Dendrobaena* by some authorities (eg. Easton, 1983: 478), and is another species claimed by vermiculturalists.

Dendrodrilus rubidus rubidus (Savigny, 1826)

14:3661, Ben Nevis, RS0440, Evandale, vi/vii.1997, collector Jim Young, from farm property, (mature, dissected and figured, from same sample as 14:3660 of *Eisenia hortensis*). Identity checked against BM: 1976.13.669-720, from Marion Islands, Indian Ocean, Van Zinderen, "Det: E.G. Easton", (several specimens loaned from the Museum of Natural History, London).

Currently unregistered material lodged at QVM were collected from Biggles track, Brothers Point to Green Gorge, Macquarie Island, 20.xi.1997, R.J. Blakemore, (several specimens, that agree with earlier descriptions). Other specimens, 14:3599, from Overland track to Bauer Bay, Macquarie Island, 30.xii.1996, C. Crossley, B. Kemp, (several specimens, one mature, figured and dissected) appear to be either ***D. rubidus subrubicundus*** (Eisen, 1874) or ***D. r. tenuis*** (Eisen, 1874), (correct determination is pending). A further subspecies *D. r. norvegicus* Eisen, 1874) has been reported from Kerguelen Islands (Bouché, 1982; Frenot, 1992).

D. rubidus tenuis (Eisen, 1874)

Listed by Lee (1968:159) as *Bimastus tenuis* (Eisen), from Macquarie Island, with collection data: Station 81, 3.vii.1930, B.A.N.Z.A.R.E., (four clitellate specimens).

[Taxonomic note: following Easton (1980: 40), *Bimastus* was corrected to its original orthography as *Bimastos*, and *B. tenuis* was placed within the synonymy of *D. rubida*, which itself was transferred from *Dendrobaena* to *Dendrodrilus*.]

Eisenia fetida (Savigny, 1826)

Possibly occuring in mixed populations with its variant, ***Eisenia fetida andrei*** Bouché, 1972. Several specimens were obtained from the same sample as 14:3660 *Eisenia hortensis*; also identified at worm farms in Lauceston, Perth and Hobart. Molecular analysis (of types!!) is required for specific separation of *E. fetida* and *E. andrei* as their morphological variances overlap (see Sims & Gerard, 1985; cf. Eaton, 1983: 480). This species is the most commonly used in vermicomposting and vermicultural operations around the world (Blakemore, 1995b).

Eiseniella tetraedra (Savigny, 1826)

14:3451, from Lake Pedder, described by Blakemore (2000b: 33). Several other specimens from Tasmania are lodged in QVM collection. This species is often associated with moist habitats.

Eophila eti Blakemore, 2008

14:3494, Holotype from Dalgarth Forest Reserve, North Tasmania, described by Blakemore (2008) as a probable introduced species.

Lumbricus castaneus (Savigny, 1826)

Occasionally found in Tasmania, (pers. obs.). Specimens are lodged in QVM collection. This species is often found in habitats high in organic matter.

Lumbricus rubellus Hoffmeister, 1843

Same sample as 14:3660 of *Eisenia hortensis* from Ben Nevis, (single specimens). Frequently found in Tasmania, further material from around the State is held in QVM collection (see also Blakemore, 1999). Frequently found under stones or logs and other moisture retaining habitats.

Lumbricus terrestris Linnaeus, 1758

Fig. 221.

Lumbricus terrestris (part.) Linnaeus, 1758, Syst. Nat. 10th edn.: 647.

Enterion herculeum Savigny, 1826, Mém. Acad. Sci. Inst. France 5: 180.

Lumbricus herculeus , Dugès, 1837, Ann. Sci. Nat., ser 2,8: 17,21.

Lumbricus agricola Hoffmeister, 1842, Verm. Lumbric., p. 24.

Lumbricus infelix Kinberg, 1867, Öfv. Vet.-Akad. Förh. Stockholm 23: 98.

? Lumbricus americanus E. Perrier, 1872, Nouv. Arch. Mus. Paris, 8: 44.

Lumbricus studeri Ribaucourt, 1896, Rev. Suisse Zool., 4: 5.

Lumbricus terrestris, Michaelsen, 1900, Tierreich, 10: 511.

MATERIAL EXAMINED

QVM: 14: 3648, Invermay, Launceston, N. Tasmania, 29.vi.1997, R.J. Blakemore, found escaping over soil surface of suburban garden when digging to 1 m depth in black clay, (mature, complete specimen; fixed in 10% formalin, preserved in 80% ethanol). [Note: neotype in British Museum not inspected. This is listed by Reynolds & Cook (1976: 18), as BMNH:1973:1:1, the original type-locality is unknown although Gates (1972: 114) argues this has to be Sweden].

Ocnerodrilus occidentalis Eisen, 1878

14:3647, Invermay, Launceston, 30.vi.1997, R.J. Blakemore, from stormwater pipe blocked by roots, found tangled in wet roots with many tubificids, (two damaged specimens, both dissected). The distinctive ‘ocnerodrilid diverticula’ were paired in segment 9. However, these specimens had two pairs of spermathecae in segments 8 and 9, rather than the typical bithecal arrangement and are thus probably morphs of this ‘species’ (see Gates, 1972 for discussion of synonymy). This species is recorded from watercourses and moist habitats around theworld, it was first described by Eisen from irrigation lines at his vinyard in Fresno, Ca. (Gates, 1972).

Eukerria saltensis (Beddard, 1895)

This species was identified in Tasmanian samples currently unregistered in the QVM collection in November, 1995, (see Blakemore, 1999). Often found in moist habitats.

Microscolex dubius (Fletcher, 1887)

Found in drain at carpark, Rocherlea, N. Tasmania, 8.vi.1996, R.J. Blakemore, (several specimens, one dissected to confirm identity). Material deposited in QVM collection. This species is similar to *M. phosphoreus* and may be a parthenogenic morph; it does not however give as phosphoresce response (pers. obs.).

Microscolex macquariensis (Beddard, 1896)

Specimens were recently collected from Subantarctic Macquarie Island by the author in 1997/8 as part of an ecological study of invertebrates (eg. 14:3714 consisting of 8 specimens). This new material has been fully described, figured, and compared with type-material loaned from the Museum of Natural History, London. Unfortunately, funds are not currently available for publication of the findings from this study.

Microscolex phosphoreus (Dugès, 1837)

14:0018, 0036, Melaleuca, SW Tasmania, 3.ii.1993, D. King, garden 319 927, (eight specimens, one dissected). Also found in drain at carpark, Rocherlea, N. Tasmania, 8.vi.1996, R.J. Blakemore, (seven specimens, collected after dark when they were seen to phosphoresce when disturbed, one dissected to confirm identity). Material deposited in QVM collection.

Rhododrilus kermadecensis Benham, 1905

Rhododrilus littoralis Jamieson, 1974 **syn. nov.**

14:3473-3474, Swan Bay, River Tamar, N. Tasmania, 31.v.1996, R.J. Blakemore, from mud flat behind sedges and under driftwood, in high numbers, (two mature specimens, dissected and figured). Other specimens of this species are lodged in the TM and QVM collections. The type locality is Raoul, Kermadec Islands (Lee, 1953; 1959).

Perionyx excavatus Perrier, 1872

Found at a worm farm at Perth, N Tasmania (pers. obs. - specimens not registered). This species, originating from Indian, was first confirmed from wormfarms in Australia by Blakemore (1994a; 1995b)

Amynthas corticis (Kinberg, 1867)

Found in garden soils and wormfarms in Tasmania (pers. obs.). Specimens of this Oriental species with cosmopolitan distribution are lodged in the QVM collection. This species is fully described in Blakemore (1994a).

Anisochaeta dorsalis (Fletcher, 1887)

A translocated native species, introduced from Victoria (see Blakemore, 1999 and introductory remarks for the present work). Specimens examined include 14:3455, Strathgordon Village, Lake Pedder, 13.iv.1996, R.J. Blakemore, (9 specimens: 4 matures, one a posterior amputee, one dissected, plus 4 immatures and a cocoon); 14:3453, St Marys Hotel, W. Tasmania, 3.vii.1993, R.D. Dorazio and M. Cooper, (two mature specimens); 14: 3454, from "Devonport Field Naturalists", 9.vii.1991, (two mature specimens dissected and identified by RJB in 1991, the first record of a Victorian earthworm in Tasmania). Blakemore (2000b: 29-31) gives full descriptions of these specimens. Other specimens have been found wandering over the soil surface at Rocherlea, Launceston and in other several other urban gardens in the north and south (pers. obs.).

Anisochaeta gracilis (Fletcher, 1886) (syn. *Megascolex crateroides* Boardman, 1943); an Australian Museum specimen (W:20797) labeled from Denison Gorge (Tas).

Anisochaeta sebastiana (Blakemore, 1997b)

This species is also a translocated native that has been identified from Queensland and NSW as well as Tasmania, always in garden soils, (see Blakemore, 1994; 1997b; 2000a). Material examined is 14:3475, from Gorge Cottage, Launceston, 22.xii.1995, R. J. Blakemore, gatekeeper's cottage garden, (mature P1 specimen, dissected and sketched).

Source reference:

Blakemore, R.J., (2000e). *Tasmanian Earthworms*. CD-ROM Monograph with Review of World Families. 'VermEcology', PO BOX 414 Kippax 2615. Canberra, December, 2000. Pp. 800 including 222 figures. ISBN 0-646-41088-1. http://www.nrel.colostate.edu/IBOY/australia_ap.html#earthworms

[End of Tasmanian types list].