

Accessory Publication

The genus *Microvelia* Westwood in Australia (Hemiptera : Heteroptera : Veliidae)

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Abstract. Water striders and their allies (Hemiptera, Gerromorpha) are familiar inhabitants of water surfaces throughout the world. One of the most species-rich groups is the subfamily Microveliinae (Veliidae) and, in particular, the genus *Microvelia* Westwood, 1834. This genus comprises small or very small bugs inhabiting the nearshore areas of stagnant or slow-flowing fresh water. Accumulation of material during the past 30 years has shown that the Australian fauna of *Microvelia* is much richer and more diverse than previously recognised. In the present paper we discuss the subgeneric classification of the genus *Microvelia* based on the results of a phylogenetic analysis using maximum parsimony, describe three new subgenera and redescribe all previously known Australian species of the genus. The new taxa are: *Microvelia (Austromicrovelia)*, subgen. nov. (type species: *Microvelia mjobergi* Hale, 1925) with the species *Microvelia (Austromicrovelia) spurgeon*, *M. hypipamee*, *M. margaretae*, *M. monteithi*, *M. tuberculata*, *M. myorensis*, *M. woodwardi*, *M. carnarvon*, *M. annemariae*, *M. mossman*, spp. nov. (all from Queensland), *M. eborensis* and *M. milleri*, spp. nov. (New South Wales), *M. queenslandiae*, *M. ventrospinosa*, spp. nov. (New South Wales, Queensland), *M. angelesi*, *M. alisonae*, *M. odontogaster*, spp. nov. (Northern Territory), *M. apunctata*, sp. nov. (Northern Territory, Queensland), *M. pennicilla*, sp. nov. (Northern Territory, Western Australia), *M. herberti*, *M. malipatili*, *M. torresiana*, and *M. australiensis*, spp. nov. (Northern Territory, Queensland, Western Australia), *Microvelia (Barbivelia)*, subgen. nov. (type species: *Microvelia barbifer*, sp. nov.) with the species *Microvelia (Barbivelia) barbifer*, sp. nov. (Queensland) and *M. falcifer*, sp. nov. (Northern Territory); *Microvelia (Pacifcovelia)*, subgen. nov. (type species: *Microvelia oceanica* Distant, 1914) with the species *M. tasmaniensis*, sp. nov. (Tasmania), *M. lilliput*, and *M. kakadu*, spp. nov. (Northern Territory, Queensland, Western Australia). We further recognise the subgenus *Microvelia (Picaultia)*, stat. nov. (type species: *Picaultia pronotalis* Distant, 1913), and describe the following new species: *Microvelia (Picaultia) justii* and *M. paramega*, spp. nov. (Northern Territory, Queensland, Western Australia), and *M. cassisi*, sp. nov. (New South Wales). Finally, *Microvelia fluvialis weiri* Malipatil, 1980, is synonymised with *Microvelia fluvialis* Malipatil, 1980. Keys to adults of all species are provided and their distributions mapped.

Abbreviations

Specimens were borrowed from the following collections. The acronyms are used in the 'Material examined' sections.

AM	Australian Museum, Sydney, Australia.
ANIC	Australian National Insect Collection, CSIRO, Canberra, Australia.
BPBM	Bernice P. Bishop Museum, Honolulu, USA.
DNRQ	Department of Natural Resources, Queensland, Australia.
JTPC	John T. Polhemus collection, Englewood, Colorado, USA.
MV	Museum Victoria, Melbourne, Australia.
NRS	Naturhistoriska Riksmuseet (Natural History Museum), Stockholm, Sweden.
NTM	Museum and Art Galleries of the Northern Territories, Darwin, Australia.
QDPI	Queensland Department of Primary Industries, Mareeba, Queensland, Australia.
QM	Queensland Museum, Brisbane, Australia.
SAM	South Australian Museum, Adelaide, Australia.
UQIC	University of Queensland Insect Collection, Brisbane, Australia.
USNM	National Museum of Natural History, Smithsonian Institution, Washington, DC, USA.
WAM	Western Australian Museum, Perth, Australia.
ZMUC	Zoological Museum, University of Copenhagen, Denmark.

Material examined

Localities are arranged in a north–south sequence for each state.

Microvelia (Austromicrovelia) mjobergi Hale

Material examined

Holotype. Apterous ♂, labelled 'Herberton, Queensland, Mjöberg' (NRS).

Paratypes. 1♂, 2♀ apt., same locality data as holotype, 17.23S 145.23E (NRS, SAM).

Other material examined. Queensland: 1♂ apt., Mt Hypipamee Nat. Pk, debris, clear, flowing, sandy, shade, 17.26S 145.29E, 5.ii.1998, T. Weir (ANIC); 9♂, 7♀ apt., 22 nymphs, Nigger Ck, 17.27S 145.28E, flowing, clear stream, half shade, rainforest, 14.xii.1994, P. Zborowski (ANIC).

Microvelia (Austromicrovelia) spurgeon, sp. nov.

Material examined

Holotype. Apterous ♂, labelled 'QLD, Stewart Ck, 4 km NNE Mt Spurgeon (Camp 1), 16.24S 145.13E, 1250–1380 m, 15–20.x.1991, Monteith, Janetzki, Cook & Roberts' (QM).

Paratypes. **Queensland:** 3♂, 6♀ apt., same locality data as holotype (QM).

Microvelia (Austromicrovelia) hypipamee, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'Mt Hypipamee Nat. Pk., Qld., 17.26S 145.29E, 5.ii.1998, T. Weir' and 'amongst debris in small stream, shade, sandy bottom, clear' (ANIC).

Paratypes. **Queensland:** 1♂ apt., Wright Ck., Lake Eachan Nat. Pk., 17.17S 145.38E, pools, murky, flowing, silty, shade, 3.ii.1998, T. Weir (ANIC); 4♀ apt., same locality data as holotype (ANIC).

Microvelia (Austromicrovelia) margaretae, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'Bald Mt Area, S. Qld, Feb. 1970, T. Weir' (ANIC).

Paratypes. **New South Wales:** 2♂, 2♀ apt., Little Haystack Ck, EPA Survey – MRHI CLAR 12, 28.39S 152.30E, 9.v.1995, E. Turak (AM); 5♂, 7♀ apt., 1♀ macr., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 3.x.1995, E. Turak (AM); 2♂, 2♀ apt., Kunderang Brook at The Racecourse, EPA Survey – MRHI MACL 17, 31.08S 152.17E, 4.x.1995, N. Waddell (AM); 4♂, 2♀ apt., 2 nymphs, Kunderang Brook at The Racecourse, EPA Survey – MRHI MACL 17, 31.08S 152.17E, 8.iv.1995, N. Waddell (AM); 3♂, 2♀ apt., Doyles R., Maxwells Flat, EPA Survey – MRHI HAST 15, 31.29S 152.11E, 11.iv.1995, E. Turak (AM); 3♂, 1♀ apt., Doyles R., Maxwells Flat, EPA Survey – MRHI HAST 15, 31.29S 152.11E, 4.x.1995, J. Ling (AM); 1♂ apt., Ellenborough R. at Bulga S.F., EPA Survey – MRHI HAST 24, 31.37S 152.17E, 10.iv.1995, E. Turak (AM); 1♂ apt., Ellenborough R. at Bulga S.F., EPA Survey – MRHI HAST 24, 31.37S 152.17E, 5.x.1995, J. Ling (AM); 1♂ apt., Koorainghat Ck, Gilfillans Road, EPA Survey – MRHI MANN 01, 31.59S 152.31E, 4.xii.1995, J. King (AM); 1♂ apt., Marramarra Ck, EPA Survey – MRHI HAWK 01, 33.31S 151.04, 7.iv.1995, E. Turak (AM); 1♂, 1♀ apt., Marramarra Ck, EPA Survey – MRHI HAWK 01, 33.31S 151.04E, 1.xi.1995, J. Ling & E. Turak (AM); 1♀ apt., Upper Little Cattai Ck, EPA Survey – MRHI HAWK 02, 33.31S 150.59E, 1.vi.1995, E. Turak (AM); 2♀ apt., 1 nymph, Upper Little Cattai Ck, EPA Survey – MRHI HAWK 02, 33.31S 150.59E, 13.xii.1995, E. Turak (AM); 2♂ apt., 2 nymphs, Upper Little Cattai Ck, EPA Survey – MRHI HAWK 02, 33.31S 150.59E, 16.v.1996, E. Turak (AM); 1♀ apt., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 8.xii.1995, N. Waddell (AM); 3♂ apt., Sydney, Roy. Natl. Park, cold clear stream, 34.07S 151.03E, 7.xi.1970, collector unknown (JTTC); 2♀ apt., Golden Moon Ck up Little R., EPA Survey – MRHI HAWK 13, 34.10S 150.27S, 14.v.1996, J. King (AM); 1♂ apt., Figtree Cave, Wombeyan, 34.19S 149.59E, 26.ii.1966, E. Hamilton-Smith (SAM); 1♂, 2♀ apt., Stoney Ck at Croobyar S.F., EPA Survey – MRHI CLYD 01, 35.20S 150.22E, 13.iii.1995, J. King (AM); 3♀ apt., Stoney Ck at Croobyar S.F., EPA Survey – MRHI CLYD 01, 35.20S 150.22E, 23.x.1995, A. Leask (AM); 1♂ apt., Lyons Ck, EPA Survey – MRHI CLYD 03, 35.34S 150.05, 12.x.1994, E. Turak (AM); 1♂ apt., Watergums Ck (Wonboyn R.), EPA Survey – MRHI TOWA 03, 36.17S 149.53E, 8.iii.1996, E. Turak (AM); 1♂, 2♀ apt., Mataganah Ck, EPA Survey – MRHI TOWA 12, 36.53S 149.39E, 16.x.1994, E. Turak (AM); 2♂ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 13.iii.1996, Natacha Waddell (AM); 2♂ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 15.x.1994, E. Turak (AM). **Queensland:** 1♀ apt., same locality data as holotype,

1♀ apt., 28.14S 152.25E (ANIC). **Victoria:** 1♂ apt., Tennyson Ck 5 km NW of Buldah, 37.14S 149.07E, 10–16.i.1982, ANZSES Expedition (also labelled ‘*Microvelia childi* Møller Andersen T.E. Woodward Det.’) (MV).

***Microvelia (Austromicrovelia) childi* Andersen, comb. nov.**

Material examined

Holotype. Apterous ♂, labelled ‘Kuringai Chase, 20 miles [= 30 km] N of Sydney, iv.1966, J. Child’ and ‘freshwater stream, 500ft [= 170 m]’ (ANIC).

Paratypes. **New South Wales:** 1♀ apt., 1♀ macr., same locality data as holotype, 33.40S 151.15E (ANIC, ZMUC); 4♂, 2♀ apt., Boronia Pk, freshwater stream, 33.49S 151.08E, 7.vi.1966, J. Child (ANIC, ZMUC);

Other material examined. **New South Wales:** 1♀ apt., Platypus Ck, EPA Survey – MRHI BELL 16, 30.31S 152.27E, 12.v.1995, E. Turak (AM); 1♀ apt., Caparra Ck, Caparra hut, EPA Survey – MRHI MANN 10, 31.42S 152.11E, 4.x.1994, J. King (AM); 1♀ apt., Caparra Ck, Caparra Hut, EPA Survey – MRHI MANN 10, 31.42S 152.11E, 11.iv.1995, E. Turak (AM); 5♂, 10♀ apt., 3 nymphs, Mount White, water pools in creek, 33.27S 151.10E, 2.ix.1990, Tom Gush (ANIC); 2♂ apt., Marramarra Ck, EPA Survey – MRHI HAWK 01, 33.31S 151.04E, 1.xi.1995, J. Ling & E. Turak (AM); 5♂, 6♀ apt., 1♀ macr., Jocks Ck u/s Cox’s R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 24.v.1996, E. Turak (AM); 12♂, 24♀ apt., 1♀ macr., Jocks Ck u/s Cox’s R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 8.xii.1995, N. Waddell (AM); 1♀ apt., Salvation Ck, EPA Survey – MRHI HAWK 03, 33.38S 151.14E, 26.v.1995, J. Ling (AM); 1♀ macr., Blackheath, 33.38S 150.17E, x.1930, F.E. Wilson (MV); 2♂, 2♀ apt., Wentworth Falls, CL1401, 19.xii.1977, J.T. & M.S. Polhemus (JTPC); 1♂ apt., Megalong Ck at Narrow Neck, EPA Survey – MRHI HAWK 10, 33.44S 150.14E, 1.xi.1995, J. King (AM); 2♂, 2♀ apt., Lane Cove, 33.49S 151.10E, 21.viii.1891, W (AM); 10♂, 13♀ apt., Golden Moon Ck up Little R., EAP Survey – MRHI HAWK 13, 34.10S 150.27S, 14.v.1996, J. King (AM); 1♂, 1♀ apt., 1♀ macr., Golden Moon Ck up Little R., EPA Survey – MRHI HAWK 13, 34.10S 150.27E, 7.xii.1995, E. Turak (AM); 1♀ apt., Mt Keira, Byarong Ck, 34.25S 150.51E, 22.v.1949, C.E. Chadwick (AM); 3♀ apt., Minnamurra R. u/s Museum, EPA Surveu – MRHI SHOAL 02, 34.38S 150.43E, 31.v.1995, J. Ling (AM); 1♂, 2♀ apt., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 17.v.1996, J. Ling (AM); 3♂, 1♀ apt., 1♀ macr., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 4.xii.1995, J. Ling (AM); 1♀ apt., Broger’s Ck, EPA Survey – MRHI SHOAL 24, 34.42S 150.41E, 2.vi.1995, J. Ling (AM); 2♂, 3♀ apt., 6 nymphs, Porter’s Ck Dam, EPA Survey – MRHI CLYD m1, 35.16S 150.20E, 3.iii.1996, J. Ling (AM); 1♀ apt., Bombay R. u/s Bombay, APE Survey – MRHI SHOAL 09, 35.29S 149.38E, 23.v.1996, E. Turak (AM); 2♂, 1♀ apt., Lyons Ck, EPA Survey – MRHI CLYD 03, 35.34S 150.05E, 23.xi.1995, E. Turak (AM); 4♂, 3♀ apt., 1 nymph, Kelly’s Ck, EPA Survey – MRHI CLYD m2, 35.49S 150.06E, 23.xi.1995, E. Turak (AM); 1♂ apt., Watergums Ck (Wonboyn R.), EPA Survey – MHRI TOWA 03, 36.17S 149.53E, 15.x.1994, J. Ling (AM); 3♀ apt., Paddy’s Ck, EPA Survey – MRHI Bega 23, 36.20S 149.48E, 15.iii.1995, E. Turak (AM); 5♂, 5♀ apt., Paddy’s Ck, EPA Survey – MRHI Bega 23, 36.20S 149.48E, 26.x.1995, E. Turak (AM); 1♀ apt., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 24.xi.1995, M. Root (AM); 7♂, 4♀ apt., Mataganah Ck, EPA Survey – MRHI TOWA 12, 36.53S 149.39E, 16.x.1994, E. Turak (AM); 1♂ apt., 1 nymph, Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 16.iii.1995, J. Ling (AM); 1♂ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 13.iii.1996, N. Waddell (AM).

Microvelia (Austromicrovelia) monteithi, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'Mt Spec. Nat. Pk. via Paluma, N. Q[ueensland], 7.xi.1969, T. Weir' (ANIC).

Paratypes. **Queensland:** 1♂, 2♀ apt., 7 km SE of Rossville, water sweep, 15.48S 145.18E, 21.ix.1992, P. Zborowski & L. Miller (ANIC); 1♂, 3♀ apt., 2♂, 1♀ macr., Emmagen Ck, 4.5 km NNW Cape Tribulation, pools, debris, clear, stony, shade, 16.02S 145.27E, 9.ii.1998, T. Weir (ANIC); 1♂ apt., Daintree Nat. Pk, Daintree–Cape Trib. Rd, crossing trib. of Buchanan Ck, 16.15S 145.26E, 29.iv.1998, G. Cassis & S. Davies (AM); 10♂, 8♀ apt., McKinnon Ck, 600 m, 17.02S 145.42E, 1.xii.1993, Monteith, Janetzki & Cook (QM); 1♂ apt., Bedarra Island, 18.00S 146.08S, 2.vi.1973, E.N. Marks (UQIC); 1♂ apt., Hinchinbrook Island, Little Ramsay Bay, 18.19S 146.18E, 11–19.viii.1975, E.N. Marks (UQIC); 4♂, 1♀ apt., 1♂, 9♀ macr., 7 nymphs, Hinchinbrook Island, Gayundah Ck, 18.22S 146.13E, 7–15.xi.1984, Monteith, Cook & Thomson (QM); 1♂ apt., Cardwell Ra. (South side), rock pools, 18.26S 146.06E, 2.vi.1953, T.E. Woodward (UQIC); 1♂, 1♀ apt., Wallaman Falls Scenic Area via Ingham, 18.36S 145.48E, 6.viii.1968, T. Weir (ANIC); 4♂, 2♀ apt., same locality data as holotype, 18.57S 146.11E (ANIC); 1♂, 1♀ apt., 1♂, 1♀ macr., Little Crystal Ck, 1086ft, 19.01S 146.15E, 7.xi.1969, T. Weir (ANIC); 2♂, 1♀ macr., Mt Cleveland, 500 m, pits & intercepts, 19.16S 147.03E, 22–24.iii.1991, G. Monteith & D. Cook (QM); 1♂, 4♀ macr., Mt Cleveland, 500 m, rainforest traps, 19.16S 147.03E, 1–12.iii.1991, A. Graham (QM); 4♂, 4♀ macr., Mt Cleveland, pitfall & intercept traps, 19.16S 147.03E, 23.iii–13.v.1991, D. Cook (QM); 2♂, 1♀ apt., 2♂, 2♀ macr., Mt Elliot, north creek, 1000 m, 19.29S 146.57E, 25–27.iii.1991, G. Monteith & D. Cook (QM).

Microvelia (Austromicrovelia) tuberculata, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'Mt Tamborine, Q[ueensland], 1.vi.1969, T. Weir' (ANIC).

Paratypes. **New South Wales:** 1♂ apt., Peacock Ck, Forestry Corner camp, EPA Survey – MRHI CLAR 15, 28.39S 152.43E, 8.v.1995, E. Turak (AM); 1♂ apt., Washpool Ck, Washpool N.P., EPA Survey – MRHI CLAR 07, 29.16S 152.26E, 9.x.1995, E. Turak (AM); 1♂, 1♀ apt., Sandon R., EPA Survey – MRHI CLAR 27, 29.53S 153.15E, 8.x.1995, E. Turak (AM); 1♀ apt., Sandon R., EPA Survey – MRHI CLAR 27, 29.53S 153.15E, 29.ix.1994, J. Ling (AM); 6♂, 6♀ apt., 1 nymph, Wooli Wooli R., EPA Survey – MRHI CLAR 28, 30.17S 153.10E, 7.x.1995, J. Ling (AM); 2♂ apt., Wooli Wooli R., EPA Survey – MRHI CLAR 28, 30.17S 153.10E, 8.v.1995, J. Ling (AM); 7♂, 7♀ apt., 4 nymphs, Eight Mile Ck, Blowhole, EPA Survey – MRHI MACL 11, 31.05S 152.34E, 7.x.1995, N. Waddell (AM); 1♂, 4♀ apt., Pappinbarra R. u/s Field Study Centre, EPA Survey – MRHI HAST 09, 31.15S 152.25E, 7.iv.1995, F. Laurenson (AM); 1♂ apt., Wilson R. at Wild Bull Park, EPA Survey – MRHI HAST 22, 31.15S 152.31E, 5.x.1995, E. Turak (AM); 5♂, 2♀ apt., 3 nymphs, Balyngara creek on Scrubby Ck Road, EPA Survey – MRHI HAST 19, 31.22S 152.44E, 6.iv.1995, F. Laurenson (AM); 5♂, 12♀ apt., Balyngara Ck on Scrubby Ck Road, EPA Survey – MRHI HAST 19, 31.22S 152.44E, 7.x.1995, E. Turak (AM); 2♂, 2♀ apt., Wauchope, stagnant pools off running creek, 31.28S 152.44E, 12.viii.1958, T.E. Woodward

(ANIC); 1♂, 1♀ apt., Coaches Ck/Doyles R. confluence, EPA Survey – MRHI HAST 20, 31.32S 152.18E, 10.iv.1995, collector unknown (AM); 1♂ apt., 1 nymph, Lansdowne R., Mt Bally, EPA Survey – MRHI MANN 06, 31.40S 152.26E, 6.x.1995, J. Ling (AM); 1♂, 1♀ apt., 1 nymph, Stoney Ck, Mosquito Road, EPA Survey – MRHI MANN 03, 31.41S 152.42E, 6.iv.1995, E. Turak (AM); 10♂, 3♀ apt., Tributary of Batar Ck, EPA Survey – MRHI MANN 16, 31.41S 152.40E, 3.x.1995, J. Ling (AM); 2♂, 1♀ apt., 5 nymphs, Tributary of Batar Ck, EPA Survey – MRHI MANN 16, 31.41S 152.40E, 6.iv.1995, E. Turak (AM); 1♂ apt., Lansdowne State Forest, in creek debris, 31.44S 152.31E, 22.v.1992, T. Gush (ANIC); 1♂, 2♀ apt., 3 nymphs, Holey Flat creek u/s Moorland, EPA Survey – MRHI MANN 02, 31.46S 152.38E, 1.x.1994, J. Ling (AM); 4♂, 5♀ apt., Kiwarrak S.F., old flood refuse in creek bed, 31.58S 152.28E, 26.xi.1992, Vince Lorimer (AM); 2♂, 1♀ apt., Parson's Ck u/s Terry's Ck, EPA Survey – MRHI HUNT 05, 32.43S 149.52E, 12.xii.1995, N. Waddell (AM); 2♂ apt., Bouddi Nat. Pk, Little Beach, in leaf litter near creek, 33.30S 151.26E, 26.x.1992, V. Lorimer (AM).

Queensland: 16♂, 25♀ apt., 3♂ macr., Mt Abbott slopes, 100–500 m, 20.06S 147.45E, 9–12.iv.1997, Monteith, Cook, Janetzki (QM); 1♀ apt., Mt Abbott, summit area, 750–1000 m, 20.06S 147.45E, 8–10.xii.1996, G. Monteith, D. & I. Cook (QM); 22♂, 76♀, 22 nymphs, Broken R., Eungella Nat. Pk, rainforest, 700 m, 21.10S 148.31E, 10–12.xi.1976, R.W. Taylor & T.A. Weir (ANIC); 1♂, 2♀ apt., Bulburin SF, 24.35S 151.30E, 27–29.v.1960, P.R. Webb (UQIC); 15♂, 14♀ apt., Imbil State Forest, stagnant creek pools, 26.28S 152.41E, 5.xi.1957, T.E. Woodward (UQIC); 2♂, 1♀ apt., Bunya Mts, 26.51S 151.34E, 18–19.x.1972, B. Cantrell (UQIC); 3♂, 3♀ apt., Bunya Mts, 26.51S 151.34E, 23.i.1938, N. Geary (AM); 2♂, 1♀ apt., Bunya Mts, 3000ft, 26.51S 151.34E, 26.xii.1937, N. Geary (AM); 5♂, 2♀ apt., Bunya Mts, rock pool, 26.51S 151.34E, 24.x.1958, S. Sekhon (ANIC); 2♂ apt., Brisbane, 27.28S 153.02E, 18.ix.1955, D. Griffith (UQIC); 1♀ apt., Brisbane, 27.28S 153.02E, 1954, T.E. Woodward (UQIC); 1♂, 1♀ apt., Cedar Falls, Brisbane area, CL0158, 27.28S 153.02E, 7.vi.1979, I. Lansbury (ANIC); 6♂, 13♀ apt., same locality data as holotype, 27.55S 153.10E (ANIC, UQIC); 1♂ apt., Mt Tamborine, 27.55S 153.10E, viii.1960, E.A. Bernays (UQIC); 1♀ apt., Joalah Nat. Pk, Tamborine Mt, 27.56S 153.12E, 18–21.x.1978, Lawrence & Weir (ANIC); 1♂ apt., Joalah Nat. Pk, Mt Tamborine, ANIC Berlesate 656, flood debris, litter, 27.58S 153.11E, 23.vii.1979, J.F. Lawrence (ANIC); 1♀ apt., Teviot Gap, between Boonah & Killarney, 28.14S 152.29E, 13.iv.1968, N. Gough (UQIC); 2♂, 5♀ apt., Farm Ck, 15 mi E of Emu Vale, 3000ft, 28.16S 152.19E, 17–22.v.1969, T. Weir (ANIC, UQIC, MV).

Microvelia (Austromicrovelia) queenslandiae, sp. nov.

Material examined

Holotype. Apterous ♂, labelled 'Q[ueens][an]d, 7 km SE Rossville, 15.48S 145.18E, water sweep, 21.ix.1992, P. Zborowski & L. Miller' (ANIC).

Paratypes. **New South Wales:** 6♂ apt., 1 nymph, Towgon Ck, EPA Survey – MRHI CLAR 18, 29.26S 152.37E, 11.v.1995, J. Ling (AM); 1♂, 1♀ apt., Towgon Ck, Grange S.F., EPA Survey – MRHI CLAR 18, 29.26S 152.37E, 8.x.1995, E. Turak (AM); 1♂, 2♀ apt., 1 nymph, Mann R., Grafton Road, EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 9.x.1995, N. Waddell (AM). **Queensland:** 4♂, 5♀ apt., 4 nymphs, Mistake Ck, pools in running creek, 11.21S 142.24E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 1♂, 2♀ macr., Cockatoo Ck, flight intercept trap, 11.39S 142.27E, 20.iv–20.v.1994, P. Zborowski (ANIC); 1♀ macr., Cockatoo Ck, Flight intercept trap, 11.39S 142.27E, 22.i–19.ii.1994, P. Zborowski (ANIC); 1♂ apt., Cockatoo Ck, pools in

rocky running creek, 11.39S 142.27E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., Heathlands, F.T.T. 1247, closed scrub (=heath), 11.45S 142.35E, 25.iv–7.vi.1992, T. McLeod (ANIC); 5♀ macr., Heathlands, FIT ANIC 1239, closed scrub (=heath), 11.45S 142.35E, 26.i.–29.ii.1992, P. Feehney (ANIC); 15♂, 17♀ apt., 50+ nymphs, Heathlands, running creek, 11.45S 142.35E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., Bertie Ck, pools in rocky running creek, 11.50S 142.30E, 21.x.1992, T. Weir & P. Zborowski (ANIC); 1♂, 4♀ apt., 12 km SSE of Heathlands, F.I.T. ANIC 1241 closed forest, 11.51S 142.38E, 26.i.–1.iii.1992, P. Feehney (ANIC); 3♂, 1♀ apt., 2♂, 1♀ macr., 12 nymphs, Glennie Ck, running creek, 12.21S 143.00E, 23.x.1992, T. Weir, P. Zborowski (ANIC); 1♂ apt., 3♂, 1♀ apt., 3 km ENE of Mt Tozer, 12.44S 143.14E, 28.vi.–4.vii.1986, T. Weir & A. Calder (ANIC); 1♂, 4♀ apt., 13♂, 22♀ macr., West Claudie R., closed forest, still rocky pools, non-flowing stream, 12.45S 143.14E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 1♂, 2♀ macr., Coen, flight intercept trap, 13.57S 143.12E, 23.iv–26.v.1994, P. Zborowski (ANIC); 1♀ apt., 3♂, 2♀ macr., Alex Ck, Cape Melville, 14.16S 144.28E, 7.vi.1994, B. Herbert & P. Graham (ANIC); 1♂, 2♀ apt., 2♂, 2♀ macr., 1 nymph, Mt Webb Nat. Pk (Humbag Ck), 15.04S 145.07E, 28–30.ix.1980, T. Weir (ANIC); 1♂, 1♀ macr., 1 nymph, 5 km W by N of Rounded Hill, 15.17S 145.10E, 7.x.1980, T. Weir (ANIC); 1♂, 1♀ apt., 1♂ macr., 5 km SE of Rossville, water sweep, 15.47S 145.17E, 21.ix.1992, P. Zborowski & L. Miller (ANIC); 2♂, 7♀ apt., 1♂, 1♀ macr., 12 nymphs, Moses Ck, 4 km N by E Mt Finnigan, 15.47S 145.17E, 14–16.x.1980, T. Weir (ANIC); 1♂, 1♀ apt., same locality data as holotype, 15.48S 145.18E (ANIC); 1♀ macr., Mt Finnigan, 1080 m, flight intercept, site 5, 15.48S 145.17E, 4.xii.1996–17.i.1997, Qld Mus. 7 ANZSES (QM); 1♀ macr., Mt Finnigan, intercept, site 4, 1060 m, 15.48S 145.17E, 17.i.1991, Qld Mus. & ANZSES (QM); 1♂, 1♀ apt., 5 km SW of Ayton, water sweep, 15.57S 145.19E, 27.iv.1994, P. Zborowski (ANIC); 1♂ apt., 1♀ macr., 4 km E of Wujal Wujal, water sweep, 15.57E 145.20E, 25.viii.1992, P. Zborowski & J. Cardale (ANIC); 3♂, 5♀ apt., 3♂, 4♀ macr., Russell Ck, water sweep, 15.52S 145.19E, 26.iv.1994, P. Zborowski (ANIC); 2♂ apt., 1♂ macr., Emmagen Ck, 4.5 km NNW Cape Tribulation, pools, debris, clear, stony, shade, 16.02S 145.27E, 9.ii.1998, T. Weir (ANIC); 3♂, 9♀ apt., 3♂, 4♀ macr., Cooper Ck, 18 mi N of Daintree R., 16.10S 145.25E, 14.xi.1969, T. Weir (ANIC); 1♂, 3♀ apt., 1♂, 1♀ macr., Mossman Gorge via Mossman, 16.28S 145.20E, 13.xi.1969, T. Weir (ANIC); 3♂, 8♀ apt., 2♂, 5♀ macr., Mossman Gorge, 16.28S 145.20E, 1.viii.1956, T.E. Woodward (UQIC); 1♂, 2♀ apt., 4 nymphs, 1.5 km NNW of Mt Lewis, flowing ck, clear, shade, rainforest, 16.34S 145.15E, 16.xii.1994, P. Zborowski (ANIC); 1♂, 6♀ apt., 2♂, 1♀ macr., 7 nymphs, Nissen Ck, still tanniny pool, shade, rainforest, 16.34S 145.20E, 16.xii.1994, P. Zborowski (ANIC); 3♂, 6♀ apt., 17 nymphs, Rocky Ck, flowing ck, clear, full shade, rainforest, 16.35S 145.17E, 16.xii.1994, P. Zborowski (ANIC); 4♂, 9♀ apt., 2♀ macr., 10 nymphs, Devil Devil Ck, small, polluted, shade, riverine scrub, 16.35S 145.23E, 16.xii.1994, P. Zborowski (ANIC); 4♀ apt., 1♂, 2♀ macr., Julatten, creek in deep gully, CL0139, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♀ apt., 2♂, 2♀ macr., Julatten, farm dam, CL0135, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 5♂, 7♀ apt., 1♀ macr., 5 nymphs, Julatten, rainforest creek, CLO138, 16.36S 145.20E, 21.v.1979, I. Lansbury (ANIC); 1♂ apt., 1♂, 2♀ macr., Hann Tableland (Nth end), rainforest, 950–1000 m, 16.49S 145.11E, 11–14.xii.1995, Monteith, Thompson & Cook (ANIC, QM); 1♂ apt., stream near Barron Falls, 16.50S 145.38E, 31.vii.1956, T.E. Woodward (UQIC); 2♂, 4♀ apt., 6♂, 4♀ macr., Crystal Cascades, via Redlynch, 16.53S 145.42E, 12.xi.1969, T. Weir (ANIC); 2♂, 2♀ apt., 1♂, 4♀ macr., 6 nymphs, Emerald Ck, flowing, clear, sandy, wet sclerophyll, 17.04S 145.33E, 15.xii.1994, P. Zborowski (ANIC); 2♂ macr., Emu Ck, 720 m, site Haig 14, 17.06S 145.32E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂, 4♀ apt., 1 nymph, Emu Ck, 750 metres, site

Haig 19, 17.06S 145.32E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂ macr., 3 nymphs, Upper Emu Ck, 900 m, 17.06S 145.33E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 2♂, 4♀ apt., 2♀ macr., Little Mulgrave R. via Gordonvale, 17.07S 145.41E, 11.xi.1969, T. Weir (ANIC, UQIC); 6♂, 7♀ apt., 2♂, 1♀ macr., 8 nymphs, Robson Ck, flowin ck, clear, part shade, rainforest, 17.08S 146.38E, 12.xii.1994, P. Zborowski (ANIC); 1♀ apt., Marnanes, Mazlin Ck, rocks, slow flow, 17.16S 145.28E, 28.viii.1995, B. Herbert (ANIC); 1♂, 1♀ apt., Marnanes, Mazlin Ck, rocks, slow flow, 17.16S 145.28E, 31.vii.1995, B. Herbert (ANIC); 1♂ apt., Lake Eacham Nat. Pk, raiforest fungi & log litter, 760 m, 17.17S 145.38E, 23.vii.1982, S. & J. Peck (ANIC); 14 apt., Peterson Ck, 12 km from Atherton, on Yungaburra Road, CL0148, 17.17S 145.35E, 24.v.1979, I. Lansbury (ANIC); 7♂, 4♀ apt., 6 nymphs, Wright Ck, Lake Eacham Nat. Pk, pools, murky, flowing, silty, shade, 17.17S 145.38E, 3.ii.1998, T. Weir (ANIC); 8♂, 9♀ apt., 6 nymphs, Leslie Ck, para grass, slow flow, 17.18S 145.34E, 8.xi.1995, B. Herbert (ANIC); 1♀ apt., Leslie Ck, para grass, slow flow, 17.18S 145.34E, 2.viii.1995, B. Herbert (ANIC); 2♂, 3♀ apt., 2♂, 1♀ macr., The Boulders via Babinda, 17.20S 145.51E, 8.xi.1969, T. Weir (ANIC); 13♂, 34♀ apt., North Johnstone R. at Malanda, 17.21S 145.36E, 9.xi.1969, T. Weir (ANIC); 1♀ apt., 1♀ macr., The Crater Nat. Pk, 17.25S 145.29E, 10.xi.1969, T. Weir (ANIC); 5♂, 3♀ apt., 2♂, 4♀ macr., 2 nymphs, Hemmings Road, Barron R., para grass, slow flow, 17.27S 145.30E, 28.xi.1994, B. Herbert (ANIC); 1♂ apt., Hemmings Road, Barron R., para grass, slow flow, 17.27S 145.30E, 31.vii.1995, B. Herbert (ANIC); 2♂, 1♀ apt., 1♀ macr., Hemmings Road, Barron R., para grass, slow flow, 17.27S 145.30E, 4.x.1994, B. Herbert (ANIC); 8♂, 18♀ apt., 2♂, 1♀ macr., Millaa Millaa Falls, 17.30S 145.37E, 10.xi.1969, T. Weir (ANIC); 1♂, 2♀ apt., 5 nymphs, The Millstream, 17.32S 145.31E, 14.xii.1994, P. Zborowski (ANIC); 2♂ apt., Palmerston Nat. Pk, 17.37S 145.47E, 10.xi.1969, T. Weir (ANIC); 1♀ apt., 1♂ macr., Millstream Falls Nat. Pk, pools below falls, clear, vegetation, 17.39S 145.27E, 8–15.xi.1998, T. Weir (ANIC); 1♂, 2♀ apt., 4 nymphs, Charmillin Ck, flowing ck, tannin, half shade, rainfore, 17.42S 145.31E, 14.xii.1994, P. Zborowski (ANIC); 1♂, 1♀ apt., 1♂, 1♀ macr., Atherton Railway Bridge, Mazlin Ck, rock, undercut, slow flow, 17.51S 145.29E, 5.xii.1995, B. Herbert (ANIC); 2♀ apt., Atherton Railway Bridge, Mazlin Ck, undercut bedrock, slow flow, 17.51S 145.28E, 8.v.1995, B. Herbert (ANIC); 1♂, 1♀ apt., Atherton Railway Bridge, Mazlin Ck, undercut, bedrock, slow flow, 17.51S 145.29E, 8.xi.1995, B. Herbert (ANIC); 1♂, 4♀ macr., 6 nymphs, Bilyana Ck, 12 mi [= 18 km] N of Cardwell, 18.07S 145.55E, 8.xi.1969, T. Weir (ANIC); 1♂ macr., Hinchinbrook Island, Little Ramsay Bay, 18.19S 146.18E, 11–19.viii.1975, E.N. Marks (UQIC); 1♀ apt., 1♂ macr., Murray Falls, CL1718, 13.viii.1983, J.T. & D.A. Polhemus (JTPC); 1♂ macr., 7 km W of Mission Beach, CL1721, 14.viii.1983, J.T. & D.A. Polhemus (JTPC); 2♂, 1♀ macr., Waterfall Ck, 18 miles [= 27 km] S of Ingham, 18.52S 146.12E, 8.xi.1969, T. Weir (ANIC); 4♂, 5♀ apt., Mt Spec Nat. Pk via Paluma, 18.57S 146.11E, 7.xi.1969, T. Weir (ANIC); 1♀ apt., Birthday Ck via Paluma, 18.58S 146.07E, 7.xi.1969, T. Weir (ANIC); 3♂, 1♀ apt., Birthday Ck, 6 km NWbyW of Paluma, 18.59S 146.10E, 25.ix.1980, T. Weir (ANIC); 1♀ macr., Alligator Ck, Bowling Green Nat. Pk, bucket light trap, 19.26S 146.57E, 20.v.1999, L. Kaila (ANIC); 3♂, 3♀ macr., Alligator Ck, Bowling Green Nat. Pk, shallow flowing creek, sandy, vegetation, 19.26S 146.57E, 20–25.v.1999, T. Weir (ANIC); 4♀ apt., 1♂ macr., Cape Upstart, 4.6 km N of Station Hill, 550–650 m, 19.44S 147.48E, 21–23.iv.1998, G. Monteith (QM); 2♂, 10♀ apt., 2♀ macr., Finch Hatton Gorge, via Finch Hatton, 21.04S 148.38E, 3.xi.1969, T. Weir (ANIC); 1♂, 1♀ macr., Boulder Ck via Mirani, 21.01S 148.42E, 5.xi.1969, T. Weir (ANIC); 1♂, 1♀ apt., Broken R., 50 mi W of Mackay, 21.10S 148.31E, 30.xi.1968, E.B. Britton (ANIC); 1♂, 1♀ macr., Eungella Nat. Pk via Dalrymple Heights, 21.11S

148.29E, 4.viii.1968, T. Weir (ANIC); 2♂, 8♀ apt., Eungella Nat. Pk, via Dalrymple Heights, 21.11S 148.29E, 4.xi.1969, T. Weir (ANIC).

***Microvelia (Austromicrovelia) myorensis*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Myora Ck, Nth. Stradbroke Is., Q., 28.ii.1969, T. Weir' (ANIC).

Paratypes. **Queensland:** 33♂, 44♀ apt., 9♂, 9♀ macr., same locality data as holotype, 27.29S 153.25E (ANIC, ZMUC).

***Microvelia (Austromicrovelia) woodwardi*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Carnarvon Gorge, S Q[ueens]land, 29.v.1954, T.E. Woodward' (ANIC).

Paratypes. **Queensland:** 1♂, 5♀ apt., same locality data as holotype, 25.03S 148.12E (ANIC, UQIC); 1♂, 1♀ apt., Ward's Canyon Stop 2, Carnarvon Nat. Park, stream pool, 25.03S 148.12E, 27.xi.1993, G. Cassis (AM).

***Microvelia (Austromicrovelia) distincta* Malipatil, comb. nov.**

Material examined

Holotype. Apterous ♂, labelled 'VIC, Thomson R., Thomson-Jordan Divide Rd, 1.v.1977, N.M.V. Survey Dept. G.R.E.S. T6 no. 5, M. Malipatil' (MV).

Paratypes. **New South Wales:** 1♂, 1♀ apt., Bimberamala R., EPA Survey – MRHI CLYD 05, 35.27S 150.04E, 12.x.1995, E. Turak (AM); 1♀ apt., Jordan R. –BB Ck junction, Jericho, Site T10, 37.38S 146.16E, 1.x.1977, MV Survey Dept, G.R.E.S. (NTM). **Victoria:** 1♂, 2♀ apt. same locality data as holotype, 37.43S 146.16E (MV); 1♀ apt., Thomson R., Thomson Portal Rd, Site T2, 37.43S 146.15E; 2.v.1977, MV Survey Dept, G.R.E.S. (MV); 2♂, 1♀ apt., Thomson R., Bells Clearing, Site T13, 37.45S 146.22E, 1.v.1977, MV Survey Dept, G.R.E.S. (ANIC, MV); 1♀ apt., Thomson R., Low Saddle Trk, Site T15, 37.53E 146.25E, 3.v.1977, MV Survey Dept, G.R.E.S. (MV); 1♀ apt., Thomson R., Moe-Walhalla Rd, Site T21, 37.58S 146.25E, 13.i.1977, MV Survey Dept, G.R.E.S. (NTM).

Other material examined. **New South Wales:** 1♂, 3♀ apt., Manning R., Gummi Trail, EPA Survey – MRHI MANN 14, 31.51S 151.34E, 9.iv.1995, J. King (AM); 1♂, 2♀ apt., Manning R., Gummi Trail, EPA Survey – MRHI MANN 14, 31.51S 151.34E, 5.x.1995, J. King (AM); 1♀ macr., Manning R., Henry's Bridge, EPA Survey – MRHI MANN 13, 31.53S 151.29E, 4.x.1995, J. King (AM); 1♂ apt., Koorainghat Ck, Gilfillans Road, EPA Survey – MRHI MANN 01, 31.59S 152.31E, 5.iv.1995, E. Turak (AM); 1♂, 2♀ apt., Manning river, Gummi Trail, EPA Survey – MRHI MANN 14, 31.51S 151.34E, 3.x.1994, J. Ling (AM); 1♂, 1♀ apt., Kerripit R. off Moppey Rd, EPA Survey – MRHI MANN 21, 32.01S 151.38E, 6.x.1995, J. King (AM); 2♀ apt., Allyn R., Chichester SF, 32.08S 151.27E, 10–11.xi.1981, T. Weir (ANIC); 1♂ apt., Broger's Ck, EPA Survey – MRHI

SHOAL 24, 34.42S 150.41E, 2.vi.1995, J. Ling (AM); 1♂, 1♀ apt., Bimberamala R., EPA Survey – MRHI CLYD 05, 35.27S 150.04E, 14.iii.1995, E. Turak (AM); 2♀ apt., Bimberamala R., EPA Survey – MRHI CLYD 05, 35.27S 150.04E, 4.iii.1996, J. Ling (AM); 3♂ apt., Bombay R. u/s Bombay, APE Survey – MRHI SHOAL 09, 35.29S 149.38E, 23.v.1996, E. Turak (AM); 1♂, 4♀ apt., Bombay R. u/s Bombay, EPA Survey – MRHI SHOAL 09, 35.29S 149.38E, 23.xi.1995, M. Root (AM); 1♂ apt., Bago Ck, EPA Survey – MRHI MURR m2, 35.34S 148.02E, 20.iii.1996, N. Waddell (AM); 10♀ apt., Bago Ck, EPA Survey – MRHI MURR m2, 35.34S 148.02E, 21.xi.1995, N. Waddell (AM); 3♀ apt., Bago Ck, EPA Survey – MRHI MURR m2, 35.34S 148.02E, 28.iii.1995, E. Turak (AM); 2♂, 4♀ apt., Cabbage Tree Ck, 34 km SE Braidwood, shaded stream, wet sclerophyll, 35.35S 150.01E, 2.iv.1996, R.E. Roughley (ANIC); 1♂, 2♀ apt., Buckenbowra R., EPA Survey – MRHI CLYD 20, 35.38S 149.59E, 13.iii.1995, J. Ling (AM); 1♂, 3♀ apt., Eucumbene R., Gauge Stn, EPA Survey – MRHI SNOW 02, 35.50S 148.29E, 25.xi.1995, J. King (AM); 2♀ apt., Jerrabuttgulla Ck at Sweetwater, EPA Survey – MRHI SHOAL 11, 35.51S 149.32E, 23.v.1996, E. Turak (AM); 1♂, 1♀ apt., Tooma R. d/s Tooma Dam, EPA Survey – MRHI MURR m9, 36.03S 148.17E, 26.iv.1995, A. Amos (AM); 1♂, 1♀ apt., Tooma R. d/s Tooma Dam, EPA Survey – MRHI MURR m9, 36.03S 148.17E, 29.iv.1996, E. Turak (AM); 2♂, 2♀ apt., Bogong Ck, EPA Survey – MRHI MURR 22, 36.21S 148.12E, 24.xi.1995, E. Turak (AM); 3♀ apt., 6 nymphs, Bogong Ck, EPA Survey – MRHI MURR 22, 36.21S 148.12S, 21.iii.1996, N. Waddell (AM); 2♂, 2♀ apt., Bogong Ck, EPA Survey – MRHI MURR 22, 36.21S 148.12E, 24.x.1995, Natacha Waddell (AM); 2♂, 8♀ apt., Thredbo R., 6 km NwbyN of Jindabyne, 900 m, 36.22S 148.36E, 15.iii.1969, T.A. Weir (ANIC); 7♀ apt., Thredbo R., 6 km NwbyN of Jindabyne (picnic area near bridge), 900 m, CL015, 36.22S 148.36E, 15.iii.1979, I. Lansbury (ANIC); 1♀ apt., Thredbo R., Kosciusko Nat. Pk, Site 12, 36.22S 148.36E, 24.ii.1982, M.E. McKaige (ANIC); 3♀ apt., Swampy Plains R. at Geehi, EPA Survey – MRHI MURR 23, 36.24S 148.11E, 28.x.1994, Frances Laurenson (AM); 1♀ apt., Swampy Plains R. at Geehi, EPA Survey – MRHI MURR 23, 36.24S 148.11E, 21.iii.1996, Natacha Waddell (AM); 4♀ apt., Swampy Plains R. at Geehi, EPA Survey – MRHI MURR 23, 36.24S 148.11E, 24.xi.1995, Alexander Leask (AM); 2♂, 4♀ apt., Wollindibby Ck, 10 km WbyS Jindabyne, 1060 m, CLO18, 36.26S 148.31E, 15.iii.1979, I. Lansbury (ANIC); 2♂, 1♀ apt., 1 nymph, Wollindibby Ck, 10 km WbyS of Jindabyne, 1060 m, 36.26S 148.31E, 15.iii.1979, T.A. Weir (ANIC); 3♂, 2♀ apt., Upper Yankee's Ck, EPA Survey – MRHI Bega 08, 36.32S 149.35E, 16.iii.1995, F. Laurenson (AM); 2♀ apt., Upper Yankee's Ck, EPA Survey – MRHI Bega 08, 36.32S 149.35E, 24.x.1995, E. Turak (AM); 1♂ apt., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 17.iii.1995, J. King (AM); 1♀ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 18.iii.1995, J. King (AM); 2♂, 3♀ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 24.xi.1995, M. Root (AM); 1♀ apt., Tantawangalo Ck, EPA Survey – MRHI Bega 09, 36.46S 149.31E, 16.x.1994, J. King (AM); 1♀ apt., Imlay Ck (Wallaraugh R.), EPA Survey – MRHI TOWA 07, 37.14S 149.42E, 13.iii.1996, J. King (AM); 1♀ apt., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 15.x.1994, E. Turak (AM); 1♂, 2♀ apt., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 16.iii.1995, J. Ling (AM); 2♂, 1♀ apt., 2♀ macr., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 6.iii.1996, J. Ling (AM); 1♂ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 13.iii.1996, N. Waddell (AM); 2♂ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 15.x.1994, E. Turak (AM); 2♂, 2♀ apt., 1 nymph, Wog Wog R., Nalbaugh, EPA Survey – MRHI TOWA 08, 37.02S 149.27E, 16.iii.1995, E. Turak (AM); 4♂, 6♀ apt., Wog Wog R., Nalbaugh, EPA Survey – MRHI TOWA 08, 37.02S 149.27E, 26.x.1995, R. Cowell (AM). **Victoria:** 1♀ apt., Suggan Buggan R., Snowy Mtns,

edge of flowing stream, 36.57S 148.20E, 17.iii.1996, R.E. Roughley (ANIC); 1♀ apt., Little R. at Taggerty, CL0052, 37.19S 145.43E, 29.iii.1979, I. Lansbury (ANIC); 1♂, 3♀ apt., Love Ck Rd from Colac to Gellibrand R, CL0037, 38.29S 143.35E, 27.iii.1979, I. Lansbury (ANIC); 3♂, 24♀ apt., East Warburton, Yarra R., CL0049, 37.45S 145.44E, 29.iii.1979, I. Lansbury (ANIC); 1♂, 2♀ apt., Upper Yarra Dam, old river bed below, CL0050, 37.40S 145.54E, 29.iii.1979, I. Lansbury (ANIC); 4♂, 6♀ apt., 3♀ macr., 1 nymph, Morwell R., 3 km N Mirboo North, upper reaches, CL0061, 38.22S 146.09E, 30.iii.1979, I. Lansbury (ANIC).

***Microvelia (Austromicrovelia) carnarvon*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Carnarvon NP, Qld, Ward's Canyon Stop 1, 27.xi.1993, G. Cassis' (AM).

Paratypes. **Queensland:** 1♂, 2♀ apt., 3♀ macr., Peawaddy Gorge, Mt Moffatt NP, 24.55S 148.04E, 1100 m, 26.ii.1996, G.B. Monteith (QM); 4♂, 11♀ apt., 40 nymphs, same locality data as holotype, 25.03S 148.12E (AM, ANIC); 1♂, 1♀, Carnarvon NP, Qld, Ward's Canyon Stop 2, 25.03S 148.12E, stream pool, 27.xi.1993, G. Cassis (AM); 1♂ apt., Carnarvon Gorge, 25.03S 148.12E, 29.vi.1954, T.E. Woodward (ANIC); 1♂, 1♀ apt., Carnarvon Gorge, 25.03S 148.12E, 29.v.1954, T.E. Woodward (ANIC, UQIC);

***Microvelia (Austromicrovelia) annemariaeae*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'NEQ[ueensland], 16.04S 145.25E, Roaring Meg Valley, 720 m, 22 Nov. 1993, Monteith, Janetzki, Roberts & Cook' (QM).

Paratypes. **Queensland:** 4♂, 1♀ apt., 1.5 km NNW of Mt Lewis, flowing, clear, rocky stream, mostly shade, rainforest, 16.34S 145.15E, 16.xii.1994, P. Zborowski (ANIC); 1♂ apt., Rocky Ck, small flowing, clear stream, sandy bottom with rocks, full shade, rainforest, 16.35S 145.17E, 16.xii.1994, P. Zborowski (ANIC); 1♂ apt., McKinnon Ck, 600 m, 17.02S 145.42E, 1.xii.1993, Monteith, Janetzki, Roberts & Cook (QM); 1♂ apt., Emerald Ck, 940 m, 17.05S 145.37E, 1.viii.1992, E. Nielsen, A. Gillison (ANIC); 2♀ apt., Hughes Rd., Topaz, 650 m, 17.36S 145.42E, Monteith, Janetzki, Roberts & Cook (QM); 1♀ apt., The Millstream, 17.32S 145.31E, 14.xii.1994, P. Zborowski (ANIC).

***Microvelia (Austromicrovelia) mossman*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Mossman Gorge via Mossman, N. Q[ueensland], 13.xi.1969, T. Weir' (ANIC).

Paratypes. **Queensland:** 3♂, 2♀ apt., Emmagen Ck, 4.5 km NNW Cape Tribulation, pools, debris, clear, stony, shade, 16.02S 145.27E, 9.ii.1998, T. Weir (ANIC); 1♀ macr., Cooper Ck, 18 mi N of Daintree R., 16.10S

145.25E, 14.xi.1969, T. Weir (ANIC); 1♂, 1♀ macr., Crystal Cascades, via Redlynch, 16.53S 145.42E, 12.xi.1969, T. Weir (ANIC); 2♂ apt., Little Mulgrave R. via Gordonvale, 17.07S 145.41E, 11.xi.1969, T. Weir (ANIC, UQIC); 2♀ apt., The Boulders via Babinda, 17.20S 145.51E, 8.xi.1969, T. Weir (ANIC); 2♂, 3♀ apt., Mt Hypipamee Nat. Pk, debris, clear, flowing, sandy, shade, 17.26S 145.29E, 5.ii.1998, T. Weir (ANIC); 6♂, 3♀ apt., The Crater Nat. Pk, 17.25S 145.29E, 10.xi.1969, T. Weir (ANIC); 1♂, 1♀ apt., Millaa Millaa Falls, 17.30S 145.37E, 11.viii.1968, T. Weir (ANIC); 2♂, 2♀ apt., Millaa Millaa Falls, 17.30S 145.37E, 10.xi.1969, T. Weir (ANIC); 1♂ apt., Palmerston Nat. Pk, 17.37S 145.47E, 10.xi.1969, T. Weir (ANIC); 1♀ apt., Charmillin Ck, flowing ck, tannin, half shade, rainforest, 17.42S 145.31E, 14.xii.1994, P. Zborowski (ANIC); 3♂, 6♀ apt., Birthday Ck via Paluma, 18.58S 146.07E, 7.xi.1969, T. Weir (ANIC); 1♂, 3♀ macr., Little Crystal Ck, 1086ft, 19.01S 146.15E, 7.xi.1969, T. Weir (ANIC); 26♂, 22♀ apt., 2♂, 3♀ macr., same locality data as holotype, 16.28S 145.20E (ANIC); 5♂, 8♀ apt., 10 nymphs, Mt Hypipamee N.P., Barron R. at Dinner F, pools, fast flow, clear, rocky, full sun, 17.26S 145.29E, 9.xi.1998, T. Weir (ANIC); 6♂, 1♀ apt., Mt Spec Nat. Pk via Paluma, 18.57S 146.11E, 7.xi.1969, T. Weir (ANIC).

***Microvelia (Austromicrovelia) angelesi*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled '12.47S 132.51E, 19 km NE by E of Mt Cahill, N.T., 13.vi.1973, T. Weir & T. Angeles' (ANIC).

Paratypes. **Northern Territory:** 8♂, 8♀ apt., Holmes Jungle Nature Park, Darwin, shaded slow flowing stream, closed forest, 12.24S 130.56E, 10.vii.1994, T. Weir, A. Roach (ANIC); 2♂, 1♀ apt., Holmes Jungle nr Darwin, in lagoon, 15.vii.1983, M.B. Malipatil (ANIC); 2♂, 2♀ apt., 1♂, 2♀ macr., 3 nymphs, same locality data as holotype, 12.47S 132.51E (ANIC); 2♂, 1♀ apt., Giyamungkurr (Black Jungle Spring), Kakadu Nat. Pk., narrow deep billabong with fringing Pandanus & grass & water lillies, 13.03S 132.10E, 14.vii.1994, T. Weir, A. Roach (ANIC); 1♂ apt., Bamboo Ck Tin Mine, Litchfield Nat. Pk., flowing creek with shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir, A. Roach (ANIC); 2♂, 2♀ apt., 1♀ macr., Robin Falls, Stream, CL910, 13.21S 131.08E, 12.xii.1977, J.T. Polhemus (JTPC).

***Microvelia (Austromicrovelia) pennicilla*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled '13.06S 130.47E GPS, Florence Falls, Litchfield Nat. Pk., NT, 17 July 1994, T. Weir, A. Roach' and 'flowing creek in closed forest, rocky sides, shaded pools' (ANIC).

Paratypes. **Northern Territory:** 2♀ apt., same locality data as holotype, 13.06S 130.47E (ANIC); 1♀ apt., Aida Ck Jumpup, Litchfield Nat. Pk., 13.06S 130.47E, shallow flowing creek with pools, 17.vii.1994, T. Weir, A. Roach (ANIC). **Western Australia:** 1♂ apt., Emma Gorge, Emma Ck, 15.v.1998, CALM (ANIC).

Microvelia (Austromicrovelia) peramoena Hale, comb. nov.

Material examined

Holotype. Macropterous ♂, labelled 'Myponga, S. Australia, H. M. Hale' and 'TYPE, *Microvelia peramoena* Hale' (SAM).

Paratypes. **South Australia:** 4♀ apt., same label data as holotype (SAM); 1♂, 1♀ apt., Adelaide, date unknown, H.M. Hale (SAM).

Other material examined. **Australian Capital Territory:** 1♂ macr., Piccadilly Circus, 35.22S 148.48E, 1240 m, Jan. 1984, J. Lawrence, T. Weir, M-L. Johnson (ANIC); 1♂ macr., Canberra, Farrer, in pool, 35.22S 149.05E, 10.xii.1980, D.C.F. Rentz (ANIC); 2♀ apt., Canberra, Black Mtn, 35.22S 149.05E, 10.xii.1999, J. Petersen (ANIC). **New South Wales:** 1♀ apt., 3♂, 3♀ macr., 2 nymphs, Clarence R. at Carnham Crossing, EPA Survey – MRHI CLAR 17, 20.20S 152.32E, 9.x.1995, E. Turak (AM); 5♂, 2♀ apt., 1♀ macr., 1 nymph, Peacock Ck, Forestry Corner camp, EPA Survey – MRHI CLAR 15, 28.39S 152.43E, 8.v.1995, E. Turak (AM); 1♀ apt., 1♀ macr., 1 nymph, Clarence R., Paddy's Flat, EPA Survey – MRHI CLAR 16, 28.43S 152.24E, 9.x.1995, J. Ling (AM); 1♀ apt., Boonoo Boonoo R., EPA Survey – MRHI CLAR 04, 28.48S 152.10E, 28.ix.1996, E. Turak (AM); 1♂ ♀ apt., Boonoo Boonoo R. at Falls, EPA Survey – MRHI CLAR 04, 28.48S 152.10E, 10.x.1995, E. Turak (AM); 1♂ macr., Boonoo Boonoo R. at Falls, EPA Survey – MRHI CLAR 04, 28.48S 152.10E, 11.x.1995, J. Ling (AM); 2♂, 5♀ apt., 2♂ macr., 1 nymph, Corall's Ck at Bald Rock N.P., EPA Survey – MRHI CLAR 06, 28.51S 152.06E, 10.v.1995, E. Turak (AM); 3♂, 5♀ apt., 1♀ macr., Corall's Ck at Bald Rock N.P., EPA Survey – MRHI CLAR 06, 28.51S 152.06E, 11.x.1995, J. Ling (AM); 4♂, 4♀ apt., 1♂, 1♀ macr., Cataract R. at Sandy Hill, EPA Survey – MRHI CLAR 05, 28.56S 152.14E, 10.x.1995, J. Ling (AM); 1♂, 2♀ apt., 1 nymph, Cataract R. at Sandy Hill, EPA Survey – MRHI CLAR 05, 28.56S 152.14E, 10.v.1995, E. Turak (AM); 1♀ apt., Washpool Ck, EPA Survey – MRHI CLAR 07, 29.16S 152.26E, 28.ix.1994, J. Ling (AM); 3♂ apt., 1♀ macr., 1 nymph, Washpool Ck, Washpool N.P., EPA Survey – MRHI CLAR 07, 29.16S 152.26E, 9.x.1995, E. Turak (AM); 5♂, 9♀ apt., 1♂, 1♀ macr., Towgon Ck, Grange S.F., EPA Survey – MRHI CLAR 18, 29.26S 152.37E, 8.x.1995, E. Turak (AM); 2♂ apt., Towgon Ck, EPA Survey – MRHI CLAR 18, 29.26S 152.37E, 11.v.1995, J. Ling (AM); 1♀ apt., 1 nymph, Sportsman's Ck, EPA Survey – MRHI CLAR 04, 29.28S 152.59E, 8.x.1995, J. King (AM); 1♀ apt., 1♀ macr., Mann R., EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 1.x.1994, E. Turak (AM); 1♂ apt., Mann R., Grafton Road, EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 11.v.1995, E. Turak (AM); 3♂, 1♀ apt., Mann R. Falls, EPA Survey – MRHI CLAR 02, 29.43S 151.56E, 11.x.1995, J. Ling (AM); 1♂ apt., 1♂, 1♀ macr., Mangrove Ck, EPA Survey – MRHI CLAR 26, 29.43S 153.09E, 28.ix.1994, J. Ling (AM); 1♂ apt., 1♀ macr., Mangrove Ck, EPA Survey – MRHI CLAR 26, 29.43S 153.09E, 9.v.1995, J. King (AM); 1♂ apt., 2 nymphs, Sandon R., EPA Survey – MRHI CLAR 27, 29.53S 153.15E, 5.viii.1995, J. Ling (AM); 2♂, 2♀ apt., 4♀ macr., Sandon R., EPA Survey – MRHI CLAR 27, 29.53S 153.15E, 8.x.1995, E. Turak (AM); 2♂ apt., Kangaroo R., EPA Survey – MRHI CLAR 21, 30.03S 152.51E, 11.v.1995, J. Ling (AM); 3♂, 2♀ apt., 1♂, 1♀ macr., Kangaroo R., EPA Survey – MRHI CLAR 21, 30.04S 152.51E, 8.x.1995, J. Ling (AM); 3♂ apt., 1♂ macr., Woolli Woolli R., EPA Survey – MRHI CLAR 28, 30.17S 153.10E, 7.x.1995, J. Ling (AM); 1♂ apt., 1 nymphs, Woolli Woolli R., EPA Survey – MRHI CLAR 28, 30.17S 153.10E, 8.v.1995, J. Ling (AM); 1♂ apt., Kara Ck, 13 km NEbyE of Juindabine, 940 m, CL019, 30.21S 148.44E, 16.iii.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., 5 nymphs, Bellinger R., EPA Survey – MRHI BELL m1,

30.26S 152.43E, 13.x.1995, E. Turak (AM); 1♂ apt., Aspley R., Aspley Falls, EPA Survey – MRHI MACL 22, 31.03S 151.46E, 2.x.1994, E. Turak (AM); 1♂, 2♀ apt., 1♀ macr., Eight Mile Ck, Blowhole, EPA Survey – MRHI MACL 11, 31.05S 152.34E, 30.ix.1994, J. Ling (AM); 1♂ apt., Eight Mile Ck, Blowhole, EPA Survey – MRHI MACL 11, 31.05S 152.34E, 7.x.1995, N. Waddell (AM); 2♀ macr., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 3.x.1995, E. Turak (AM); 3♂, 2♀ apt., 1♀ macr., Reedy Ck, Ford on Southern Trail, EPA Survey – MRHI HAST 02, 31.09S 152.52E, 6.iv.1995, A. Amos (AM); 1♂, 1♀ macr., Pappinbarra R. u/s Field Study Centre, EPA Survey – MRHI HAST 09, 31.15S 152.25E, 7.iv.1995, F. Laurensen (AM); 2♂ apt., 3♂, 1♀ macr., Wilson R. at Wild Bull Park, EPA Survey – MRHI HAST 22, 31.15S 152.31E, 5.x.1995, E. Turak (AM); 1♂, 5♀ apt., Balyngara Ck on Scrubby Ck Road, EPA Survey – MRHI HAST 19, 31.22S 152.44E, 7.x.1995, E. Turak (AM); 3♂, 5♀ apt., Hastings R., Koree Island, EPA Survey – MRHI HAST 05, 31.27S 152.40E, 6.x.1995, E. Turak (AM); 1♀ apt., 1♀ macr., Hastings R., Koree Island, EPA Survey – MRHI HAST 05, 31.27S 152.40E, 7.iv.1995, A. Amos (AM); 2♂ apt., 1♂ macr., Ellenborough R. u/s Ellenborough, EPA Survey – MRHI HAST 08, 31.28S 152.28E, 6.x.1995, E. Turak (AM); 12♂, 18♀ apt., 1♂, 2♀ macr., Wauchope, stagnant pools off running creek, 31.28S 152.44E, 12.viii.1958, T.E. Woodward (ANIC); 3♂, 1♀ apt., 1♂ macr., Cowarra Ck, Houston Mitchell Drive, EPA Survey – MRHI HAST 01, 31.32S 152.48E, 10.x.1995, J. King (AM); 1♀ apt., Cowarra Ck, Houston Mitchell Drive, EPA Survey – MRHI HAST 01, 31.32S 152.48E, 5.iv.1995, F. Laurensen (AM); 1♂ apt., Holey Flat creek u/s Moorland, EPA Survey – MRHI MANN 02, 31.46S 152.38E, 1.x.1994, J. Ling (AM); 2♂, 1♀ apt., Holey Flat Ck u/s Moorland, EPA Survey – MRHI MANN 02, 31.46S 152.38E, 6.iv.1995, E. Turak (AM); 24♂, 25♀ apt., 1♂, 1♀ macr., Two Mile Ck, EPA Survey – MRHI MANN 05, 31.48S 152.38E, 3.x.1995, J. Ling (AM); 1♀ apt., 3 nymphs, Two Mile Ck, EPA Survey – MRHI MANN 05, 31.48S 152.38E, 7.iv.1995, E. Turak (AM); 1♀ apt., Manning R., Nines Trail, EPA Survey – MRHI MANN 15, 31.49S 151.39E, 4.x.1995, F. Laurensen (AM); 8♂, 4♀ apt., 3♂, 9♀ macr., Tommy Owen's creek, Brimbin Reserve, EPA Survey – MRHI MANN 07, 31.49S 152.26E, 11.x.1995, N. Waddell (AM); 7♂, 8♀ apt., 3♂, 2♀ macr., Tommy Owen's Ck, Brimbin Reserve, EPA Survey – MRHI MANN 07, 31.49S 152.26E, 7.iv.1995, E. Turak (AM); 1♀ macr., Manning R. at Charity Crossing, EPA Survey – MRHI MANN 20, 31.54S 152.14E, 11.iv.1995, J. King (AM); 1♂ ♀ apt., 1♂ macr., 2 nymphs, Manning R. at Charity Crossing, EPA Survey – MRHI MANN 20, 31.54S 152.14E, 11.x.1995, J. King (AM); 2♂, 1♀ apt., Koorainghat Ck, Gilfillans Road, EPA Survey – MRHI MANN 01, 31.59S 152.31E, 2.x.1994, J. Ling (AM); 14♂, 19♀ apt., 1♂ macr., 2 nymphs, Koorainghat Ck, Gilfillans Road, EPA Survey – MRHI MANN 01, 31.59S 152.31E, 4.xii.1995, J. King (AM); 6♀ apt., 2 nymphs, Koorainghat Ck, Gilfillans Road, EPA Survey – MRHI MANN 01, 31.59S 152.31E, 5.iv.1995, E. Turak (AM); 1♂, 1♀ macr., Kerripit R. off Moppey Rd, EPA Survey – MRHI MANN 21, 32.01S 151.38E, 6.x.1995, J. King (AM); 1♂, 3♀ macr., Kerripit R. off Moppey Road, EPA Survey – MRHI MANN 21, 32.01S 151.38E, 7.iv.1995, M. Preston (AM); 1♀ macr., Williams R. at Rocky Crossing, EPA Survey – MRHI HUNT 04, 32.07S 151.29E, 5.xii.1995, N. Waddell (AM); 1♀ apt., 1♂ macr., Chichester R., EPA Survey – MRHI HUNT 09, 32.10S 151.35E, 4.iv.1994, E. Turak (AM); 1♂ apt., Chichester R., EPA Survey – MRHI HUNT 09, 32.10S 151.35E, 6.iv.1995, J. King (AM); 1♂, 3♀ apt., 30 km N of Singleton, Mt Royal State Forest, CL006, 32.11S 151.20E, 11.iii.1979, I. Lansbury (ANIC); 9♂, 5♀ apt., 2 nymphs, 30 km N Singleton, Tuglo Wildlife Park, CL001, 32.18S 151.10E, 10.iii.1979, I. Lansbury (ANIC); 1♂ apt., Goulburn R. near Tunbridge Ck, EPA Survey – MRHI HUNT 07, 32.19S 150.14E, 13.xii.1995, N. Waddell (AM); 10♂, 8♀ apt., Clyde R., Blue Gum Flat, EPA Survey – MRHI CLYD 04, 32.23S 150.12E, 11.x.1995, E.

Turak (AM); 1 ♀ apt., Bayswater Ck, EPA Survey – MRHI HUNT m5, 32.27S 151.02E, 17.x.1995, N. Waddell (AM); 1 ♂, 1 ♀ apt., 1 ♂ macr., Williams R. at Thalba Bridge, EPA Survey – MRHI HUNT 02, 32.28S 151.46E, 18.x.1995, J. King (AM); 1 ♂, 1 ♀ apt., 1 ♀ macr., Parson's Ck u/s Terry's Ck, EPA Survey – MRHI HUNT 05, 32.43S 149.52E, 12.xii.1995, N. Waddell (AM); 2 ♂, 1 ♀ apt., Lachlan R. d/s Kiaccatoo Bridge, EPA Survey – MRHI LACH 17, 33.03S 146.46E, 29.x.1994, R. Cowell (AM); 3 ♂, 1 ♀ apt., 1 nymph, Lachlan R. d/s Kiaccatoo Bridge, EPA Survey – MRHI LACH 17, 33.03S 146.46E, 8.xi.1995, E. Turak (AM); 44 ♂, 41 ♀ apt., 2 ♂ macr., 6 nymphs, Lachlan R., Murrin Bridge, EPA Survey – MRHI LACH 18, 33.12S 146.22E, 27.iii.1995, R. Cowell (AM); 1 ♀ apt., Lachlan R., Straney's Bridge, EPA Survey – MRHI LACH 14, 33.22S 147.39E, 27.iii.1995, R. Cowell (AM); 1 ♂, 5 ♀ apt., Lachlan R. u/s Mandagery Ck, EPA Survey – MRHI LACH 13, 33.30S 148.18E, 8.xi.1995, E. Turak (AM); 1 ♂ macr., Upper Little Cattai Ck, EPA Survey – MRHI HAWK 02, 33.31S 150.59E, 1.vi.1995, E. Turak (AM); 2 ♂ apt., 1 ♂, 4 ♀ macr., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 24.v.1996, E. Turak (AM); 1 ♂ apt., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 8.xii.1995, N. Waddell (AM); 1 ♂, 3 ♀ apt., Belubula R., Taplow Flat, EPA Survey – MRHI LACH 12, 33.36S 148.52E, 28.x.1994, J. King (AM); 1 ♂, 2 ♀ apt., 1 nymph, Belubula R., Taplow Flat, EPA Survey – MRHI LACH 12, 33.36S 148.52E, 9.xi.1995, J. King (AM); 8 ♂, 2 ♀ apt., Megalong Ck at Narrow Neck, EPA Survey – MRHI HAWK 10, 33.44S 150.14E, 1.xi.1995, J. King (AM); 5 ♀ apt., 1 nymph, Megalong Ck at Narrow Neck, EPA Survey – MRHI HAWK 10, 33.44S 150.14E, 29.v.1996, E. Turak (AM); 1 ♀ apt., Lachlan R. d/s Humes Ck, EPA Survey – MRHI LACH 06, 33.45S 149.18E, 26.x.1994, J. King (AM); 3 ♂, 5 ♀ apt., Piesley's Ck u/s Rocky Bridge Ck, EPA Survey – MRHI LACH 21, 33.51S 149.08E, 23.v.1996, J. King (AM); 3 ♂, 5 ♀ apt., Rocky Bridge Ck u/s Piesley's Ck, EPA Survey – MRHI LACH 05, 33.52S 149.08E, 10.xi.1995, E. Turak (AM); 1 ♂ apt., Rocky Bridge Ck u/s Piesley's Ck, EPA Survey – MRHI LACH 05, 33.52S 149.08E, 24.iii.1995, R. Cowell (AM); 3 ♂, 1 ♀ apt., 1 nymph, Rocky Bridge Ck u/s Piesley's Ck, EPA Survey – MRHI LACH 05, 33.52S 149.14E, 23.v.1996, R. Cowell (AM); 5 ♂, 9 ♀ apt., 8 nymphs, Lachlan R. u/s Cowra, EPA Survey – MRHI LACH 11, 33.53S 148.45E, 27.iii.1995, R. Cowell (AM); 1 ♂ ♀ apt., 1 nymph, Lachlan R. u/s Cowra, EPA Survey – MRHI LACH 11, 33.53S 148.45E, 9.xi.1995, J. King (AM); 1 ♂, 2 ♀ apt., 1 macr., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 26.iii.1995, R. Cowell (AM); 2 ♂, 1 ♀ apt., Royal N.P., Upper Causeway, CL1405, 34.07S 151.03E, 20.xii.1977, J.T. & M.S. Polhemus (JTTC); 3 ♂, 2 ♀ apt., Boorowa river at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 21.iii.1996, A. McLean (AM); 1 ♀ apt., 1 ♂, 1 ♀ macr., 2 nymphs, Boorowa river at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 26.iii.1995, F. Laurensen (AM); 1 ♂, 6 ♀ apt., 1 ♀ macr., 1 nymph, Boorowa R. at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 9.xi.1995, E. Turak (AM); 3 ♂ ♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10 s 149.56E, xi.1995, R. Cowell (AM); 2 ♂, 4 ♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 22.iii.1996, A. McLean (AM); 6 ♂, 4 ♀ apt., 1 macr., 7 nymphs, Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 25.iii.1995, F. Laurensen (AM); 2 ♂ ♀ apt., Golden Moon Ck up Little R., EPA Survey – MRHI HAWK 13, 34.10S 150.27E, 7.xii.1995, E. Turak (AM); 1 ♂, 2 ♀ apt., Golden Moon Ck up Little R., EPA Survey – MRHI HAWK 13, 34.10S 150.27S, 14.v.1996, J. King (AM); 3 ♀ apt., Mittagong, 34.27S 150.27E, A.M. Lea (SAM); 1 ♀ apt., Murrumbidgee R., Nulabor, EPA Survey – MRHI BIDG 04, 34.29S 145.06E, 19.iii.1996, Murray Root (AM); 5 ♂ apt., Murrumbidgee R., Nulabor, EPA Survey – MRHI BIDG 04, 34.29S 145.06E, 28.iii.1995, J. King (AM); 1 ♀ apt., Darlington Point, edge of flowing river, 34.34S 146.00E,

25.xi.1993, T. Weir & W. Dressler (ANIC); 1♂ macr., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 17.v.1996, J. Ling (AM); 1♂, 2♀ apt., Kangaroo R. up Gerringong creek, EPA Survey – MRHI SHOAL 01, 34.41S 150.36E, 30.iv.1998, T. Rankin (AM); 1♂ apt., Kangaroo R. up Gerringong Ck, EPA Survey – MRHI SHOAL 01, 34.41S 150.36E, 18.v.1996, J. Ling (AM); 1♂, 1♀ apt., Kangaroo R. up Gerringong Ck, EPA Survey – MRHI SHOAL 01, 34.41S 150.36E, 4.xii.1995, J. Ling (AM); 3♀ apt., Murrumbidgee R., Waldaira, EPA Survey – MRHI BIDG 01, 34.42S 143.19E, 20..iii.1996, Murray Root (AM); 12♂, 39♀ apt., 1♀ macr., 15 nymphs, Narrandera, Lake Talbot, still water edge of lake, 34.45S 146.34E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 6♂, 2♀ apt., Billabong Ck d/s Coleambally Outfall dam, EPA Survey – MRHI BIDG m3, 35.02S 144.27E, 21.iii.1996, Murray Root (AM); 1♀ macr., 32 km NEbyE Lockhart, temp. roadside pool, 35.03S 147.00E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 1♀ apt., Bungendore Ck, Reid property, 35.08S 149.18E, 7.iv.1974, K.F. Walker (SAM); 2♂, 3♀ apt., Corang R. at Hockeys, EPA Survey – MRHI SHOAL 07, 35.09S 150.02E, 22.v.1996, E. Turak (AM); 9♂, 3♀ apt., 1♂ macr., Corang R. at Hockeys, EPA Survey – MRHI SHOAL 07, 35.09S 150.02E, 22.xi.1995, Murray Root (AM); 2♂, 1♀ apt., 1 macr., Upper Corang Ck, EPA Survey – MRHI SHOAL 08, 35.12S 150.03E, 22.v.1996, E. Turak (AM); 1♂, 3♀ apt., Upper Corang R., EPA Survey – MRHI SHOAL 08, 35.12S 150.03E, 22.xi.1995, J. Ling (AM); 1♀ apt., 1 nymph, Niemur R., Nacurrie Road, EPA Survey – MRHI MURR 20, 35.14S 143.58E, 20.iii.1996, M. Root (AM); 2♀ apt., 1 nymph, Niemur R., Nacurrie Road, EPA Survey – MRHI MURR 20, 35.14S 143.58E, 26.iii.1995, B. Gardiner (AM); 1♂ apt., Niemur R., Nacurrie Road, EPA Survey – MRHI MURR 20, 35.14S 143.58E, 7.xi.1995, N. Waddell (AM); 1♂ macr., Bunnair Ck at Calgaroo Ford, EPA Survey – MRHI CLYD 18, 35.14S 150.24E, 3.iii.1996, E. Turak (AM); 2♂, 2♀ apt., 1♂ macr., Yadboro R. u/s Budawang N.P., EPA Survey – MRHI CLYD 06, 35.19S 150.08E, 14.iii.1995, E. Turak (AM); 2♂ apt., 1♀ macr., Yadboro R., EPA Survey – MRHI CLYD 14, 35.19S 150.11E, 13.iii.1995, E. Turak (AM); 1♂ ♀ apt., Yadboro R., EPA Survey – MRHI CLYD 14, 35.19S 150.11E, 22.xi.1995, J. Ling (AM); 5♂, 2♀ apt., Yadboro R., EPA Survey – MRHI CLYD 14, 35.19S 150.11E, 3.iii.1996, E. Turak (AM); 1♂ apt., Clyde R. near Yadboro Flat, EPA Survey – MRHI CLYD 15, 35.20S 150.15E, 13.iii.1995, E. Turak (AM); 10♂, 8♀ apt., 2♀ macr., 6 nymphs, Yadboro SF, Clyde R., Castle Campground, 35.22S 150.10E, 20.i.1994, G. Cassis (AM); 1♀ apt., Clyde R., Blue Gum Flat, EPA Survey – MRHI CLYD 04, 35.23S 150.12E, 13.iii.1995, E. Turak (AM); 2♂, 4♀ apt., Clyde R., Blue Gum Flat, EPA Survey – MRHI CLYD 04, 35.23S 150.12E, 24.x.1995, A. Leask (AM); 2♂ apt., 1 nymph, Box Ck Esc. Chan., Conargo Road, EPA Survey – MRHI MURR m7, 35.24S 145.03E, 10.xi.1995, J. Ling (AM); 1♀ apt., d/s Bimberamala R., EPA Survey – MRHI CLYD 13, 35.26S 150.12E, 11.xi.1994, E. Turak (AM); 1♂ apt., d/s Bimberamala R., EPA Survey – MRHI CLYD 13, 35.26S 150.12E, 12.iii.1995, E. Turak (AM); 1♀ macr., Bombay R. u/s Bombay, EPA Survey – MRHI SHOAL 09, 35.29S 149.38E, 23.xi.1995, Murray Root (AM); 4♂, 5♀ apt., 4 nymphs, Bawley Point, in tide pool, 35.30S 150.24E, 3.xii.1994, D. Rentz & K. McCarron (ANIC); 1♂ apt., 1 nymph, Clyde R., Shallow crossing, EPA Survey – MRHI CLYD 22, 35.32S 150.12E, 12.iii.1995, M. Eggerup (AM); 3♂, 1♀ apt., 1♂ macr., 1 nymph, Clyde R., Shallow crossing, EPA Survey – MRHI CLYD 22, 35.32S 150.12E, 5.iii.1996, E. Turak (AM); 1♂ apt., Majors Ck at Majors Ck Road, EPA Survey – MRHI MORU 502, 35.34S 149.45E, 25.iii.1997, Natacha Waddell (AM); 2♀ apt., Monga, 35.35S 149.55E, 11.xi.1966, E.F. Riek (ANIC); 22♂, 20♀ apt., 7 nymphs, Cabbage Tree Ck, 34 km SE Braidwood, shaded stream, wet sclerophyll, 35.35S 150.01E, 2.iv.1996, R.E. Roughley (ANIC); 9♂, 5♀ apt., Murray R., Jingellic, EPA Survey – MRHI MURR 07, 35.36S 147.42E, 26.x.1994, Frances Laurenson (AM); 1♀ apt., 2♂

macr., 4 nymphs, Buckenbowra R., EPA Survey – MRHI CLYD 20, 35.38S 149.59E, 13.iii.1995, J. Ling (AM); 12♂, 11♀ apt., 1♀ macr., Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 19.iii.1996, N. Waddell (AM); 48♂, 29♀ apt., Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 22.xi.1995, N. Waddell (AM); 3♂, 5♀ apt., 2 nymphs, Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 25.iii.1995, E. Turak (AM); 4♂, 1♀ apt., 1 nymph, Billabong Ck, Culcairn Bridge, EPA Survey – MRHI MURR 19, 35.40S 147.02E, 20.iii.1996, N. Waddell (AM); 4♂, 1♀ apt., 2 nymphs, Billabong Ck, Culcairn Bridge, EPA Survey – MRHI MURR 19, 35.40S 147.02E, 27.iii.1995, E. Turak (AM); 11♂, 18♀ apt., Billabong Ck, Culcairn Bridge, EPA Survey – MRHI MURR 19, 35.40S 147.02E, 9.xi.1995, N. Waddell (AM); 1♂ apt., Murray R., Barham Mill Bend, EPA Survey – MRHI MURR 14, 35.45S 144.13E, 7.xi.1995, J. Ling (AM); 1♂ apt., Murray R., Nursery Bend ♂2, EPA Survey – MRHI MURR13, 35.46S 144.21E, 2.iii.1996, M. Root (AM); 1♀ macr., Jerrabuttgulla Ck at Sweetwater, EPA Survey – MRHI SHOAL 11, 35.51S 149.32E, 23.v.1996, E. Turak (AM); 1♀ apt., 3 nymphs, Murray R., Jingellic, EPA Survey – MRHI MURR 07, 35.56S 147.42E, 26.iii.1995, E. Turak (AM); 1♀ apt., Murray R., Howlong Common, EPA Survey – MRHI MURR 09, 36.00S 146.37E, 26.x.1994, Frances Laurenson (AM); 1♀ apt., Murray R., Howlong Common, EPA Survey – MRHI MURR 09, 36.00S 146.37E, 9.xi.1995, J. Ling (AM); 7♂, 16♀ apt., Murray R. d/s W. Albury sewage plant, EPA Survey – MRHI MURR m5, 36.04S 146.52E, 9.xi.1995, J. Ling (AM); 3♂, 3♀ apt., Swampy Plains R. near Khancoban, EPA Survey – MRHI MURR 06, 36.12S 148.04E, 27.x.1994, Frances Laurenson (AM); 1♀ apt., Cooma Ck u/s Mittagong Road, EPA Survey – MRHI BIDG 510, 36.12S 149.07E, 23.iii.1997, Alexander Leask (AM); 1♀ apt., Watergums Ck (Wonboyn R.), EPA Survey – MRHI TOWA 03, 36.17S 149.53E, 15.x.1994, J. Ling (AM); 1♂, 1♀ macr., Kara Ck, 13 km NEbyE Jindabyne, 940 m, 36.21S 148.44E, 16.iii.1979, T.A. Weir (ANIC); 11♂♀ macr., Brogo R., EPA Survey – MRHI Bega06, 36.28 s 149.42E, 13.x.1994, E. Turak (AM); 1♂, 2♀ apt., Brogo R., EPA Survey – MRHI Bega 06, 36.28S 149.42E, 25.x.1995, E. Turak (AM); 1♀ apt., 2♂ macr., 1 nymph, Upper Yankee's Ck, EPA Survey – MRHI Bega 08, 36.32S 149.35E, 16.iii.1995, Frances Laurenson (AM); 2♂, 1♀ apt., 1♂ macr., Upper Yankee's Ck, EPA Survey – MRHI Bega 08, 36.32S 149.35E, 24.x.1995, E. Turak (AM); 1♀ apt., 2 nymphs, Mumbulla Ck, EPA Survey – MRHI Bega m20, 36.33S 149.56E, 18.iii.1995, J. King (AM); 3♂, 2♀ apt., Mumbulla Ck, EPA Survey – MRHI Bega m20, 36.33S 149.56E, 26.x.1995, E. Turak (AM); 1♂ apt., 3 nymphs, Knight's Ck, EPA Survey – MRHI Bega 25, 36.33S 149.59E, 14.iii.1995, J. King (AM); 8♂, 5♀ apt., Knight's Ck, EPA Survey – MRHI Bega25, 36.33S 149.59E, 25.x.1995, E. Turak (AM); 1♀ macr., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 17.iii.1995, J. King (AM); 2♂, 4♀ apt., 1 nymph, Mumbulla Falls, EPA Survey – MRHI Bega 19, 36.35S 149.53E, 15.iii.1995, J. King (AM); 1♀ macr., Mumbulla Falls, EPA Survey – MRHI Bega 19, 36.35S 149.53E, 25.x.1995, E. Turak (AM); 2♂, 3♀ apt., Polack's Flat Ck, EPA Survey – MRHI Bega 07, 36.38S 149.36E, 14.x.1994, J. Ling (AM); 1♂ apt., 4 nymphs, Polack's Flat Ck, EPA Survey – MRHI Bega 07, 36.38S 149.36E, 16.iii.1995, J. King (AM); 1♂ macr., Tantawangalo Ck, EPA Survey – MRHI Bega 09, 36.46S 149.31E, 17.iii.1995, J. King (AM); 1♂ ♀ apt., Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54 s 149.28E, 24.x.1995, Natacha Waddell (AM); 1♀ apt., Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54S 149.28E, 14.iii.1995, Marie Eggerup (AM); 1♂, 1♀ apt., Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54S 149.28E, 16.x.1994, E. Turak (AM); 3♂, 1♀ apt., Chalkhill's Ck, EPA Survey – MRHI Bega 04, 36.54S 149.48E, 27.x.1995, N. Waddell (AM); 2♀ apt., Myanba Ck, EPA Survey – MRHI TOWA 09, 36.57S 149.29E, 15.iii.1995, J. Ling (AM); 1♂ apt., Towamba R., Burragate, EPA Survey – MRHI TOWA 06, 37.00S 146.37E,

15.iii.1995, M. Eggerup (AM); 1♂ apt., Towamba R., Burragate, EPA Survey – MRHI TOWA 06, 37.00S 149.37E, 15.iii.1995, E. Turak (AM); 6♂, 4♀ apt., 1♂ macr., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 15.x.1994, E. Turak (AM); 3♂, 3♀ apt., 1 nymph, Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 16.iii.1995, J. Ling (AM); 1♂ apt., 1♀ macr., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 13.iii.1996, Natacha Waddell (AM); 1♂, 2♀ apt., Old Hut Ck, EPA Survey – MRHI TOWA 04, 37.02S 149.48E, 15.x.1994, E. Turak (AM); 3♂, 3♀ apt., 1 nymph, Wog Wog R, 4 km NE Mt Wog Wog, Typha pool isolated from stream, 37.05S 149.30E, 25.iii.1996, R.E. Roughley (ANIC). **Northern Territory:** 1♂, 1♀ macr., Cockatoo Lagoon, Keep R. NP, deep billabong, water lillies, fringing, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., Limestone Gorge, E. Baines R, Gregory NP, pools in flowing creek, muddy, rocky, 16.03S 130.23E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 2♀ macr., Bigley Springs, 25 km SE by E of Mt Panton, 17.29S 129.25E, 29.v.1974, T. Weir & T. Angeles (ANIC); 1♂ macr., McLaren Ck, freshwater stream, 20.20S 134.22E, 12.iv.1981, M. Malipatil & J. Hawkins (NTM); 2♂, 2♀ apt., Glen Helen, C. Australia, 23.25S 132.14E, date unknown, 1929 expedition (SAM); 1♀ macr., Ormiston Ck, above Ormiston Pound, West, 23.38S 132.44E, 10.iii.1995, T. Weir (ANIC); 1♀ macr., Ormiston Ck, below gorge, West Macdonnell, pools, sandy, rocks, algae, reeds, 23.38S 132.44E, 10.iii.1995, T. Weir (ANIC); 16♂, 17♀ apt., 6♂, 6♀ macr., Roma Gorge c. 33 km W of Glen Helen, West Macdonnells, CL0099, 23.25S 131.55E, 29.iv.1979, I. Lansbury (ANIC); 1♂, 2♀ apt., Red Bank, 18 miles W of Glen Helen, CL0098, 23.34S 132.29E, 29.iv.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., 2♂, 2♀ macr., Redbank Gorge, West Macdonnells NP, large pool, sandy, overhanging & floating vegetation, 23.34S 132.31E, 9.iii.1995, T. Weir (ANIC); 1♂, 2♀ apt., 13♂, 19♀ macr., Simpsons Gap, 17 km W by NW of Alice Springs, 23.41S 133.43E, 31.x.1974, T. Weir & T. Angeles (ANIC); 1♂ apt., 1♂ macr., 1 nymph, Trephina Gorge Nat Pk, above John Hayes, flowing creek, rocky, vegetation at edge, 23.32S 134.21E, 4.iii.1995, T. Weir (ANIC); 9♂, 10♀ apt., 5♂, 6♀ macr., 5 nymph, Wigley Waterhole, 8 km W of Alice Springs, 23.38S 133.51E, 4.xi.1974, T. Weir & T. Angeles (ANIC); 1♂, 2♀ apt., Finke R. above Glen Helen, West Macdo, flowing, rocky, bulrushes, grass, algae, 23.41S 132.40E, 10.iii.1995, T. Weir (ANIC); 1♀ apt., 3♂, 1♀ macr., mound springs above Pioneer Ck, West Mac, perm. spring, bulrushes, moss, 23.41S 132.43E, 8.iii.1995, T. Weir (ANIC); 1♂, 7♀ apt., 1♂, 4♀ macr., John Hayes Rock Hole, Alice Springs, nr Trephina Gorge, CL0093, 23.42S 133.52E, 27.iv.1979, I. Lansbury (ANIC); 32♂, 31♀ apt., 3♀ macr., 3 nymphs, Standley Chasm, CL0106, 23.43S 133.27E, 30.iv.1979, I. Lansbury (ANIC); 4♂, 3♀ apt., 1♂, 1♀ macr., Serpentine Gorge, West Macdonnells NP, perm. rocky pools, sandy, vegetation, 23.44S 132.59E, 8.iii.1995, T. Weir (ANIC); 2♂, 4♀ apt., 1♂, 2♀ macr., Hugh R, 2.5 km SE by S Paisley Bluff, flowing, pools, rocky, sandy, vegetation, 23.44S 133.21E, 7.iii.1995, T. Weir (ANIC); 9♂, 3♀ apt., 4♂, 2♀ macr., Emily Gap nr Alice Springs, CL0088, 23.45S 133.57E, 26.iv.1979, I. Lansbury (ANIC); 11♂, 24♀ apt., 3♂, 3♀ macr., Ellery Gorge, 85 km W Alice Springs, 23.46S 133.04E, 5.xi.1979, T. Weir (ANIC); 2♂, 2♀ apt., 45♂, 54♀ macr., 5 nymphs, Ellery Ck Big Hole, West Macdonnells NP, large pool, vegetation at edge, 23.47S 133.04E, 7.iii.1995, T. Weir (ANIC); 1♂, 4♀ apt., 19♂, 37♀ macr., Ellery Ck, nr Alice Springs, West Macdonnells, CL0095, 23.47S 133.04E, 28.iv.1979, I. Lansbury (ANIC); 2♀ apt., Hugh R, 12.5 km SSE Paisley Bluff, flowing, pools, sandy, grass at edge, 23.49S 133.22E, 7.iii.1995, T. Weir (ANIC); 1♀ apt., Palm Valley (Hermannsberg), CL0101, 23.57S 132.46E, 29.iv.1979, I. Lansbury (ANIC); 10♂, 14♀ apt., 12 macr., Ooraminna Rock Hole, 35 km S Alice Springs, CL0091, 24.01S 133.52E, 26.iv.1979, I. Lansbury (ANIC); 2♂, 2♀ apt., 2♀ macr., Palm Valley, Finke Gorge NP, large pools, rocky, bulrushes, algae, grass, 24.03S 132.43E, 14.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 2♂, 2♀ macr., Palm

Valley, Finke Gorge NP, temp. pools, rocky, sandy, algae, detriti, 24.03S 132.43E, 14.iii.1995, T. Weir (ANIC); 2♂ apt., 1♂, 1♀ macr., Finke Gorge Nat Pk, above old Ranger Stn, temp. pools, rocky, grass, algae, 24.04S 132.46E, 12.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 2♂, 2♀ macr., Finke Gorge Nat Pk, Kanara Ck at Oasis, perm. rock pools, palms, grass, algae, 24.04S 132.44E, 12.iii.1995, T. Weir (ANIC); 1♂, 2♀ apt., 1♂ macr., Finke R at Palm Bend, Finke Gorge NP, large pool, sandy, rocky, grass, algae, 24.04S 132.46E, 12.iii.1995, T. Weir (ANIC); 2♂, 9♀ apt., 3♂, 11♀ macr., Palm Valley, Finke Gorge Nat. Pk, 24.04S 132.45E, 10–12.vii.1974, T. Weir & T. Angeles (ANIC); 2♂, 2♀ apt., 1♂, 1♂ macr., Little Palm Ck, Finke Gorge NP, rock pools, palms, algae, vegetation overhanging, 24.06S 132.46E, 13.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 2♂, 2♀ macr., gorge W of Finke R, Finke Gorge NP, perm. & temp. rock pools, algae, detritus, 24.08S 132.51E, 15.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 'Boggy Hole', Finke Gorge NP, perm. pool in river bed, bulrushes, grass, 24.09S 132.52E, 15.iii.1995, T. Weir (ANIC); 2♂, 1♀ apt., 1♂ macr., Finke R., Finke Gorge NP, perm. pool in river bed, grass, bulrushes, 24.09S 132.52E, 15.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 2♂, 2♀ macr., Illamurta Springs Conservation Reserve, small temp. rock pool, sandy bottom, 24.19S 132.41E, 16.iii.1995, T. Weir (ANIC); 2♂, 2♀ apt., 2♂, 1♀ macr., 1 nymph, Finke R. at Running Water, temp. pools in sandy creek bed, 24.20S 132.53E, 15.iii.1995, T. Weir (ANIC); 12♂, 7♀ apt., 1 nymph, Amadeus Basin, swimming on water, 24.45S 130.53E, 3.vii.1962, P. Ranford (ANIC). **Queensland:** 7♀ apt., 12♂, 5♀ macr., 10 nymphs, 9 km NNW of Lockhart R., closed forest, stagnant pools in dry creek bed, closed, 12.43S 143.18E, 25.x.1992, T. Weir & P. Zborowski (ANIC); 6♂, 3♀ apt., 2♂ macr., West Claudie R., closed forest, still rocky pools, non-flowing stream, 12.45S 143.14E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ apt., Claudie R. near Mt Lamond, 12.46S 143.17E, 26.v.1966, D.K. McAlpine (AM); 3♂ macr., Archer R., water sweep, 13.33S 143.03E, 28.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 3♂, 1♀ apt., 2♂, 2♀ macr., Rocky R. via Coen, 13.49S 143.28E, 7.xi.1969, B. Cantrell (ANIC); 3♂, 7♀ apt., 2♂, 2♀ macr., Coen R., 13.57S 143.12E, 28.x.1969, B. Cantrell (UQIC, ANIC); 1♂, 1♀ macr., East Normanby R., water sweep, 15.45S 145.00E, 25.viii.1992, P. Zborowski & J. Cardale (ANIC); 1♂ macr., Shepherd Ck, water sweep, 15.46S 144.15E, 17.i.1994, P. Zborowski & E.D. Edwards (ANIC); 1♂, 1♀ apt., 1♀ macr., Russell Ck, water sweep, 15.52S 145.19E, 26.iv.1994, P. Zborowski (ANIC); 1♀ apt., 1♂, 3♀ macr., 1 nymph, Laura R., water sweep, 15.56S 144.50E, 30.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 1♂ macr., 35 km NNW Mt Carbine, 16.15S 145.00E, 13.xii.1982, J.C. Doyen (ANIC); 1♂, 1♀ macr., Little Mitchell R., CL0143, 16.19S 144.05E, 22.v.1979, I. Lansbury (ANIC); 1♀ macr., Julatten, creek in deep gully, CL0139, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Julatten, farm dam, CL0135, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., 1♂ macr., Julatten, McDougalls Rd, waterlily pool, CL0136, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Rifle Ck at Mt Molloy, CL0144, CL0145, lilly pool, 16.41S 145.20E, 22.v.1979, I. Lansbury (ANIC); 1♂ apt., Crystal Cascades nr. Cairns, 16.53S 145.42E, 18.v.1966, E. Mann (UQIC); 1♂, 2♀ macr., 12 km N Mareeba, creek on Mt Molloy Rd, CL0141, 16.54S 145.26E, 22.v.1979, I. Lansbury (ANIC); 1♂, 2♀ macr., 15 km NE of Mareeba, MDPI Intercept Trap Site 25, 16.54S 145.32E, 12.ii–20.iii.1985, Storey & Halfpapp (QDPI); 1♂ macr., Clohesy R., flowing, sandy, sun, riverine, scrub, 16.55S 145.34E, 22.xii.1994, P. Zborowski (ANIC); 2♂ macr., Davies Ck, flowing, clear, sandy, stony, sunny, sclerophyl, 16.57S 145.32E, 2.xii.1994, P. Zborowski (ANIC); 8♂, 4♀ apt., 1♀ macr., 5 nymphs, Tinaroo Ck, 17.03S 145.28E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♀ macr., Barron R., 17.04S 145.27E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 2♂, 1♀ macr., 2 nymphs, Barron R., flowing, clear, shallow, wet sclerophyl, 17.05S 145.27E, 15.xii.1994, P. Zborowski (ANIC); 4♂, 2♀ apt., 3♂, 2♀ macr.,

5 nymphs, Douglas Ck, 480 m, 17.05S 145.30E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 3♀ macr., 2 nymphs, Emu Ck, 720 m, site Haig 14, 17.06S 145.32E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂ apt., Little Mulgrave R. via Gordonvale, 17.07S 145.41E, 11.xi.1969, T. Weir (ANIC, UQIC); 1♂ apt., 1♂ macr., Congo Ck, flowing, clear, bedrock, mostly sun, r/f, 17.16S 145.37E, 21.xii.1994, P. Zborowski (ANIC); 1♂ apt., Peterson Ck, 12 km from Atherton, on Yungaburra Road, CL0148, 17.17S 145.35E, 24.v.1979, I. Lansbury (ANIC); 33♂, 52♀ apt., North Johnstone R. at Malanda, 17.21S 145.36E, 9.xi.1969, T. Weir (ANIC); 1♂, 1♀ apt., Barron R. at Plath Rd crossing, 794 m, 17.23S 145.30E, 27.iv.1998, G. Cassis & S. Davies (AM); 1♂ macr., Mt Hypipamee Nat. Pk, debris, clear, flowing, sandy, shade, 17.26S 145.29E, 5.ii.1998, T. Weir (ANIC); 1♂, 1♀ macr., Hemmings Road, Barron R., para grass, slow flow, 17.27S 145.30E, 28.xi.1994, B. Herbert (ANIC); 1♂ macr., Hemmings Road, Barron R., para grass, slow flow, 17.27S 145.30E, 6.xi.1995, B. Herbert (ANIC); 2♂, 2♀ apt., The Millstream, 17.32S 145.31E, 14.xii.1994, P. Zborowski (ANIC); 1♀ apt., Millstream Falls Nat. Pk, pools below falls, clear, vegetation, 17.39S 145.27E, 8–15.xi.1998, T. Weir (ANIC); 2♂, 1♀ apt., 4 nymphs, Vine Ck, flowing ck, tannin, half shade, wet sclerophyl, 17.40S 145.30E, 4.xii.1994, P. Zborowski (ANIC); 1♂ macr., Atherton Railway Bridge, Mazlin Ck, rock, undercut, slow flow, 17.51S 145.29E, 5.xii.1995, B. Herbert (ANIC); 1♂ macr., Wallaman Falls via Ingham, 18.36S 145.48E, 16.xi.1969, T. Weir (ANIC); 1♂ apt., 2♀ macr., 4 nymphs, Magnetic Island, 19.08S 146.50E, A.M. Lea (SAM); 14♂, 14♀ apt., 11♂, 11♀ macr., 2 nymphs, Townsville, Inst of Marine Science, Rocky Ck, CL0152, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC); 1♀ apt., Townsville, Institute of Marine Science, creek in thin dry forest, CL0151, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC); 4♂, 1♀ macr., 6 nymphs, Alligator Ck, Bowling Green Nat. Pk, shallow flowing creek, sandy, vegetation, 19.26S 146.57E, 20–25.v.1999, T. Weir (ANIC); 5♂, 2♀ apt., 3♂, 2♀ macr., Don R. nr. Bowen, Cent. coastal Qld., Pools, 20.01S 148.15E, 28.v.1953, T.E. Woodward (UQIC, ZMUC); 1♂ macr., 1 nymph, Pelican Ck at Myuna Road, sandy pool, 20.33S 147.37E, 8.xi.1994 (DNRQ); 2♂, 1♀ apt., 1 nymph, Walkers Ck anabranch, edge, 20.53S 143.45E, 14.xi.1994, collector unknown (DNRQ); 2♂, 1♀ apt., Boulder Ck via Mirani, 21.01S 148.42E, 5.xi.1969, T. Weir (ANIC); 3♂ apt., 4♂ macr., Finch Hatton Gorge, via Finch Hatton, 21.04S 148.38E, 3.xi.1969, T. Weir (ANIC); 3♂, 2♀ apt., 1♂ macr., Pioneer R. at Balnagowan Crossing, swarming over rocks in river (thousands), 21.09S 149.01E, 3.xi.1969, T. Weir (ANIC); 1♂, 1♀ apt., 1♂ macr., Upper Broken R., near Eungella, 21.10S 148.29E, 12.xii.1961, McAlpine & Lossin (AM); 1♂ macr., Broken R., Eungella Nat. Pk, rainforest, 700 m, 21.10S 148.31E, 10–12.xi.1976, R.W. Taylor & T.A. Weir (ANIC); 19♂, 14♀ apt., 3♂, 32 macr., Eungella Nat. Pk, via Dalrymple Heights, 21.11S 148.29E, 4.xi.1969, T. Weir (ANIC); 14♂, 14♀ apt., Crediton Ck via Dalrymple Heights, 21.13S 148.33E, 4.xi.1969, T. Weir (ANIC); 3♂, 3♀ apt., 1♂, 1♀ macr., South Percy Island (Central Valley), 21.45S 150.19E, 26–28.xi.1992, Monteith, Thompson, Cook (QM); 2♂, 1♀ macr., 42 km NNW of Boullia, 22.35S 139.43, 11.v.1973, M.S. Upton (ANIC); 6♂, 6♀ apt., 5♂, 3♀ macr., Limestone Ck, 10 mi W Rockhampton, 23.17S 150.35E, 27.iv.1969, T. Weir (ANIC, UQIC); 4♂, 2♀ apt., 3♂, 3♀ macr., Washpool Ck via Rockhampton, 23.30S 149.29, 15.vi.1969, T. Weir (ANIC, UQIC); 1♀ apt., Nogoia R. at Emerald, 23.31S 148.10, 5.iv.1969, T. Weir (UQIC); 20♂, 11♀ apt., 6♂ macr., Blackdown Tableland via Dingo, 850–950 m, 23.48S 149.08E, 11–12.iv.1996, G. Monteith (QM); 23♂, 20♀ apt., 11♂, 11♀ macr., Glassford Ck, Monto-Many Peaks Rd (as Gladford Ck), 24.35S 151.20E, 18.xi.1957, T.E. Woodward (UQIC); 2♂, 3♀ apt., 1♂, 2♀ macr., Peawaddy Gorge, Mt Moffatt NP, 1100 m, 24.55S 148.04E, 26.ii.1996, G.B. Monteith (QM); 2♂, 1♀ apt., 9♂, 11♀ macr., Dargonelly Rockhole, 25.02S 147.54E, 27.ii.1996, G. Monteith & C. Burwell (QM); 3♂, 7♀ apt., 2♂, 2♀ macr., 2 nymphs, Dargonelly Rockhole, Mt

Moffatt NP, 25.02S 147.54E, 26.xi.1997, Evans, Lambkin, Skevington (QM); 17♂, 20♀ apt., 2♂, 2♀ macr., Carnarvon Gorge, 25.03S 148.12, 24.v–2.vi.1954, T.E. Woodward (UQIC); 9♂, 13♀ apt., 8♂, 7♀ macr., Carnarvon Gorge, 25.03S 148.12E, 29.v.1954, T.E. Woodward (ANIC, UQIC); 4♂, 3♀ apt., 6♂, 4♀ macr., Boggomoss No 19 via Taroom, aquatic coll 075, 25.25S 150.01E, 11.xi.1996, G. Thompson (QM); 3♂, 2♀ apt., 2♀ macr., Boggomoss No 3 via Taroom, aquatic coll 079, 25.26S 150.01E, 12.xi.1996, G. Thompson (QM); 3♂, 1♀ apt., 7♂, 3♀ macr., Boggomoss 12/1 (Nathan G) via Taroom, aquatic coll 081, 25.27S 150.08E, 14.xi.1996, G. Thompson (QM); 1♀ apt., 1♂ macr., Boggomoss 12/2 (Nathan G) via Taroom, aquatic coll 084, 25.27S 150.09E, 14.xi.1996, G. Thompson (QM); 9♂, 12♀ apt., 5♂, 2♀ macr., Boggomoss No 10 via Taroom, aquatic coll 089, 25.31S 150.03E, 14.xi.1996, G. Thompson (QM); 1♂, 2♀ apt., 1 nymph, Maryborough, 25.32S 152.42E, date unknown, E.W. Fischer (SAM); 1♀ apt., 1♂ macr., Burnett R. at Mt Lawless, edge, 25.33S 151.39E, 18.x.1994, collector unknown (DNRQ); 5♂, 17♀ apt., 4♂, 2♀ macr., 9 nymphs, Hell Hole Gorge Nat. Pk, pools in creek bed, 25.43S 144.11E, 22–24.x.1997, T. Weir (ANIC); 13♂, 20♀ apt., 3♂, 2♀ macr., Imbil State Forest, stagnant creek pools, 26.28S 152.41E, 5.xi.1957, T.E. Woodward (UQIC); 1♂ macr., Mtn Ck, Buderim, 26.41S 153.03E, 3.iv.1956, E.N. Marks (UQIC); 4♀ apt., 2♂ macr., Condamine R. near Chinchilla, macrophytes, 26.48S 150.34E, 30.vii.1994 (DNRQ); 1♀ macr., Caloundra, 26.48S 153.08E, 17.viii.1954, C.R. Byrne (UQIC); 2♀ apt., Balonne R. at Weribone, edge, 27.19S 148.49E, 30.vii.1994, collector unknown (DNRQ); 112♂, 91♀ apt., 95♂, 116♀ macr., South Pine R. via Samford, 27.22S 152.22E, 16.ii.1969, T. Weir (ANIC); 1♀ macr., Cedar Ck, 27.22S 152.53E, 28.ix.1930, H. Hacker (QM); 1♀ apt., 1♂ macr., Highvale, 27.23S 152.48E, 5.ii.1969, B. Cantrell (UQIC); 4♂, 3♀ apt., 3♂, 2♀ macr., Camp Mtn district, Samford valley, 27.24S 152.52E, xii.1952, T.E. Woodward (UQIC); 3♂, 1♀ apt., Ashgrove, Brisbane, Walton Bridge, 27.27S 152.59E, 3.v.1960, I.C. Yeo (UQIC); 3♂, 3♀ apt., 1♀ macr., Ashgrove, Brisbane, Walton Bridge, 27.27S 152.59E, 3.v.1960, T.E. Woodward (UQIC); 3♂, 2♀ apt., Brisbane, Gold Ck at Brookfield, CL0156, 27.28S 152.55E, 6.vi.1979, I. Lansbury (ANIC); 1♀ macr., Brisbane, 27.28S 153.02E, 17.iv.1956, H.J. Lavery (UQIC); 1♂, 1♀ macr., Brisbane, 27.28S 153.02E, 2.v.1931, F.A. Perkins (UQIC); 1♂ apt., Brisbane, 27.28S 153.02E, 2.x.1962, B.F. Stone (UQIC); 1♂, 1♀ apt., Brisbane, 27.28S 153.02E, 20.x.1942, I.F.B. Common (UQIC); 3♂ apt., 2♂ macr., Brisbane, 27.28S 153.02, 30.v.1962, F.J.D. McDonald (UQIC); 2♀ apt., Brisbane, 27.28S 153.02E, 31.viii.1962, B. Willson (UQIC); 7♂, 8♀ apt., 4♂, 5♀ macr., Cedar Falls, Brisbane area, CL0158, 27.28S 153.02E, 7.vi.1979, I. Lansbury (ANIC); 1♀ apt., 1♀ macr., Brookfield, 27.29S 152.52E, 21.iii.1965, T. Weir (UQIC); 1♀ apt., Brookfield, 27.29S 152.52E, 7.iv.1957, Haseler (UQIC); 1♀ macr., Upper Brookfield, 27.29S 152.52E, 10.xii.1962, G. Monteith (UQIC); 2♂, 7♀ apt., Brisbane, Slaughter Ck on Mt Coot-tha, CL0153, 27.29S 152.57E, 5.vi.1979, I. Lansbury (ANIC); 1♀ apt., 1♂ macr., Blue Lake, Stradbroke Island, CL0159, 27.32S 153.29E, 8.vi.1979, I. Lansbury (ANIC); 1♀ apt., 2♀ macr., Moggill, 27.34S 152.53E, 17.iv.1956, T.E. Woodward (UQIC); 1♀ apt., Sunnybank, 27.35S 153.03E, 19.iii.1957, Haseler (UQIC); 1♂ macr., Greenbank, 27.43S 152.59E, 13.xii.1962, G.B. Monteith (UQIC); 2♀ macr., Southport, 27.58S 153.25E, iii.1947, P. Bertie (UQIC); 1♂ macr., Canungra, 28.01S 153.10E, 27.iii.1937, R.F. Langdon (UQIC); 1♂ macr., Canungra, 28.01S 153.10E, 29.iii.1937, G.L. Wilson (UQIC); 1♂ macr., Coomera R. at Tuckers Lane, edge, 28.03S 153.11E, 8.xii.1994, collector unknown (DNRQ); 12♂, 7♀ apt., 6♂, 6♀ macr., South Emu Ck via Emu Vale, 28.13S 152.25E, 22.v.1969, T. Weir (ANIC); 2♂, 1♀ apt., Balonne R at Mooramanna Waterhole, edge, 28.16S 148.26E, 29.vii.1994, collector unknown (DNRQ). **South Australia:** 1♂, 1♀ apt., Tarlton Springs, 28.33S 136.06E, 10.vii.1989, V. Bunic (ANIC); 1♀ apt., Flinders Ranges, Terrapinna Spring, 29.55S 139.40E,

12.v.1981, J.A. Forrest (SAM); 9♂, 14♀ apt., 1♀ macr., 2 nymphs, Flinders Ranges, 12 km NW Blinman, Glass Gorge, 1st & 2nd springs, 31.02S 138.36E, 10.v.1981, J.A. Forrest (SAM); 1♂, 2♀ apt., Wilpena, 31.31S 138.37E, date unknown, H.M. Hale (SAM); 2♀ apt., 4 nymphs, Flinders Ranges, 22 km N Quorn, Warren Gorge, 32.12S 138.00E, 8.v.1981, J.A. Forrest (SAM); 20♂, 17♀ apt., 12 nymphs, Alligator Ck, Mount Remarkable NP, shallow rock pools, floating debris, 32.45S 138.05E, 3.iii.1995, T. Weir (ANIC); 4♂, 3♀ apt., 1 nymph, Mambray Ck, Mt Remarkable Nat Pk, 32.51S 137.57E, 7.v.1981, J.A. Forrest (SAM); 24♂, 17♀ apt., 13 nymphs, Ral Ral Ck, Calperum Stn, 15 km NbyW Renm, murky, silty, grass edge, sticks, vegeta, 34.03S 140.43E, 23.v.1996, T. Weir & K. Pullen (ANIC); 1♂, 3♀ apt., Adelaide, 34.56S 138.36E, date unknown, H.M. Hale (SAM); 3♂ apt., 1♀ macr., Adelaide, 34.56S 138.36E, date unknown, R. Carpenter (SAM); 1♀ apt., Adelaide, S.A. Museum, on water in tadpole dish, 34.56S 138.36E, 5.iii.1959, P. Aitken (SAM); 7♀ apt., Mitcham, Brownhill Ck, on surface of water, 34.59S 138.37E, 24.ix.1977, D. Lacin (SAM); 9♂, 16♀ apt., 1♀ macr., 30 nymphs, Belair, Nat Pk, 35.00S 138.38E, 25–31.xii.1949, H.W. (SAM); 1♀ apt., 1♀ macr., Bridgewater, 35.00S 138.46E, date unknown, H.M. Hale (SAM); 5♂, 6♀ apt., Coxs Ck, 35.02S 138.46E, 12.iii.1964, P. Aitkin, G. Gross, D. Murphy (SAM); 1♂ apt., Murray Bridge, 35.07S 139.16E, date unknown, H.M. Hale (SAM); 2♂, 2♀ apt., 1♂ macr., Macclesfield, 35.10S 138.50E, v.1921, H.M. Hale (SAM); 5♂, 19♀ apt., 3♀ macr., Myponga, 35.23S 138.28E, date unknown, H.M. Hale (SAM); 6♂, 1♀ apt., 1 nymph, Bremer R., 35.23S 139.03E, 12.iii.1964, G.F. Gross (SAM); 6♂, 3♀ apt., 3 nymphs, Kangaroo Island, Rocky Ck, between Amen Corner & Stokes Bay, CL0075, 35.41S 137.13E, 10.iv.1979, I. Lansbury (ANIC); 2♂, 1♀ apt., 4 nymphs, Kangaroo Island, Cygnet R., on Parndana to Emu Bat Rd, CL0065, 35.44S 137.22E, 7.iv.1979, I. Lansbury (ANIC); 2♂ apt., Kangaroo Island, Cygnet R. at bridge, before Kingscote – Middle R. Rd, CL0074, 35.44S 137.22E, 10.iv.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., Kangaroo Island, 35.50S 138.03E, date unknown, B.B. Beck (SAM); 1♂, 7♀ apt., 2 nymphs, Kangaroo Island, Grassdale, South-west Rd, between Western Hwy & Karatha, CL0071, 36.00S 136.52E, 9.iv.1979, I. Lansbury (ANIC); 11♂, 6♀ apt., Mosquito Ck at Struan nr Naracoorte, CL0084, 37.06S 140.47E, 23.iv.1979, I. Lansbury (ANIC); 10♂, 9♀ apt., Mt Gambier, Brown Lake, 37.50S 140.47E, 27.ix.1933, D.C.S. (SAM); 3♂, 1♀ apt., Mt Gambier, Piccaninie Blue Pond, near Glenelg R., CL0081, 38.03S 140.55E, 20.iv.1979, I. Lansbury (ANIC); 4♂, 1♀ apt., Piccaninnie Ponds, in water, 38.03S 140.55E, 20.iv.1979, museum party (SAM). **Tasmania:** 2♂ apt., Lewisham, creek just past turnoff, 33.53S 147.37E, 26.ix.1972, B. Knott (ANIC); 1♀ apt., King Island, Porky Ck, 39.52S 143.53E, 7.xii.1972, B. Knott (ANIC); 16♂, 24♀ apt., 1♂ macr., Flinders Island, creek S of Whitemark, 40.07S 148.01E, 20.x.1973, P.S. Lake (ANIC); 1♂ apt., 1♀ macr., 5 nymphs, Flowerdale R. at Flowerdale, 40.58S 145.41E 9.ii.1973, P.S. Lake (ANIC); 5♂, 3♀ apt., Gladstone Lagoon, 40.58S 148.10E, 2.ii.1972, B. Knott (ANIC); 1♀ apt., Port Sorell, Brown Ck, 41.09S 146.34E, 20.vii.1970, A.M.M. Richardson (ANIC); 2♂ apt., 5 nymphs, Guide R. Falls, 41.10S 145.48E, 6.ii.1973, P.S. Lake (ANIC); 4♂, 8♀ apt., Scottsdale, 41.10S 147.31E, 2.xi.1972, B. Knott (ANIC); 2♀ apt., Beaconsfield, pond near asbestos mine, 41.12S 146.49E, 24.vii.1973, P.S. Lake (ANIC); 3♀ apt., Eugenana, Arboretum lake, 41.14S 146.18E, 28.ix.1986, L. Hill (ANIC); 1♂, 8♀ apt., 1♂ macr., Saxons Ck tributary, on Frankford Highway, 41.16S 146.44E, 14.ix.1975, P. Lake, D. Coleman, A. Richardson (ANIC); 1♂ apt., 1♂, 1♀ macr., St Patricks R. at Tasman Hwy, 41.17S 147.23E, 2.xi.1985, L. Hill (ANIC); 1♂, 8♀ apt., 1♀ macr., Talawa (as Talawah), pond, 41.17S 147.43E, 31.x.1972, B. Knott & R. Manbey (ANIC); 3♀ apt., 1♂ macr., Fingerpost Road, F.B.A., 41.26S 145.36E, 5.iv.1974, G. Bennisen (ANIC); 2♀ apt., Launceston, 41.26S 147.08E, date unknown, Lea (SAM); 1♀ apt., 1 nymph, Meander R. near Long Ridge, gravel, 41.35S 146.38E,

29.v.1988, L. Hill (ANIC); 1♀ apt., Fingal, creek on Mathinna road, 41.38S 147.58E, 30.x.1972, B. Knott (ANIC); 2♂, 1♀ apt., 3 nymphs, South Esk R. at Milford, 41.48S 147.31E, 15.i.1976, P.S. Lake (ANIC); 3♂, 4♀ apt., Lake Leake, 42.00S 147.50E, 9.xi.1972, A. Neboiss (MV); 5♂, 7♀ apt., 1♂, 1♀ macr., 11 km NNW Swansea, Bluemans Valley Ck, 30 m, 42.02S 148.02E, 6.ix.1986, L. Hill (ANIC); 4♂, 7♀ apt., 5 nymphs, Gordon R. near Butlers Island, peched lake, around logs on edge, 42.17S 146.16E, 25.i.1976, P.S. Lake, D. Coleman, *et al.*(ANIC); 3♂ apt., Coal R. at Tunnack, 42.27S 147.28E, iv.1972, B. Knott (ANIC); 1♂, 1♀ apt., Prosser R., S of Levendale, 42.34S 147.36E, 17.xii.1971, B. Knott (ANIC); 4♂ apt., Karanja, pond below timber mill, 42.41S 146.50E, 10.x.1972, B. Knott (ANIC); 1♂, 8♀ apt., Coal R. at Laburnum Park, 42.41S 147.26E, 30.ix.1975, B. Mills & P.S. Lake (ANIC); 12♂, 14♀ apt., 16 nymphs, Coal R., 4 mi N Richmond, Laburnum Park, 42.41S 147.26E, 15.i.1972, 28.ii.1972, T. Walker (ANIC, NTM); 19♂, 20♀ apt., 1♂, 1♀ macr., 14 nymphs, Granton Lagoon, 42.45S 147.14E, collector unknown (ANIC); 1♀ macr., Hobart, Lenah Valley creek, 42.52S 147.17E, 21.i.1928, A. Musgrave (AM); 1♀ macr., Hobart, 42.53S 147.19E, date unknown, Lea (SAM); 2♂, 1♀ apt., Hobart, Cascade Ck, 42.53S 147.19E, 11.v.1969, P.S. Lake (ANIC); 2♂ ♀ apt., Hobart, pond at Ridgeway, 42.56S 147.17E, 11.x.1975, R.B. Mawbey (ANIC); 22 nymphs, Nicholls Rivulet at Nicholls Rivulet, 43.10S 147.09E, 2.i.1976, P.S. Lake & T. Walker (ANIC); 7♂, 3♀ apt., Adamsons Rd near Dover, 43.19S 147.01E, 19.v.1976, B. Knott, T. Tyson, *et al.*(ANIC). **Victoria:** 1♂ apt., Wangaratta, ex floodwaters, 36.21S 146.19E, 27.vii.1986, J. Rheinheimer (ANIC); 1♀ macr., Mitta Mitta R., Locality BB, 36.32S 147.22E, 3.xii.1973, Dartmouth Survey (MV); 13♂, 11♀ apt., 2 nymphs, Buckland R. at Buckland, backwater pool with *Carex*, 36.49S 146.51E, 14.iii.1996, R.E. Roughley (ANIC); 2♂, 3♀ apt., Suggan Buggan R., Snowy Mtns, edge of flowing stream, 36.57S 148.20E, 17.iii.1996, R.E. Roughley (ANIC); 1♂, 1♀ apt., Spring Ck, 6–7 km WNW of Cathkin, near Alexandra CL0053, 37.09S 145.35E, 29.iii.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., 1♂ macr., 1 nymph, Little R. at Taggerty, CL0052, 37.19S 145.43E, 29.iii.1979, I. Lansbury (ANIC); 1♀ macr., Newlyn, 37.25S 144.00E, 13.xii.1966, E.F. Riek (ANIC); 5♀ apt., 1 nymph, 2 km N of Marysville, Taggerty Bridge pool, CL0051, 37.30S 145.45E, 29.iii.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., Werribee R. at Ballan, 37.36S 144.14E, 10.vi.1976, A. Calder (MV); 1♀ apt., Yarra Glen, 37.39S 145.22E, date unknown, C. Barrett (SAM); 1♂ macr., Thomson R at Thomson-Jordan Divide Rd, Site T6 no.5, 37.43S 146.16E, 1.v.1977, MV Survey Dept, G.R.E.S. (MV); 4♂, 2♀ apt., 1♂ macr., East Warburton, Yarra R., CL0049, 37.45S 145.44E, 29.iii.1979, I. Lansbury (ANIC); 1♀ apt., 3 nymphs, West Branch, between Maude & Steglitz, 37.57S 144.10E, 27.iii.1979, I. Lansbury (ANIC); 8♂, 6♀ apt., 1♂, 1♀ macr., nr Melbourne, creek into Tarago R., Mt Baw Baw Road, CL0026, 37.57S 145.50E, 23.iii.1979, I. Lansbury (ANIC); 12♂, 10♀ apt., Neerim, Tarago R., south of reservoir, CL0029, 37.58S 145.47E, 25.iii.1979, I. Lansbury (ANIC); 2♂, 2♀ apt., Thomson R at Cowwarr-Seaton Rd, Site T24, 37.59S 146.41E, 7.v.1977, MV Survey Dept G.R.E.S. (MV, NTM); 1♂ apt., Macalister R. – Thomson R. junction, Site T26, 38.02S 146.59E, 28.ix.1977, MV Survey Dept. G.R.E.S. (NTM); 1♀ apt., Macallister R – Thomson junction, swamp, Site T26, 38.02S 146.59E, 7.v.1977, N.M.V. Survey Dept. G.R.E.S. (MV); 2♂, 2♀ apt., 1♀ macr., Bunyip R. at Labertouche, farm dam, CL0046, 38.03S 145.48E, 25.iii.1979, I. Lansbury (ANIC); 43♂, 36♀ apt., 2♀ macr., Bunyip R., Princess Highway bridge, CL0025, 38.05S 145.45E, 25.iii.1979, I. Lansbury (ANIC); 1♂, 3♀ apt., 1♂ macr., 2 nymphs, Native Hut Ck nr Inverleigh, CL0044, 38.06S 144.03E, 27.iii.1979, I. Lansbury (ANIC); 1♂ apt., Barwon R. at Inverleigh, billabongs, CL0042–43, 38.06S 145.37E, 27.iii.1979, I. Lansbury (ANIC); 2♀ apt., 1♂ macr., Frankston, Melbourne Dist, 38.09S 145.08E, 17.i.1955, T.E. Woodward (UQIC); 3♂, 1♀ apt., 2 nymphs, Yallock Ck, Melbourne, CL0024, 38.12S 145.32E, 25.iii.1979, I.

Lansbury (ANIC); 10♂, 8♀ apt., 4 nymphs, Lake Purrumbete, 38.17S 143.14E, 23.ii.1970, E.F. Riek (ANIC); 2♀ apt., Pirron Yallock Ck, CL0033, 38.21S 143.24E, 26.iii.1979, I. Lansbury (ANIC); 17♂, 22♀ apt., 3♀ macr., Allambee South at Tarwin R. (W branch, CL0062, 38.21S 146.06E, 30.iii.1979, I. Lansbury (ANIC); 1♀ apt., 3♂, 1♀ macr., 5 nymphs, Morwell R., 3 km N Mirboo North, upper reaches, CL0061, 38.22S 146.09E, 30.iii.1979, I. Lansbury (ANIC); 1♀ apt., 2 km from Barwon Downs, CL0040, 38.28S 143.45E, 27.iii.1979, I. Lansbury (ANIC); 2♂, 4♀ apt., 4♂, 3♀ macr., 5 nymphs, Love Ck Rd from Colac to Gellibrand R, CL0037, 38.29S 143.35E, 27.iii.1979, I. Lansbury (ANIC); 5♂, 2♀ apt., 2–3 km NE of Leongatha, creek, CL0059, 38.29S 145.57E, 30.iii.1979, I. Lansbury (ANIC); 1♂ apt., Powlett R. 10 km n of Inverloch, CL0058, 38.33S 145.44E, 30.iii.1979, I. Lansbury (ANIC); 1♀ apt., 12 macr., Otway Ranges, 38.34S 143.47E, 7–9.i.1966, T. Weir (ANIC). **Western Australia:** 3♂, 2♀ apt., Whitlock, 20.44S 115.29, date and collector unknown (AM); 1♀ macr., 1 km NNE of Millstream, 21.35S 117.04, 3–4.iv.1971, M.S. Upton (ANIC); 1♀ apt., Millstream, 21.35S 117.04, 23.vii.1958, R.P. McMillan (WAM); 1♀ macr., Marandoo Camp, at light, 22.38S 118.06, 5–19.v.1980, T.F. Houston *et al.* (WAM); 2♂, 5♀ macr., Rawlinson Range, 24.50S 127.50, 22.vii.1967, K.T. Richards (WADA); 2♂, 6♀ macr., Giles, 25.02S 128.18, 19.vii.1967, K.T. Richards (WADA); 1♂ macr., Darlington, Perth, 31.55S 116.04, xii.1976, G.H. Lowe (WAM); 1♀ apt., Donnybrook, Preston R., 33.35S 115.49, 29.ix.1965, E. Britton (ANIC); 1♀ macr., Brigdetown, 33.58S 116.08, date unknown, A.M. Lea (SAM); 3♂, 2♀ apt., Barlee Ck, Dickson Rd Xing, 34.13S 115.46, 25.xi.1994, PSC (ANIC); 2♂, 2♀ apt., Headquarters, Stirling Ranges N.P., CL898, 34.26S 118.01E, 8.xii.1977, J.T. Polhemus (JTPC); 4♂, 11♀ apt., 90 nymphs, Albany, edge of pond, 35.00S 117.52, 26.xii.1997, R.A. Lewin (ANIC); 1♂ apt., Denmark, Walpole Road, pool near Parrys Inlet, 35.01S 117.09, 25.ix.1965, E. Britton (ANIC).

***Microvelia (Austromicrovelia) herberti*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled '11.50S 142.30E, Q[ueens]L[an]D, Bertie creek, 21 Oct. 1992, T. Weir, P. Zborowski, pools in rocky running creek' (ANIC).

Paratypes. **Northern Territory:** 4♂, 6♀ apt., 4♂ macr., Cooper Ck, 19 km E by S Mt Borradaile, 12.06S 133.04E, 5.vi.1973, T. Weir & A. Allwood (ANIC); 32♂, 82♀ macr., 1 km N of Cahills Crossing (East Alligator R.), 12.25S 132.58E, 7.vi.1973, T. Weir & A. Allwood (ANIC); 6♂, 5♀ apt., 2♂, 3♀ macr., Swim Ck Crossing, Point Stuart Station, 12.31S 131.51E, 10–13.x.1971, T. Weir & A. Allwood (ANIC); 2♂ apt., 1♂, 1♀ macr., Mudginberri Station, via Jim Jim, 12.36S 132.52E, 19.viii.1971, T. Weir & A. Allwood (ANIC); 1♂ macr., Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 3♂, 4♀ apt., 1♂ macr., 4 nymphs, Nourlangie Ck, 6 km NE of Mt Cahill, 12.49S 132.44E, 2.v.1973, T. Weir & T. Angeles (ANIC); 1♂ macr., Arnhem Highway, Wildman R. W. branch, isolated pool, CL0131, CL0132, 12.50S 131.57E, 17.v.1979, I. Lansbury (ANIC); 6♂ apt., 1♂, 5♀ macr. Muirella Park, Nourlangie Ck, Kakadu NP, deep billabong, fringing Pandanus, 12.51S 132.45E, 13.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., Nourlangie Ck, 8 km E of Mt Cahill, 12.52S 132.47E, 14.vi.1973, T. Weir & T. Angeles (ANIC); 1♀ macr., 4 miles SW of Finnis R. Station HS, 12.53S 130.32E, 28.vii.1971, T. Weir & A. Allwood (ANIC); 2♂, 2♀ macr., Arnhem Highway, lagoon off Mary R., leaves, debris, CL0129, 12.54S 131.38E, 17.v.1979, I. Lansbury (ANIC); 1♂ apt., 2♂ macr., Arnhem Highway, 13 km W of Mary R., creek, CL0127, 13.00S 131.33E,

17.v.1979, I. Lansbury (ANIC); 3♂, 1♀ apt., 1♀ macr., Finnis R. xing, 9 km WNW Batchelor, shallow water, lots of floating leaves, 13.01S 130.57E, 17.vii.1994, T. Weir & A. Roach (ANIC); 2♀ macr., Coomalie Ck, near Darwin, CL0121, 13.02S 131.11E, 15.v.1979, I. Lansbury (ANIC); 2♂, 4♀ apt., 18♂, 22♀ macr., South Alligator R. Xing, Kakadu NP, flowing river, rocks at edge, 13.03S 132.19E, 14.vii.1994, T. Weir & A. Roach (ANIC); 9♂, 4♀ apt., 3♂, 1♀ macr., Stapleton Ck, near Darwin, CL0120, 13.11S 131.03E, 13.v.1979, I. Lansbury (ANIC); 16♂, 15♀ apt., 11♂, 26♀ macr., 15 nymphs, Daly R. Crossing, edge of flowing river, fringing Pandanus, 13.46S 130.43E, 19.vii.1994, T. Weir & A. Roach (ANIC); 3♂, 2♀ apt., Katherine, 14.28S 132.16E, 23.i.1971, T. Weir & A. Allwood (ANIC); 1♂ macr., Crocodile Ck near Dorisvale, freshwater pool, 14.29S 131.22E, 17–18.xi.1984, M. Malipatil (NTM); 1♂ apt., Katherine Low Level Reserve, freshwater stream, 14.30S 132.15E, 15.iv.1981, M. Malipatil & J. Hawkins (NTM); 39♂, 38♀ apt., 3♂, 4♀ macr., Bitter Springs, Roper R., Eley NP, flowing river, deep billabongs, Pandanus, 14.55S 133.05E, 25.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 2♀ apt., 5♂, 5♀ macr., Roper R. at 4 mile, Eley Nat Pk, edge flowing river, grass, reeds, algae, 14.56S 133.10E, 25.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 2♀ apt., Roper R. at Mulurark, Eley NP, limestone rocks in flowing river, algal, 14.57S 133.12E, 25.vii.1994, T. Weir & A. Roach (ANIC); 12♂, 9♀ apt., 22♂, 16♀ macr., Sullivan Ck, Gregory NP, deep billabong, rocky edges, 15.35S 131.17E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Gregory Nat. Pk, Roderick Ck, mv light, 15.38S 131.22E, 4–6.vii.1986, I. Archibold, Operation Raleigh (NTM); 1♂ apt., 1♂, 2♀ macr., Keep R. Gorge, Keep R. Nat Pk, deep billabongs with rocks, floating leaves, 15.50S 129.07E, 22.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., Cockatoo Lagoon, Keep R. NP, deep billabong, water lillies, fringing Pandanus, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 2♂ apt., Limestone Gorge, freshwater pool, 16.03S 130.23E, 23–26.vi.1986, M. Malipatil, Operation Raleigh (NTM); 1♂ apt., Limestone Gorge, E. Baines R., Gregory NP, deep billabong, fringing Pandanus, 16.03S 130.23E, 21.vii.1994, T. Weir & A. Roach (ANIC); 3♀ apt., 1♂, 2♀ macr., Bullita Outstation, freshwater pool, 16.07S 130.25E, 22.vi–3.vii.1986, M. Malipatil, Operation Raleigh (NTM); 3♂, 4♀ apt., 1♂, 3♀ macr., Bullita Outstation, East Baines R., Gregory NP, deep billabong, rockshelf, 16.07S 130.25E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Armstrong R. Xing, 6 km S Top Springs, mv light, 16.36S 131.47E, 12.xi.1984, M. Malipatil (NTM); 1♀ macr., Campbell Spring, 38 km E by SE of Mt Panton, 17.25S 129.34E, 30.v.1974, T. Weir & T. Angeles (ANIC); 1♂, 1♀ apt., Giles or Wattle Ck, 7 km N Wave Hill Police Stn, on pool, 17.25S 130.50E, 13–14.xi.1984, M. Malipatil (NTM); 1♀ apt., 1♂, 3♀ macr., Border Waterhole 15 km WbyS Musselbrook M, small rocky pools, sandy, algae, roots, 17.37S 137.59E, 14.v.1995, T. Weir (ANIC); 10♂, 4♀ macr., Border Waterhole 15 km WbyS Musselbrook M, large perm. pool, muddy edges, algae, 18.37S 137.59E, 14.v.1995, T. Weir (ANIC); 1♂ apt., 3♂, 2♀ macr., McLaren Ck, freshwater stream, 20.20S 134.22E, 12.iv.1981, M. Malipatil & J. Hawkins (NTM). **Queensland:** 1♀ apt., Cockatoo Ck, pools in rocky running creek, 11.39S 142.27E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 3♂, 2♀ apt., 1♂ macr., Cockatoo Ck Xing, 17 km NW of Heathlands, 11.39S 142.27E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 1♂ macr., 12 km E by N of Heathlands, temporary pool, 11.43S 142.41E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 2♂, 5♀ apt., same locality data as holotype, 11.50S 142.30E (ANIC); 5♀ apt., Bertie Ck Xing, 12 km SW Heathlands, 11.50S 142.30E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 1♀ apt., Dulhunty R. (as Dalhousie R.), water sweep, 11.50S 142.30E, 10.ix.1993, P. Zborowski & S. Shattuck (ANIC); 3♂, 8♀ apt., Rocky Ck, water sweep, 12.06S 142.33E, 10.xii.1992, P. Zborowski & W. Dressler (ANIC); 4♂, 1♀ apt., Rocky Ck, water sweep, 12.06S 142.33E, 17.viii.1992, P. Zborowski & J. Cardale (ANIC); 1♂, 8♀ apt.,

Rocky Ck Xing, still pool in creek bed, 12.06S 142.34E, 10.xii.1992, W. Dressler & P. Zborowski (ANIC); 1♂ macr., Catfish Ck, water sweep, 12.08S 142.16E, 11.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♂, 1♀ macr., Ling Ck, water sweep, 12.19S 142.10E, 14.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♂, 1♀ apt., Schramm Ck, water sweep, 12.22S 142.37E, 11.viii.1993, P. Zborowski & J. Balderson (ANIC); 7♂, 2♀ apt., 3♂, 2♀ macr., Schramm Ck, water sweep, 12.22S 142.37E, 17.viii.1992, P. Zborowski & J. Cardale (ANIC); 2♂, 1♀ apt., Schramm Ck, water sweep, 12.22S 142.37E, 19.v.1993, P. Zborowski & A. Roach (ANIC); 1♀ macr., Wenlock R., Stone Crossing, 12.23S 142.10E, 14.viii.1993, P. Zborowski & J. Balderson (ANIC); 2♂ apt., 2♀ macr., 1 nymph, Wenlock R., water sweep, 12.27S 142.38E, 8.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♀ apt., Myall Ck, water sweep, 12.39S 142.16E, 25.v.1993, P. Zborowski & A. Roach (ANIC); 2♂ apt., Wenlock R., water sweep, 12.39S 142.47E, 23.xi.1992, P. Zborowski & A. Calder (ANIC); 11♂, 6♀ apt., Wenlock R. Crossing, at flowing river edge, 12.39S 142.47E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., Lydia Ck lagoon, water sweep, 12.40S 142.40E, 8.ix.1993, P. Zborowski & S. Shattuck (ANIC); 2♂, 1♀ apt., 4♂, 3♀ macr., Moonlight Ck, water sweep, 12.42S 142.30E, 22.vi.1993, P. Zborowski & I. Naumann (ANIC); 2♂ apt., Moonlight Ck, water sweep, 12.42S 142.30E, 24.v.1994, P. Zborowski (ANIC); 1♂, 1♀ apt., Canoe Ck, still pools in dry creek bed, 12.48S 143.03E, 26.x.1992, T. Weir & P. Zborowski (ANIC); 2♂, 3♀ apt., 1♀ macr., Pascoe R. Crossing, stagnant pools in dry river bed, 12.53S 142.56E, 26.ix.1992, T. Weir & P. Zborowski (ANIC); 2♂ apt., 1♂ macr., Heskett Ck, water sweep, 12.54S 142.45E, 19.v.1994, P. Zborowski (ANIC); 1♂ macr., Capsise Ck, water sweep, 12.57S 142.45E, 17.vi.1993, P. Zborowski & I. Naumann (ANIC); 3♂, 3♀ apt., 4♂, 1♀ macr., Wenlock R. Crossing, still stagnant pools in dry river bed, 13.06S 142.56E, 26.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., Archer R., stagnant rocky pools, 13.26S 142.19E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 25♂, 23♀ apt., 32♂, 42♀ macr., Langi Lagoon, Mungkan Kandju NP, perm. lagoon, clear, sticks, logs, lilli, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 3♂, 4♀ apt., 2♀ macr., 17 km NW by N of Rokeby (Vardons Lagoon), small pools with debris, 13.34S 142.32E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 2♀ apt., 10 km WNW of Rokeby (Mango Lagoon), lagoon with rocks at edge, 13.38S 142.35E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 2♂, 1♀ apt., 1♀ macr., Coen R., 1 km E Rokeby, Mungkan Kandju NP, leaf packets in lagoon, 13.39S 142.41E, 23.vii.1998, A. Calder (ANIC); 2♂, 1♀ apt., Culliban Ck, water sweep, 13.39S 142.49E, 27.v.1993, P. Zborowski & A. Roach (ANIC); 1♂, 2♀ apt., 1♂ macr., Rocky R. via Coen, 13.49S 143.28E, 7.xi.1969, B. Cantrell (ANIC); 5♂ apt., 3♂, 1♀ macr., Coen R., 13.57S 143.12E, 28.x.1969, B. Cantrell (UQIC, ANIC); 1♂ apt., 1♂ macr., Pretender Ck, lagoon, 14.08S 142.38E, 14.ix.1993, P. Zborowski & S. Shattuck (ANIC); 4♀ apt., Holroyd R., lagoon, 14.22S 142.27E, 14.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♀ apt., Normanby Riv, Lakefield NP (Orange Plain), waterhole with debris and vegetation, 14.43S 144.10E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 2♂ macr., Saltwater Ck, water sweep, 14.47S 143.30E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 2♂, 1♀ apt., Normanby R., Lakefield Nat. Pk (Hanushs waterhole), waterhole, debris, 14.50S 144.12E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., King R., water sweep, 14.52S 143.06E, 17.viii.1993, P. Zborowski & J. Balderson (ANIC); 13♂, 12♀ apt., 2 nymphs, Long Lagoon, Coleman R., at light, 14.54S 142.50E, 16.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♀ macr., Dead Horse Ck, water sweep, 15.05S 143.43E, 16.vi.1993, P. Zborowski & I. Naumann (ANIC); 3♂, 4♀ macr., Healy Ck, water sweep, 15.08S 143.48E, 15.i.1994, P. Zborowski & E.D. Edwards (ANIC); 1♂ macr., Hann R., 110 km S of Coen, 15.11S 143.52E, 27.vi.1970, J.C. Le Souef (MV); 3♂, 1♀ apt., Hann R., water sweep, 15.11S 143.52E, 16.viii.1992, P. Zborowski & J. Cardale

(ANIC); 1♂, 1♀ apt., 2 nymphs, Hann R., 50 miles N of Laura, 15.11S 143.52E, x.1969, B. Cantrell (ANIC); 1♂, 3♀ apt., Normanby R., 7 km Eby S New Laura, Lakefield NP, small pool, sandy, algae, 15.11S 144.24E, 29.vii.1998, A. Calder (ANIC); 1♂ apt., 2♂ macr., 6.5 km ESE Old Laura, Lakefield NP, pool, sandy, debris, algae (dry end), 15.12S 144.25E, 28.vii.1998, A. Calder (ANIC); 7♂, 9♀ apt., 1♂, 1♀ macr., Laura R., Lakefield Nat. Pk (Six Mile Waterhole), waterhole, debris, 15.16S 144.27E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 3♂, 3♀ apt., 1♂ macr., Normanby R., water sweep, 15.18S 144.51E, 27.vi.1993, P. Zborowski & I. Naumann (ANIC); 2♀ apt., Endeavour R. Falls, water sweep, 15.20S 145.02E, 19.i.1994, P. Zborowski & E.D. Edwards (ANIC); 2♂ apt., 1♂, 2♀ macr., Kennedy R., water sweep, 15.26S 144.11E, 24.iv.1994, P. Zborowski (ANIC); 3♂ apt., 3♂, 7♀ macr., Kennedy R. Xing, temporary pool in dry river bed, sandy, 15.26S 144.11E, 16.vi.1992, T. Weir (ANIC); 1♂, 1♀ apt., Trevethan Ck, water sweep, 15.37S 145.13E, 25.iv.1994, P. Zborowski (ANIC); 1♂, 1♀ macr., Split Rock, 14 km S of Laura, 15.39S 144.31E, 23–26.vi.1975, G.B. Monteith (QM); 3♂, 2♀ apt., 6♂, 5♀ macr., East Normanby R., water sweep, 15.45S 145.00E, 25.viii.1992, P. Zborowski & J. Cardale (ANIC); 1♂, 5♀ apt., Shepherd Ck, water sweep, 15.46S 144.15E, 17.i.1994, P. Zborowski & E.D. Edwards (ANIC); 1♂ macr., Laura R., water sweep, 15.56S 144.50E, 30.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 1♀ macr., Mossman Bluff Tr., 5–10 km W Mossman, intercepts, 1300 m, site 10, 16.28S 145.19E, 1–17.i.1989, Monteith, Thompson & ANZSES (QM); 1♂ macr., Mary Ck, 16.33S 145.12E, 4.xii.1968, Britton & Misko (ANIC); 2♂, 2♀ macr., Devil Devil Ck, small, polluted, shade, riverine scrub, 16.35S 145.23E, 16.xii.1994, P. Zborowski (ANIC); 1♀ macr., Julatten, McDougalls Rd, waterlily pool, CL0136, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂, 1♀ apt., Tinaroo Ck, 17.03S 145.28E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 2♂, 3♀ apt., Barron R., 17.04S 145.27E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 2♀ apt., 3 nymphs, Tinaroo Ck, murky ponds, some shade, sclerophyll, 17.04S 145.28E, 15.xii.1994, P. Zborowski (ANIC); 4♂, 2♀ apt., 13♂, 12♀ macr., Little Mulgrave R. via Gordonvale, 17.07S 145.41E, 11.xi.1969, T. Weir (ANIC, UQIC); 1♂ macr., Mulgrave R. crossing, 72 m, junct Gilles Hwy and Little Mulgrave Rd, 17.09S 145.43E, 27.iv.1998, G. Cassis & S. Davies (AM); 1♀ macr., The Boulders via Babinda, 17.20S 145.51E, 8.xi.1969, T. Weir (ANIC); 2♂ macr., Murray Falls, CL1718, 13.viii.1983, J.T. & D.A. Polhemus (JTPC); 1♀ macr., Amphitheatre Camp 27 km NbyE Musselbrook, small pools, rocky, sandy, debris, clear, 18.21S 138.10E, 13.v.1995, T. Weir (ANIC); 3♂ apt., 6♂, 7♀ macr., Musselbrook Ck 19 km NEbyE Musselbrook M. C., large & small pools, rocky, sandy, algae, 18.30S 138.17E, 15.v.1995, T. Weir (ANIC); 7♂, 8♀ apt., 9♂, 12♀ macr., Holts Ck 8 km N Musselbrook Mining Camp, large pools, rocky, sandy, debris, logs, 18.33S 138.11E, 10–20.v.1995, T. Weir (ANIC); 6♂, 6♀ macr., Musselbrook Ck 11 km ENE Musselbrook M. C., clear shallow pool, rocky, sandy, twigs, 18.34S 138.13E, 15.v.1995, T. Weir (ANIC); 1♂, 2♀ apt., 4♂, 3♀ macr., Murrays Spring 8 km WbyN Musselbrook M. C., large pool, rocky, sandy, waterlilies, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC); 1♂ macr., Murrays Spring, 8 km WbyN Musselbrook Min, at light, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC); 8♂, 7♀ macr., Murrays Ck, Musselbrook Mining Camp, small pools, rocky, sandy, algal growth, 18.36S 138.08E, 10.v.1995, T. Weir (ANIC); 10♂, 8♀ apt., 10♂, 12♀ macr., Musselbrook Ck 2 km S Musselbrook M. C., large pool, rocky, sandy, 18.37S 138.08E, 9.v.1995, T. Weir (ANIC); 4♂, 6♀ apt., 2♂, 5♀ macr., Ridgepole Waterhole 24 km ESE Musselbrook, perm. waterhole, waterlilies, nardoo, algae, 18.40S 138.20E, 11.v.1995, T. Weir (ANIC); 5♂, 7♀ macr., 15 km SEbyS Musselbrook Mining Camp, pool in rocky creek bed, sandy, murky, 18.43S 138.12E, 8.v.1995, T. Weir (ANIC); 8♂, 10♀ apt., Bluewater Ck, 19 miles N of Townsville, 19.11S 146.33E, 7.xi.1969, T. Weir (ANIC); 1♂, 4♀ apt., Cloncurry R. at Sedan Dip, bank, 20.03S 141.07E, 17.xi.1994 (DNRQ); 5♂, 3♀

apt., 1♂, 1♀ macr., Pioneer R. at Balnagowan Crossing, swarming over rocks in river (thousands), 21.09S 149.01E, 3.xi.1969, T. Weir (ANIC). **Western Australia:** 5♂ apt., 2♂ macr., Millstream, Top end crossing, 21.35S 117.04E, 20.vii.1958, R.P. McMillan (WAM); 1♂ apt., Crossing Pool, Fortescue R., CLM 29, undisturbed, episodic, macrophytes, 21.35S 117.05E, 28.x.1994, CALM (CALMWA); 4♂, 6♀ apt., 3♂, 5♀ macr., Cangan Pool, Cockeraga R., CLM 21, mod disturbed, episodic, macrophytes, 21.42S 118.38E, 1994, CALM (CALMWA); 1♂ apt., Joolabroo Pool, Minilya R., CLM 40, mod disturbed, episodic, macrophytes, 23.50S 114.40E, 31.viii.1994, CALM (CALMWA); 1♀ apt., 1♂ macr., 5 nymphs, Edithana Pool, Lyons R., CLM 44, mod disturbed, episodic, macrophytes, 24.07S 116.30E, 2.ix.1994, CALM (CALMWA); 1♂, 1♀ apt., 1 nymph, Mooka Ruins, Mooka Ck, CLM 45, undisturbed, episodic, macrophytes, 24.54S 114.58E, 1.vii.1994, CALM (CALMWA); 2♂ apt., 13 km ESE Mooka HS, skating on stagnant pool, 24.58S 114.49E, 9–11.v.1981, B. Hanich & T.F. Houston (WAM); 1♂, 1♀ apt., 1 nymph, Coolabulla Pool, Murchison R., CLM 48, mod disturbed, episodic, macrophytes, 27.30S 115.39E, 14.vii.1994, CALM (CALMWA).

***Microvelia (Austromicrovelia) malipatili*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled '16.03S 130.23E GPS, Limestone Gorge, junction East Baines R. and Limestone Ck, Gregory NP, N[orthern] T[erritory], 21 July 1994, T. Weir, A. Roach' and 'pools in flowing creek, muddy and rocky edges' (ANIC).

Paratypes. **Northern Territory:** 1♀ macr., Gubarra (Baroalba Springs), Kakadu NP, shaded pools, flowing ck, closed forest, 12.50S 132.53E, 13.v.11.1994, T. Weir & A. Roach (ANIC); 3♂, 1♀ apt., Crocodile Ck near Dorisvale, freshwater pool, 14.29S 131.22E, 17–18.xi.1984, M. Malipatil (NTM); 1♂ macr., Sullivan Ck, Gregory NP, deep billabong, rocky edges, 15.35S 131.17E, 21.vii.1994, T. Weir & A. Roach (ANIC); 8♂, 8♀ apt., 2♂, 4♀ macr., Limestone Gorge, freshwater pool, 16.03S 130.23E, 23–26.vi.1986, M. Malipatil, Operation Raleigh (NTM); 3♂, 3♀ apt., 2♂, 1♀ macr., same locality data as holotype, 16.03S 130.23E (ANIC); 1♂, 6♀ apt., 9♂, 7♀ macr., near Sullivan Yard, freshwater pool, 15.30S 131.21E, 11.xi.1984, M. Malipatil (NTM); 1♂, 1♀ apt., Giles or Wattle Ck, 7 km N Wave Hill Police Stn, on pool, 17.25S 130.50E, 13–14.xi.1984, M. Malipatil (NTM). **Queensland:** 23♂, 24♀ apt., 4 nymphs (Indarri Waterfall) Lawn Hill NP, large perm. pool, near waterfall, tufa dams, 18.42S 138.29E, 16.v.1995, T. Weir (ANIC); 9♂, 5♀ apt., 7 nymphs, Louie Ck at tufa dams, Lawn Hill NP, flowing, clear, sandy, vegetation, Pandanus, 18.46S 138.31E, 17.v.1995, T. Weir (ANIC); 1♂, 1♀ apt., 1 nymph, Louie Ck Xing, Lawn Hill NP, flowing, silty, floating veget, lillies, 18.46S 138.31E, 17.v.1995, T. Weir (ANIC); 60♂, 47♀ apt., Louie Ck, near stockyards, Lawn Hill NP, flowing creek, sandy, debris, Pandanus, 18.47S 138.31E, 17.v.1995, T. Weir (ANIC); 4♂, 4♀ apt., 2 km WNW of Riversleigh HS, at ford of Gregory R., 19.01S 138.43E, 29.iv.1986, J.A. Forrest (SAM). **Western Australia:** 1♂ apt., Wilson Spring, Wilson Ck, CLM 16, undisturbed, seasonal, macrophytes, 17.55S 125.34E, 1994, CALM (CALMWA).

Microvelia (Austromicrovelia) alisonae, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'Mary R., 37 ml. [= 55 km] E of Pine Ck, N[orthern] T[erritory], 9.vii.1971, T. Weir & A. Allwood' (ANIC).

Paratypes. **Northern Territory:** 31♂, 18♀ apt., 2♂ macr., Howard Springs, 12.27S 131.03E, 18.iii.1971, T. Weir (ANIC); 7♂, 7♀ apt., 1♀ macr., Howard Springs, CL0107, 12.27S 131.03E, 3.v.1979, I. Lansbury (ANIC); 5♂, 1♀ apt., Swim Ck Crossing, Point Stuart Station, 12.31S 131.51E, 10–13.x.1971, T. Weir & A. Allwood (ANIC); 1♂ apt., Elizabeth R. nr Darwin, CL0110, 12.35S 131.02E, 3.v.1979, I. Lansbury (ANIC); 1♂, 5♀ apt., Mudginberri Station, via Jim Jim, 12.36S 132.52E, 19.viii.1971, T. Weir & A. Allwood (ANIC); 1♂ apt., Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 17♂, 16♀ apt., 3 nymphs, Berry Springs, 12.42S 130.59E, 28.x.1970, T. Weir (ANIC); 3♂, 1♀ apt., Berry Springs, 38 mi S of Darwin, 12.42S 130.59E, 29.vii.1971, T. Weir & A. Allwood (ANIC); 2♂, 5♀ apt., 2♂, 2♀ macr., Arnhem Highway, Flying Fox Ck, CL0134, 12.42S 132.20E, 17.v.1979, I. Lansbury (ANIC); 1♂ apt., Flying Fox Ck, Kapalga, Kakadu NP, deep billabong, algal growth, 12.42S 132.20E, 15.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ apt., Magela Ck, Arnhem Land, pools in flowing creek, sandy bottom, 12.45S 133.02E, 12.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 3♀ apt., Bowerbird Billabong, Magela Ck, Kakadu N, still pools in rocky creek bed, sandy bo, 12.46S 133.02E, 12.vii.1994, T. Weir & A. Roach (ANIC); 2♂, 2♀ apt., Manton R., near Darwin, CL0122, 12.49S 131.10E, 15.v.1979, I. Lansbury (ANIC); 2♂, 5♀ apt., Darwin R. Reservoir, 12.50S 130.58E, 7.vii.1980, M.B. Malipatil (NTM); 3♂, 3♀ apt., 3 nymphs, 19 km E by N of Mt Cahill, 12.50S 132.52E, 18.xi.1972, T. Weir & A. Allwood (ANIC); 1♂ macr., Gubarra (Baroalba Springs), Kakadu NP, shaded pools, flowing ck, closed forest, 12.50S 132.53E, 13.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Lightning Dreaming Gorge, 25 km E by S of Mt Cahill, 12.55S 132.56E, 12.vi.1973, T. Weir (ANIC); 7♂, 5♀ apt., 4 nymphs, Finnis R. xing, 9 km WNW Batchelor, shallow water, lots of floating leaves, 13.01S 130.57E, 17.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 5♀ apt., Coomalie Ck, near Darwin, CL0121, 13.02S 131.11E, 15.v.1979, I. Lansbury (ANIC); 14♂, 11♀ apt., 2 nymphs, Giyamungkurr (Black Jungle Spring), Kakadu NP, narrow billabong, Pandanus, grass, 13.03S 132.10E, 14.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 1♀ apt., Reynolds R. xing, Litchfield NP, pools in flowing river, Pandanus, grass, 13.18S 130.45E, 18.vii.1994, T. Weir & A. Roach (ANIC); 1♂ apt., Adelaide R. Crossing, Daly R. Road, 13.29S 131.04E, 10.viii.1980, M.B. Malipatil (NTM); 5♂, 12♀ apt., 2♂ macr., same locality data as holotype, 13.36S 132.08E (ANIC); 12♂, 16♀ apt., 2♂, 2♀ macr., Douglas Hot Springs Nature Park, Douglas R, pools in flowing river, algal, 13.46S 131.26S, 20.vii.1994, T. Weir & A. Roach (ANIC); 6♂, 6♀ apt., 2♂, 3♀ macr., Edith Falls, Nitmiluk (Katherine Gorge) NP, flowing river, Pandanus, floating leaves, 14.11S 132.11E, 20.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 3♀ apt., Katherine, 14.28S 132.16E, 23.i.1971, T. Weir & A. Allwood (ANIC); 9♂, 11♀ apt., Bitter Springs, Roper R., Elsey NP, flowing river, deep billabongs, Pandanus, 14.55S 133.05E, 25.vii.1994, T. Weir & A. Roach (ANIC); 20♂, 17♀ apt., 6 nymphs, Roper R. xing, Mataranka Homestead Rd, flowing river, deep billabongs, grassy, 14.56S 133.07E, 25.vii.1994, T. Weir & A. Roach (ANIC); 12♂, 6♀ apt., Roper R. at 4 mile, Elsey Nat Pk, edge flowing river, grass, reeds, algae, 14.56S 133.10E, 25.vii.1994, T. Weir & A. Roach (ANIC); 7♂, 4♀ apt., Roper R. at Mulurark, Elsey NP, limestone rocks in flowing river, algal, 14.57S

133.12E, 25.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., Bullita Outstation, East Baines R., Gregory NP, deep billabong, rockshelf, 16.07S 130.25E, 21.vii.1994, T. Weir & A. Roach (ANIC).

***Microvelia (Austromicrovelia) fluvialis* Malipatil, comb. nov.**

Material examined

Holotype (Microvelia fluvialis fluvialis). Apterous ♂, labelled 'VIC[toria], Thomson R., Thomson-Jordan Divide Rd, 1.v.1977, N.M.V. Survey Dept. G.R.E.S. T6 no. 5, M. Malipatil' (MV).

Holotype (Microvelia fluvialis weiri). Apterous ♂, 'Farm Ck, 3000' [= 915 m], 15 mi [= 24 km] E of Emu Vale, S.E. Q[ueens]l[an]d, 17–22.v.1969, T. Weir' (ANIC).

Paratypes (Microvelia fluvialis fluvialis). **New South Wales:** 16♂, 6♀ apt., Thredbo R., 900 m, 6 km NWbyN of Jindabyne, 15.iii.1979, T. A. Weir (ANIC). **Victoria:** 2♂ apt., Thomson R. Jordan R. junction, Swingler Portal, Site T11 No. 6, 37.39S 146.15E, 12.ii.1977, N.M.V. Survey Dept. G.R.E.S. (NTM); 1♀ apt., 1♂, 1♀ macr., same locality data as holotype, 37.43S 146.16E (MV); 1♂, 1♀ apt., Thomson R., 7 km NNW Walhalla, Site T16 no. 5, 37.54S 146.25E, 3.v.1977, MV Survey Dept, G.R.E.S. (ANIC).

Paratypes (Microvelia fluvialis weiri). **New South Wales:** 1♂ apt., Boonoo Boonoo R. via Legume, 28.51S 152.09E, 18.iv.1965, S.R. Curtis (UQIC). **Queensland:** 42♂, 31♀ apt., 1♂, 12 macr., Crystal Cascades, via Redlynch, 16.53S 145.42E, 12.xi.1969, T. Weir (ANIC); 2♂, 1♀ apt., 1♀ macr., The Boulders via Babinda, 17.20S 145.51E, 8.xi.1969, T. Weir (ANIC); 6♂, 7♀ apt., 4♂, 18♀ macr., Palmerston Nat. Pk, 17.37S 145.47E, 10.xi.1969, T. Weir (ANIC); 18♂, 21♀ apt., Wallaman Falls via Ingham, 18.36S 145.48E, 16.xi.1969, T. Weir (ANIC); 32♂, 11♀ apt., Birthday Ck via Paluma, 18.58S 146.07E, 7.xi.1969, T. Weir (ANIC); 3♂ apt., 2♂ macr., Little Crystal Ck, 1086ft, 19.01S 146.15E, 7.xi.1969, T. Weir (ANIC); 3♂, 4♀ macr., Boulder Ck via Mirani, 21.01S 148.42E, 5.xi.1969, T. Weir (ANIC); 4♂, 3♀ apt., Eungella Nat. Pk via Dalrymple Heights, 21.11S 148.29E, 4.viii.1968, T. Weir (ANIC); 5♂, 4♀ apt., 1♂, 12 macr., Eungella Nat. Pk, via Dalrymple Heights, 21.11S 148.29E, 4.xi.1969, T. Weir (ANIC); 3♂, 8♀ apt., Crediton Ck via Dalrymple Heights, 21.13S 148.33E, 4.xi.1969, T. Weir (ANIC); 15♂, 6♀ apt., Glassford Ck, Monto-Many Peaks Rd (as Gladford Ck), 24.35S 151.20E, 18.xi.1957, T.E. Woodward (UQIC); 5♂, 2♀ apt., Carnarvon Gorge, 25.03S 148.12E, 24.v–2.vi.1954, T.E. Woodward (UQIC); 13♂, 11♀ apt., 40+ nymphs, Fat Hen Ck via Kilkeven, 26.07S 152.18E, 19.viii.1957, F.A. Perkins (UQIC); 11♂, 17♀ apt., Mt Mowbull, Bunya Mts, lower slopes, creek, 26.53S 151.36E, 1.vi.1958, T.E. Woodward (UQIC); 1♀ apt., Mt Glorious, 27.20S 152.46E, 22.iv.1961, S. Thorburn (UQIC); 1♂, 1♀ apt., Upper Cedar Ck via Samford, 27.20S 152.49E, 6.xii.1962, G. Monteith (UQIC); 1♀ apt., Cash's Crossing, 27.21S 152.58E, 16.iv.1954, G. Hooper (UQIC); 17♂, 9♀ apt., 1♀ macr., South Pine R. via Samford, 27.22S 152.22E, 16.ii.1969, T. Weir (ANIC); 7♂, 5♀ apt., 3 miles W of Samford, stagnant creek pools, 27.22S 152.50E, 16.ii.1969, T. Weir (UQIC); 2♂, 4♀ apt., Brisbane, 27.28S 153.02E, 30.v.1962, F.J.D. McDonald (UQIC); 1♀ apt., Brisbane, 27.28S 153.02E, 5.x.1962, E.A. Bernays (UQIC); 1♀ apt., Cedar Ck, 27.22S 152.53E, viii.1955, R.W. Downes (UQIC); 1♀ apt., Upper Brookfield, 27.29S 152.52E, 10.xii.1962, G. Monteith (UQIC); 1♂ apt., Beaudesert, 27.59S 153.00E, 8.iv.1966, B.F. Ingram (UQIC); 2♂, 1♀ apt., Canungra, 28.01S 153.10E, 9.iii.1954, K.L.S. Harley (UQIC); 13♂, 4♀ apt., South Emu Ck via Emu Vale, 28.13S 152.25E, 22.v.1969, T. Weir (ANIC); 1♂ apt., Bald Mtn area, 28.14S 152.25E, ii.1970, T.A. Weir (ANIC); 1♀ apt., Picnic Rock, West Canungra Ck, Lamington Nat. Pk, 28.15S 153.09E, 16.ii.1958, H.G. Greening (UQIC); 31♂, 28♀

apt., same locality data as holotype, 28.16S 152.19E (ANIC, MV, UQIC); 1♂ apt., 6 nymphs, Tannymorel Ck, 28.17S 152.15E, 27.iii.1958, T.E. Woodward (UQIC).

Other material examined. New South Wales: 1♂, 1♀ apt., Boonoo Boonoo R., EPA Survey – MRHI CLAR 04, 28.48S 152.10E, 28.ix.1996, E. Turak (AM); 1♀ apt., Boonoo Boonoo R. at Falls, EPA Survey – MRHI CLAR, 04, 28.48S 152.10E, 10.x.1995, E. Turak (AM); 1♂, 1♀ apt., Boonoo Boonoo R. at Falls, EPA Survey – MRHI CLAR, 04, 28.48S 152.10E, 11.x.1995, J. Ling (AM); 7♂, 9♀ apt., Cataract R. at Sandy Hill, EPA Survey – MRHI CLAR, 05, 28.56S 152.14E, 10.x.1995, J. Ling (AM); 3♂, 2♀ apt., Cataract R. at Sandy Hill, EPA Survey – MRHI CLAR, 05, 28.56S 152.14E, 10.v.1995, E. Turak (AM); 4♂, 5♀ apt., Washpool Ck, Washpool N.P., EPA Survey – MRHI CLAR, 07, 29.16S 152.26E, 13.v.1995, J. King (AM); 3♂, 1♀ apt., Washpool Ck, Washpool N.P., EPA Survey – MRHI CLAR, 07, 29.16S 152.26E, 9.x.1995, E. Turak (AM); 3♂, 1♀ apt., Towgon Ck, Grange S.F., EPA Survey – MRHI CLAR 18, 29.26S 152.37E, 8.x.1995, E. Turak (AM); 1♂ apt., 2♂ macr., Little Dandahra Ck, Mulligan's Hut, EPA Survey – MRHI CLAR 14, 29.31S 152.22E, 9.x.1995, J. King (AM); 1♂, 1♀ apt., Mann R., EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 1.x.1994, E. Turak (AM); 2♂ apt., Mann R., Grafton Road, EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 11.v.1995, E. Turak (AM); 1♂ apt., Mann R., Grafton Road, EPA Survey – MRHI CLAR 03, 29.41S 152.06E, 9.x.1995, N. Waddell (AM); 19♂, 5♀ apt., Mann R. Falls, EPA Survey – MRHI CLAR 02, 29.43S 151.56E, 11.x.1995, J. Ling (AM); 1♀ apt., 8 nymphs, Chaelundi SF, Chandlers Ck, 30.02S 152.29E, 11.iv.1996, P.S. Cranston (ANIC); 1♂ apt., Kangaroo R., EPA Survey – MRHI CLAR 21, 30.03S 152.51E, 11.v.1995, J. Ling (AM); 1♂ apt., Fry's Ck at William Cole Bridge, 2 km WNW Jambaroo, 31.03S 147.13E, 24.x.1993, L. Hill (AM); 1♂ apt., Aspley R., Aspley Falls, EPA Survey – MRHI MACL 22, 31.03S 151.46E, 2.x.1994, E. Turak (AM); 1♂ apt., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 3.x.1995, E. Turak (AM); 1♂ apt., Upper Hastings R. at Werrikimbe, EPA Survey – MRHI HAST 23, 31.12S 152.13E, 4.x.1995, A. Leask (AM); 1♂, 1♀ apt., Wilson R. at Wild Bull Park, EPA Survey – MRHI HAST 22, 31.15S 152.31E, 5.x.1995, E. Turak (AM); 2♂, 1♀ apt., Tobins R. u/s Mt Seaview Lodge, EPA Survey – MRHI HAST 14, 31.24S 152.15E, 10.iv.1995, F. Laurensen (AM); 1♂, 1♀ apt., 1 nymph, Hastings R., The Crest, EPA Survey – MRHI HAST 06, 31.28S 152.36E, 5.x.1995, E. Turak (AM); 3♂, 1♀ apt., Coaches Ck/Doyles R. confluence, EPA Survey – MRHI HAST 20, 31.32S 152.18E, 4.x.1995 (AM); 2♂, 5♀ apt., Manning R., Ninnes Trail, EPA Survey – MRHI MANN 15, 31.49S 151.39E, 11.iv.1995, M. Preston (AM); 2♂, 1♀ apt., Manning R., Ninnes Trail, EPA Survey – MRHI MANN 15, 31.49S 151.39E, 3.x.1994, J. Ling (AM); 1♂ apt., Manning R., Gummi Trail, EPA Survey – MRHI MANN 14, 31.51S 151.34E, 9.iv.1995, J. King (AM); 1♂, 3♀ apt., Kiemans Ck off Dart Brook, EPA Survey – MRHI HUNT 08, 31.53S 150.40E, 13.xii.1995, J. King (AM); 1♂ apt., Upper Hunter R. at Moonan Flat, EPA Survey – MRHI HUNT 11, 31.55S 151.16E, 5.x.1995, J. King (AM); 1♀ apt., Upper Hunter R. at Moonan Flat, EPA Survey – MRHI HUNT 11, 31.55S 151.16E, 9.iv.1995, M. Preston (AM); 4♂ apt., Gloucester R. on Gloucester Road, EPA Survey – MRHI MANN 19, 32.03 s 151.41E, 7.iv.1995, J. King (AM); 25♂, 8♀ apt., Gloucester R., Barrington Tops Nat. Pk, 32.04S 151.41E, 12–14.xi.1981, T. Weir (ANIC); 7♂, 22♀ apt., 2♀ macr., Allyn R., Chichester SF, 32.08S 151.27E, 10–11.xi.1981, T. Weir (ANIC); 2♂ apt., Chichester R., EPA Survey – MRHI HUNT 09, 32.10S 151.35E, 4.iv.1994, E. Turak (AM); 9♂, 6♀ apt., Falbrook, 30 km N of Singleton, Mt Royal State Forest, CL003,4, 32.11S 151.20E, 10.iii.1979, I. Lansbury (ANIC); 1♂ apt., Upper Turin R., 20 km WNW Lithgow, 33.25S 149.56E, 1984, H. Washington (ANIC); 1♂ apt., 27.5 km NW of Oberon, in river debris, 33.31S 149.43E, 17.xi.1991, T. Gush (ANIC); 1♂, 3♀ apt., Jocks

Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 24.v.1996, E. Turak (AM); 3♂ apt., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 8.xii.1995, N. Waddell (AM); 1♀ macr., Wentworth Falls, CL1401, 33.42S 118.01E, 19.xii.1977, J.T. & M.S. Polhemus (JTTC); 1♂ apt., Megalong Ck at Narrow Neck, EPA Survey – MRHI HAWK 10, 33.44S 150.14E, 1.xi.1995, J. King (AM); 6♂ apt., Megalong Ck at Narrow Neck, EPA Survey – MRHI HAWK 10, 33.44S 150.14E, 29.v.1996, E. Turak (AM); 1♂ apt., Nepean R. u/s Penrith, EPA Survey – MRHI HAWK 08, 33.48S 150.38E, 29.v.1996, E. Turak (AM); 4♂, 2♀ apt., Piesley's Ck u/s Rocky Bridge Ck, EPA Survey – MRHI LACH 21, 33.51S 149.08E, 23.v.1996, J. King (AM); 1♀ apt., Rocky Bridge Ck u/s Piesley's Ck, EPA Survey – MRHI LACH 05, 33.52S 149.08E, 10.xi.1995, E. Turak (AM); 2♂ apt., Abercrombie R. u/s Isabella R., EPA Survey – MRHI LACH 03, 34.02S 149.30E, 25.iii.1995, F. Laurenson (AM); 1♂ apt., Abercrombie R. u/s Isabella R., EPA Survey – MRHI LACH 03, 34.02S 149.30E, 14.xi.1995, A. Leask (AM); 1♂ apt., Abercrombie R. u/s Isabella R., EPA Survey – MRHI LACH 03, 34.02S 149.30E, 20.iii.1996, A. McLean (AM); 3♂, 1♀ apt., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 14.xi.1995, R. Cowell (AM); 2♂, 2♀ apt., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 20.iii.1996, J. King (AM); 1♀ apt., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 26.iii.1995, R. Cowell (AM); 1♀ apt., 1♂, 1♀ macr., Boorowa river at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 26.iii.1995, F. Laurenson (AM); 1♀ apt., Boorowa R. at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 9.xi.1995, E. Turak (AM); 1♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10 s 149.56E, xi.1995, R. Cowell (AM); 1♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 22.iii.1996, A. McLean (AM); 1♂ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 25.iii.1995, F. Laurenson (AM); 1♂ apt., Lachlan R., Narrawa Mtn, EPA Survey – MRHI LACH 09, 34.22S 149.07E, 22.iii.1996, J. King (AM); 3♂ apt., 3 nymphs, Lachlan R., Narrawa Mtn, EPA Survey – MRHI LACH 09, 34.22S 149.07E, 26.iii.1995, J. King (AM); 1♂ apt., Grabben Gullen Ck u/s Lachlan R., EPA Survey – MRHI LACH 07, 34.32S 149.09E, 18.iii.1996, J. Ling (AM); 1♂, 4♀ apt., Kangaroo R. up Gerringong Ck, EPA Survey – MRHI SHOAL 01, 34.41S 150.36E, 18.v.1996, J. Ling (AM); 1♂ apt., Kangaroo R. up Gerringong Ck, EPA Survey – MRHI SHOAL 01, 34.41S 150.36E, 4.xii.1995, J. Ling (AM); 1♂ apt., Broger's Ck, EPA Survey – MRHI SHOAL 24, 34.42S 150.41E, 17.v.1996, J. King (AM); 11♂, 13♀ apt., Shoalhaven R. d/s Tallowa Dam, EPA Survey – MRHI SHOAL 10, 34.47S 150.19E, 15.v.1996, J. King (AM); 5♂ apt., Shoalhaven R., Fossicker's Flat, EPA Survey – MRHI SHOAL 05, 34.50S 150.12E, 30.iv.1998, Natacha Waddell (AM); 1♂ apt., Shoalhaven R., Yalwal Ck, EPA Survey – MRHI SHOAL 04, 34.50S 150.23E, 21.xii.1995, E. Turak (AM); 1♂, 2♀ apt., Mtn Ck, 4 km from Taemas Bridge, 35.00S 148.51E, 12.v.1985, L. Hill (ANIC); 1♀ apt., Corang R. at Hockeys, EPA Survey – MRHI SHOAL 07, 35.09S 150.02E, 22.v.1996, E. Turak (AM); 1♂, 3♀ apt., Upper Corang Ck, EPA Survey – MRHI SHOAL 08, 35.12S 150.03E, 22.v.1996, E. Turak (AM); 2♂, 1♀ apt., Yadboro R. u/s Budawang N.P., EPA Survey – MRHI CLYD 06, 35.19S 150.08E, 14.iii.1995, E. Turak (AM); 1♂ apt., Yadboro R., EPA Survey – MRHI CLYD 14, 35.19S 150.11E, 13.iii.1995, E. Turak (AM); 1♀ apt., Yadboro SF, Clyde R., Castle Campground, 35.22S 150.10E, 20.i.1994, G. Cassis (AM); 2♀ apt., Clyde R. at Yadboro, 4.5 km SW of Pigeon House Mt, 35.23S 150.14E, 11.ii.1983, L.Hill (ANIC); 1♀ apt., Bimberamala R., EPA Survey – MRHI CLYD 05, 35.27S 150.04E, 4.iii.1996, J. Ling (AM); 1♀ apt., Carters Ck, 7 km SE Mt Budawang, 35.32S 150.03E, 11.ii.1985, L. Hill (ANIC); 2♂, 5♀ apt., Majors Ck at Majors Ck Road, EPA Survey – MRHI MORU 502, 35.34S 149.45E, 25.iii.1997, Natacha Waddell (AM);

18♂, 18♀ apt., Cabbage Tree Ck, 34 km SE Braidwood, shaded stream, wet sclerophyll, 35.35S 150.01E, 2.iv.1996, R.E. Roughley (ANIC); 14♂, 15♀ apt., 1♂ macr., 6 nymphs, Buckenbowra R., EPA Survey – MRHI CLYD 20, 35.38S 149.59E, 13.iii.1995, J. Ling (AM); 1♀ apt., Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 9.iii.1996, N. Waddell (AM); 1♂ apt., Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 2.xi.1995, N. Waddell (AM); 1♂ apt., Stony Ck, EPA Survey – MRHI MURR m1, 35.39S 147.46E, 25.iii.1995, E. Turak (AM); 1♀ apt., Upper Shoalhaven R. nr Gundillion, SW of Braidwood, 35.46S 149.38E, 24.iv.1983, L. Hill (ANIC); 1♀ apt., Tooma R. d/s Tooma Dam, EPA Survey – MRHI MURR m9, 36.03S 148.17E, 26.iv.1995, A. Amos (AM); 26♂, 27♀ apt., 3 nymphs, Thredbo R., 6 km NWbyN of Jundabine (picnic area near bridge), 900 m, CL015, 36.22S 148.36E, 15.iii.1979, I. Lansbury (ANIC); 8♂, 3♀ apt., 2♂ macr., Swampy Plains R. at Geehi, EPA Survey – MRHI MURR 23, 36.24S 148.11E, 21.iii.1996, Natacha Waddell (AM); 1♂, 3♀ apt., Brogo R., EPA Survey – MRHI Bega 06, 36.28S 149.42E, 25.x.1995, E. Turak (AM); 1♂, 1♀ apt., Mumbulla Ck, EPA Survey – MRHI Bega m20, 36.33S 149.56E, 26.x.1995, E. Turak (AM); 2♂, 1♀ apt., Knight's Ck, EPA Survey – MRHI Bega 25, 36.33S 149.59E, 14.iii.1995, J. King (AM); 4♂, 1♀ apt., Knight's Ck, EPA Survey – MRHI Bega25, 36.33S 149.59E, 25.x.1995, E. Turak (AM); 3♂, 1♀ apt., Mumbulla Falls, EPA Survey – MRHI Bega 19, 36.35S 149.53E, 4.x.1994, E. Turak (AM); 2♂, 4♀ apt., 1 nymph, Mumbulla Falls, EPA Survey – MRHI Bega 19, 36.35S 149.53E, 15.iii.1995, J. King (AM); 1♂ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 18.iii.1995, J. King (AM); 10♂, 10♀ apt., Tantawangalo Ck, EPA Survey – MRHI Bega 09, 36.46S 149.31E, 17.iii.1995, J. King (AM); 1♂ apt., 1 nymph, Bombale R. at Cambalong, EPA Survey – MRHI SNOW 506, 36.53S 149.07E, 24.iii.1997, Alexander Leask (AM); 7♂, 8♀ apt., Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54S 149.28E, 24.x.1995, Natacha Waddell (AM); 13♂, 10♀ apt., 2 nymphs, Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54S 149.28E, 14.iii.1995, Marie Eggerup (AM); 1♂, 3♀ apt., Towamba R., Coolangubra, EPA Survey – MRHI TOWA 10, 36.54S 149.28E, 16.x.1994, E. Turak (AM); 1♂, 2♀ apt., Chalkhill's Ck, EPA Survey – MRHI Bega 04, 36.54S 149.48E, 14.x.1995, J. Ling (AM); 1♀ apt., Chalkhill's Ck, EPA Survey – MRHI Bega 04, 36.54S 149.48E, 27.x.1995, Natacha Waddell (AM); 2♂, 1♀ apt., Chalkhill's Ck, EPA Survey – MRHI Bega04, 36.54S 149.48E, 5.iii.1996, J. Ling (AM); 4♂, 6♀ apt., Myanba Ck, EPA Survey – MRHI TOWA 09, 36.57S 149.29E, 15.iii.1995, J. Ling (AM); 1♂, 2♀ apt., Myanba Ck, EPA Survey – MRHI TOWA 09, 36.57S 149.29E, 16.x.1994, E. Turak (AM); 2♂, 2♀ apt., Myanba Ck, EPA Survey – MRHI TOWA 09, 36.57S 149.29E, 24.x.1994, J. King (AM); 9♂, 8♀ apt., Myanba Ck, EPA Survey – MRHI TOWA 09, 36.57S 149.29E, 6.iii.1996, J. Ling (AM); 1♂ apt., 1 nymph, Towamba R., Burragate, EPA Survey – MRHI TOWA 06, 37.00S 146.37E, 15.iii.1995, Marie Eggerup (AM); 1♀ apt., Towamba R., Burragate, EPA Survey – MRHI TOWA 06, 37.00S 149.37E, 25.x.1995, Russell Cowell (AM); 1♀ apt., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 16.iii.1995, J. Ling (AM); 2♂, 3♀ apt., Jingo Ck, EPA Survey – MRHI TOWA 05, 37.00S 149.40E, 6.iii.1996, J. Ling (AM); 1♂, 2♀ apt., Wog Wog R., Nalbaugh, EPA Survey – MRHI TOWA 08, 37.02S 149.27E, 16.iii.1995, E. Turak (AM); 1♀ apt., Manning R., Gummi Trail, EPA Survey – MRHI MANN 14, 51.51S 151.34E, 5.x.1995, J. King (AM). **Queensland:** 8♂, 4♀ apt., 38 nymphs, Millstream Falls Nat. Pk, pools below falls, clear, vegetation, 17.39S 145.27E, 8–15.xi.1998, T. Weir (ANIC); 1♀ apt., Murray Falls, CL1718, 13.viii.1983, J.T. & D.A. Polhemus (JTPC); 1♂ apt., Blencoe R. at Blencoe Falls, riffle, 18.12S 145.32E, 10.x.1994, collector unknown (DNRQ); 1♂, 1♀ apt., Alligator Ck, Bowling Green Nat. Pk, shallow flowing creek, sandy, vegetation, 19.26S 146.57E, 20–25.v.1999, T. Weir (ANIC); 1♂ apt., Upper Broken R., near

Eungella, 21.10S 148.29E, 12.xii.1961, McAlpine & Lossin (AM); 1♂ apt., Broken R., 50 mi W of Mackay, 21.10S 148.31E, 30.xi.1968, E.B. Britton (ANIC); 2♀ apt., Cedar Ck, 27.22S 152.53E, 28.ix.1930, H. Hacker (QM); 6♂, 5♀ apt., Brisbane, Gold Ck at Brookfield, CL0156, 27.28S 152.55E, 6.vi.1979, I. Lansbury (ANIC); 3♂, 10♀ apt., Cedar Falls, Brisbane area, CL0158, 27.28S 153.02E, 7.vi.1979, I. Lansbury (ANIC); 1♀ apt., Brisbane, Slaughter Ck on Mt Coot-tha, CL0153, 27.29S 152.57E, 5.vi.1979, I. Lansbury (ANIC); 1♂ apt., Logan R. at Forest Home, riffle, 28.12S 152.46E, 2.xii.1994, collector unknown (DNRQ); 13♂, 4♀ apt., South Emu Ck via Emu Vale, 28.13S 152.25E, 22.v.1969, T. Weir (ANIC). **Victoria:** 1♂, 1♀ apt., 4 nymphs, Dart R., Locality LE, 36.31S 147.45E, 12.ii.1973, Dartmouth Survey (MV); 2♂, 1♀ apt., Suggan Buggan R., Snowy Mtns, edge of flowing stream, 36.57S 148.20E, 17.iii.1996, R.E. Roughley (ANIC); 1♂ apt., Little R. at Taggerty, CL0052, 37.19S 145.43E, 29.iii.1979, I. Lansbury (ANIC); 1♂ apt., Caledonia R., below junc. of branches, Site Mc6 no.3, 37.20S 146.39E, 22.ii.1978, MV Survey Dept & G.R.E.S. (NTM); 2♀ macr., Macalister R. – Barkly R. junc., Lyndon Flat, Site Mc14, 37.34S 146.35E, 24.ii.1978, MV Survey Dept & G.R.E.S. (NTM); 2♂ apt., Thomson R. Jordan R. junction, Swingler Portal, Site T11 No. 6, 37.39S 146.15E, 12.ii.1977, N.M.V. Survey Dept. G.R.E.S. (NTM); 9♂, 13♀ apt., Upper Yarra Dam, old river bed below, CL0050, 37.40S 145.54E, 29.iii.1979, I. Lansbury (ANIC); 40♂, 43♀ apt., 2 nymphs, East Warburton, Yarra R., CL0049, 37.45S 145.44E, 29.iii.1979, I. Lansbury (ANIC); 1♀ apt., Aberfeldy R. at Aberfeldy – Walhalla Rd, Site T19 no.3, 37.51S 146.26E, 4.v.1977, MV Survey Dept & G.R.E.S. (NTM); 1♂, 1♀ apt., Thomson R., 7 km NNW Walhalla, Site T16 no. 5, 37.54S 146.25E, 3.v.1977, MV Survey Dept, G.R.E.S. (ANIC); 2♂, 1♀ apt., Bunyip R., Princess Highway bridge, CL0025, 38.05S 145.45E, 25.iii.1979, I. Lansbury (ANIC); 1♀ macr., Morwell R., 3 km N Mirboo North, upper reaches, CL0061, 38.22S 146.09E, 30.iii.1979, I. Lansbury (ANIC).

Microvelia (Austromicrovelia) eborensis, sp. nov.

Material examined

Holotype. Apterous ♂, 'Ebor, N.S.W., 18.xii.1965, B. Cantrell' (ANIC).

Paratypes. **New South Wales:** 57♂, 38♀ apt., 7 nymphs, Sawpit Ck, Kosciusko Nat. Pk, 1200 m, CL010, 30.06S 148.12E, 14.iii.1979, I. Lansbury (ANIC); 1♀ apt., Ebor Falls via Ebor, 30.20S 152.24E, 17.xii.1965, B. Cantrell (UQIC); 86♂, 100♀ apt., 9♂, 7♀ macr., Kara Ck, 13 km NEbyE of Jindabine, 940 m, CL019, 30.21S 148.44E, 16.iii.1979, I. Lansbury (ANIC); 4♂, 1♀ apt., same locality data as holotype, 30.24S 152.21E (ANIC, UQIC); 3♂, 5♀ apt., 1♂ macr., Serpentine R. via Ebor, 30.29S 152.19E, 18.xii.1965, B. Cantrell (UQIC); 1♂ apt., 1♀ macr., Styx R. near Ebor, 30.29S 152.20E, 18.xii.1965, B. Cantrell (UQIC); 1♂, 2♀ apt., 27.5 km NW of Oberon, in river debris, 33.31S 149.43E, 17.xi.1991, T. Gush (ANIC); 6♂, 17♀ apt., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 24.v.1996, E. Turak (AM); 8♂, 6♀ apt., Jocks Ck u/s Cox's R., EPA Survey – MRHI HAWK 12, 33.34S 150.05E, 8.xii.1995, N. Waddell (AM); 1♂ apt., Abercrombie R. u/s Isabella R., EPA Survey – MRHI LACH 03, 34.02S 149.30E, 14.xi.1995, A. Leask (AM); 10♂, 10♀ apt., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 14.xi.1995, R. Cowell (AM); 4♂, 5♀ apt., 1♂ macr., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 20.iii.1996, J. King (AM); 2♀ apt., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 25.x.1994, J. King (AM); 1♀ apt., 2 nymphs, Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 26.iii.1995, R. Cowell (AM); 2♂, 4♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01,

34.10 s 149.56E, xi.1995, R. Cowell (AM); 4♂ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 22.iii.1996, A. McLean (AM); 1♂, 1♀ apt., Abercrombie R., Speary Ridge, EPA Survey – MRHI LACH 01, 34.10S 149.56E, 25.iii.1995, F. Laurensen (AM); 1♀ apt., Mtn Ck, 4 km from Taemas Bridge, 35.00S 148.51E, 12.v.1985, L. Hill (ANIC); 3♂, 3♀ apt., Majors Ck at Majors Ck Road, EPA Survey – MRHI MORU 502, 35.34S 149.45E, 25.iii.1997, Natacha Waddell (AM); 1♂ apt., Monga, 35.35S 149.55E, 11.xi.1966, E.F. Riek (ANIC); 3♂, 2♀ apt., Monga, 35.35S 149.55E, 4.v.1970, E.F. Riek (ANIC); 8♂, 4♀ apt., 1♂, 22 macr., Sawpit Ck, Kosciusko Nat. Pk, 1200 m, 36.06S 148.12E, 14.iii.1979, T.A. Weir (ANIC); 49♂, 82♀ apt., 5♂, 7♀ macr., 1 nymph, Diggers Ck, Kosciusko Nat. Pk, 1510 m, 36.21S 148.29E, 14.iii.1979, T.A. Weir (ANIC); 34♂, 41♀ apt., Diggers Ck, Kosciusko Nat. Pk, 1510 m, CL011-CL014, 36.21S 148.29E, 14.iii.1979, I. Lansbury (ANIC); 34♂, 25♀ apt., 50 nymphs, Thredbo R., 6 km NwbyN of Jindabyne, 900 m, 36.22S 148.36E, 15.iii.1969, T.A. Weir (ANIC); 44♂, 36♀ apt., Thredbo R., 6 km NWbyN of Jindabyne (picnic area near bridge), 900 m, CL015, 36.22S 148.36E, 15.iii.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., 3 nymphs, Betts Ck, Kosciusko Nat. Pk, 1780 m, 36.26S 148.22E, 15.iii.1979, T.A. Weir (ANIC); 5♀ apt., Wollindibby Ck, 10 km WbyS Jindabyne, 1060 m, CLO18, 36.26S 148.31E, 15.iii.1979, I. Lansbury (ANIC); 2♂, 2♀ apt., Wollindibby Ck, 10 km WbyS of Jindabyne, 1060 m, 36.26S 148.31E, 15.iii.1979, T.A. Weir (ANIC); 1♂ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 24.xi.1995, Murray Root (AM); 1♀ apt., Bombale R. at Cambalong, EPA Survey – MRHI SNOW 506, 36.53S 149.07E, 24.iii.1997, Alexander Leask (AM).

Microvelia (Austromicrovelia) torresiana, sp. nov.

Material examined

Holotype. Apterous ♂, labelled '14.56S 133.10E GPS, Roper R. at 4 Mile, Elsey Nat. Pk., NT, 25 July 1994, T. Weir, A Roach' and 'edge of flowing river with grass, reeds & algal growth' (ANIC).

Paratypes. **Northern Territory:** 20♂, 13♀ macr., Melville Island, Pickertaramoor, 11.45S 130.53E, 23.iv.1976, T. Weir (ANIC); 1♀ macr., Cooper Ck, 19 km EbyS of Mt Borradaile, edge of stagnant pool in sandt creek bed, 12.06S 133.04E, 3.xi.1972, E. Britton (ANIC); 27♂, 13♀ macr., Cooper Ck, 19 km E by S Mt Borradaile, 12.06S 133.04E, 5.vi.1973, T. Weir & A. Allwood (ANIC); 2♂, 1♀ macr., Birraduk Ck, 18 km E by N of Oenpelli, 12.16S 133.13E, 4.vi.1973, R.L. Kitching (ANIC); 7♂, 4♀ macr., Birraduk Ck, 18 km E by N of Oenpelli, 12.16S 133.13E, 4.vi.1973, T. Weir & A. Allwood (ANIC); 3♂, 3♀ macr., 1 km N of Cahill's Crossing (East Alligator R.), 12.25S 132.58E, 7.vi.1973, T. Weir & A. Allwood (ANIC); 18♂, 21♀ macr., 1 km N of Cahills Crossing (East Alligator R.), 12.25S 132.58E, 7.vi.1973, T. Weir & A. Allwood (ANIC); 1♂ macr., Swim Ck Crossing, Point Stuart Station, 12.31S 131.51E, 10–13.x.1971, T. Weir & A. Allwood (ANIC); 2♀ macr., Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 114♂, 139♀ macr., Berry Springs, 38 mi S of Darwin, 12.42S 130.59E, 29.vii.1971, T. Weir & A. Allwood (ANIC); 36♂, 19♀ macr., Flying Fox Ck, Kapalga, Kakadu NP, deep billabong, algal growth, 12.42S 132.20E, 15.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., 12 km NNW of Mt Cahill, 12.46S 132.39E, 15.vi.1973, T. Weir & T. Angeles (ANIC); 1♂, 1♀ macr., Manton R., near Darwin, CL0122, 12.49S 131.10E, 15.v.1979, I. Lansbury (ANIC); 1♂, 2♀ macr., Darwin R. Reservoir, 12.50S 130.58E, 7.vii.1980, M.B. Malipatil (NTM); 9♂, 4♀ apt., 2♂, 1♀ macr., Arnhem Highway, Wildman R. W. branch, isolated pool, CL0131,

CL0132, 12.50S 131.57E, 17.v.1979, I. Lansbury (ANIC); 1♂ macr., 16 km E by N of Mt Cahill, 12.50S 132.51E, 13.vi.1973, T. Weir & T. Angeles (ANIC); 3♂, 1♀ macr., 19 km E by N of Mt Cahill, 12.50S 132.52E, 14.vi.1973, T. Weir (ANIC); 1♂ macr., 8 km E by N of Mt Cahill, 12.51S 132.47E, 22.v.1973, T. Weir & T. Angeles (ANIC); 14♂, 12♀ macr., Nourlangie Rock billabong, Kakadu NP, CL0117, 12.51S 132.49E, 10.v.1979, I. Lansbury (ANIC); 1♀ macr., Koongarra, nr Jabiru, small pool, CL0115, 12.52S 132.05E, 15.v.1979, I. Lansbury (ANIC); 2♂, 3♀ macr., Koongarra, 15 km E Mt Cahill, 12.52S 132.50E, 15.xi.1972, T. Weir & A. Allwood (ANIC); 1♂ macr., Koongarra, 15 km E of Mt Cahill, 12.52S 132.50E, 24.v.1973, T. Weir & T. Angeles (ANIC); 5♂, 11♀ macr., 4 miles SW of Finnis R. Station HS, 12.53S 130.32E, 28.vii.1971, T. Weir & A. Allwood (ANIC); 2♂ macr., Arnhem Highway, lagoon off Mary R., leaves, debris, CL0129, 12.54S 131.38E, 17.v.1979, I. Lansbury (ANIC); 23♂, 16♀ macr., Lightning Dreaming Gorge, 25 km E by S of Mt Cahill, 12.55S 132.56E, 12.vi.1973, T. Weir (ANIC); 4♂, 9♀ macr., Lake Bennett area, 25 km SE Manton Dam, freshwater pool, 13.00S 131.17E, 29–30.xii.1979, M.B. Malipatil (NTM); 8♂, 8♀ macr., Arnhem Highway, 13 km W of Mary R., creek, CL0127, 13.00S 131.33E, 17.v.1979, I. Lansbury (ANIC); 2♂, 3♀ macr., Finnis R. xing, 9 km WNW Batchelor, shallow water, lots of floating leaves, 13.01S 130.57E, 17.vii.1994, T. Weir & A. Roach (ANIC); 2♂, 1♀ macr., Coomalie Ck, near Darwin, CL0121, 13.02S 131.11E, 15.v.1979, I. Lansbury (ANIC); 3♂, 4♀ macr., Giyamungkurr (Black Jungle Spring), Kakadu NP, narrow billabong, Pandanus, grass, 13.03S 132.10E, 14.vii.1994, T. Weir & A. Roach (ANIC); 6♂, 5♀ macr., South Alligator R. Xing, Kakadu NP, flowing river, rocks at edge, 13.03S 132.19E, 14.vii.1994, T. Weir & A. Roach (ANIC); 25♂, 20♀ macr., Bamboo Ck Tin Mine, Litchfield Nat. Pk, flowing creek, shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC); 3♂, 7♀ macr., Stapleton Ck, near Darwin, CL0120, 13.11S 131.03E, 13.v.1979, I. Lansbury (ANIC); 3♀ macr., Brocks Ck (as Brock Ck), 13.28S 131.25E, 18.xii.1932, T.G. Campbell (ANIC); 1♂, 1♀ macr., Fountain Head, freshwater pool, 13.28S 131.29E, 16.iv.1981, M. Malipatil & J. Hawkins (NTM); 2♂, 1♀ macr., Adelaide R. Crossing, Daly R. Road, 13.29S 131.04E, 10.viii.1980, M.B. Malipatil (NTM); 1♂, 1♀ apt., 2♂, 2♀ macr., Ck nr. Daly R., CL905, 11.xii.1977, J.T. Polhemus (JTPC); 1♂ macr., ‘Moline Rock Hole’, 6 km E by NE of Mt Daniels, 13.34S 132.15E, 23.v.1974, T. Weir & T. Angeles (ANIC); 1♂, 1♀ macr., Mary R., 37 miles E of Pine Ck, 13.36S 132.08E, 9.vii.1971, T. Weir & A. Allwood (ANIC); 10♂, 6♀ macr., Daly R., mv light, 13.45S 130.42E, 9–10.viii.1980, M.B. Malipatil (NTM); 1♂, 1♀ macr., 10 mi E of Daly R., at light, 13.45S 130.50E, 28.vi.1972, B.K. Head (SAM); 114♂, 84♀ macr., Butterfly Gorge Nature Pk, Douglas R., still pools, floating leaves, algae, san, 13.45S 131.34E, 19.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Daly R. Crossing, edge of flowing river, fringing Pandanus, 13.46S 130.43E, 19.vii.1994, T. Weir & A. Roach (ANIC); 16♂, 18♀ macr., Edith Falls, Nitmiluk (Katherine Gorge) NP, flowing river, Pandanus, floating leaves, 14.11S 132.11E, 20.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Katherine, 14.28S 132.16E, 23.i.1971, T. Weir & A. Allwood (ANIC); 1♂, 1♀ macr., Crocodile Ck near Dorisvale, freshwater pool, 14.29S 131.22E, 17–18.xi.1984, M. Malipatil (NTM); 3♂, 3♀ macr., Katherine Low Level Reserve, freshwater stream, 14.30S 132.15E, 15.iv.1981, M. Malipatil & J. Hawkins (NTM); 1♂ macr., Manbulloo Station, Katherine, 14.31S 132.12E, 19.vii.1929, I.M. Mackerras & T.G. Campbell (ANIC); 1♂ macr., Bitter Springs, Roper R., Elsey NP, flowing river, deep billabongs, Pandanus, 14.55S 133.05E, 25.vii.1994, T. Weir & A. Roach (ANIC); 10♂, 19♀ macr., same locality data as holotype, 14.56S 133.10E; 5♂, 9♀ macr., Salt Ck, Roper Hwy, 21 km SSE Mataranka, flowing creek, muddy edges, rocks, calcium, 15.01S 133.14E, 25.vii.1994, T. Weir & A. Roach (ANIC); 2♂, 2♀ macr., Warlock Ponds, 35 mi N of Larrimah, at light, 15.06S 133.06E, 21.vi.1972, B.K. Head

(SAM); 7♂, 4♀ macr., Sullivan Ck, Gregory NP, deep billabong, rocky edges, 15.35S 131.17E, 21.vii.1994, T. Weir & A. Roach (ANIC); 80♂, 109♀ macr., Dilirba (Big Police Hole) Keep R., Keep R. Nat.Pk, deep billabong, float, 15.45S 129.05E, 23.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 2♀ macr., Stop No1, Jarnarm Walks, Keep R. NP, small stagnant pools in creek bed, grass, 15.45S 129.05E, 23.vii.1994, T. Weir & A. Roach (ANIC); 30♂, 27♀ macr., Keep R. Gorge, Keep R. Nat Pk, deep billabongs with rocks, floating leaves, 15.50S 129.07E, 22.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Cockatoo Lagoon, Keep R. NP, small muddy pools, floating leaves, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Limestone Gorge, freshwater pool, 16.03S 130.23E, 23–26.vi.1986, M. Malipatil, Operation Raleigh (NTM); 2♂, 1♀ macr., Limestone Gorge, E. Baines R, Gregory NP, pools in flowing creek, muddy, rocky, 16.03S 130.23E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Bullita Outstation, freshwater pool, 16.07S 130.25E, 22.vi–3.vii.1986, M. Malipatil, Operation Raleigh (NTM); 1♀ macr., Bullita Outstation, East Baines R., Gregory NP, deep billabong, rockshelf, a, 16.07S 130.25E, 21.vii.1994, T. Weir & A. Roach (ANIC); 12♂, 17♀ apt., 13♂, 10♀ macr., 15 nymphs, Daly Waters, 16.21S 133.21E, 18–21.i.1972, T. Weir & A. Allwood (ANIC); 1♂, 1♀ macr., 18 km N Dunmara on Stuart Highway, in lagoon, 16.31S 133.25E, 2.iv.1981, M. Malipatil & J. Hawkins (NTM); 1♀ macr., Armstrong R. Xing, 6 km S Top Springs, mv light, 16.36S 131.47E, 12.xi.1984, M. Malipatil (NTM); 3♂, 1♀ macr., Border Waterhole 15 km WbyS Musselbrook M, small rocky pools, sandy, algae, roots, 17.37S 137.59E, 14.v.1995, T. Weir (ANIC); 1♀ macr., 4.6 km S of Renner Springs, uv light, 18.21S 133.48E, 8.iii.1966, N. McFarland (SAM); 40♂, 24♀ macr., Border Waterhole 15 km WbyS Musselbrook M, large perm. pool, muddy edges, algae, 18.37S 137.59E, 14.v.1995, T. Weir (ANIC); 2♀ macr., Border Waterhole, 15 km WbyS Musselbrook, at light, 18.37S 137.59E, 14.v.1995, T. Weir (ANIC). **Queensland:** 4♀ macr., Horn I., Torres Strait, 10.37S 142.17E, date and collector unknown (SAM); 6♂, 4♀ macr., Prince of Wales Is., Torres Strait, brackish water, 10.41S 142.09E, 28.v.1969, Neboiss (MV); 2♂♀ macr., 7 km S of Cape York, water sweep, rainforest, 10.44S 142.31E, 20.vi.1993, P. Zborowski & I. Naumann (ANIC); 57♂, 55♀ macr., Laradeenya Ck, still pools in dry creek bed, 10.46S 142.27E, 17.x.1992, T. Weir & P. Zborowski (ANIC); 3♂, 1♀ macr., Lockerbie, Cape York, 10.48S 142.28E, 10–15.vi.1969, G.B. Monteith (ANIC, UQIC); 26♂, 30♀ macr., Lockerbie, Cape York, 10.48S 142.28E, 6–10.vi.1969, G.B. Monteith (UQIC); 2♂, 6♀ macr., 12 km E by N of Heathlands, temporary pool, 11.43S 142.41E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 3♂, 1♀ macr., Heathlands, small still pools (man made), 11.45S 142.35E, 20–22.vi.1992, T.A. Weir (ANIC); 13♂, 7♀ macr., 2 nymphs, Dulhunty R. (as Dalhousie R.), water sweep, 11.50S 142.30E, 10.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♀ macr., Dulhunty R. Crossing, water sweep, 11.50S 142.30E, 18.xi.1992, A. Calder & P. Zborowski (ANIC); 9♂, 10♀ macr., Palm Ck, water sweep, 12.03S 142.39E, 19.v.1993, P. Zborowski & A. Roach (ANIC); 6♂, 3♀ macr., Rocky Ck, water sweep, 12.06S 142.33E, 10.xii.1992, P. Zborowski & W. Dressler (ANIC); 2♂, 6♀ macr., 2 nymphs, Rocky Ck, water sweep, 12.06S 142.33E, 17.viii.1992, P. Zborowski & J. Cardale (ANIC); 8♀ macr., Rocky Ck Xing, still pool in creek bed, 12.06S 142.34E, 10.xii.1992, W. Dressler & P. Zborowski (ANIC); 4♂, 2♀ macr., Palm Ck, water sweep, 12.08S 142.04E, 11.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♀ macr., Catfish Ck, water sweep, 12.08S 142.16E, 11.ix.1993, P. Zborowski & S. Shattuck (ANIC); 16♂, 12♀ macr., Bertiehaugh Ck, water sweep, 12.11S 142.21E, 10.ix.1993, P. Zborowski & S. Shattuck (ANIC); 2♀ macr., Bertiehaugh Ck, water sweep, 12.11S 142.21E, 13 Aug. 1993, P. Zborowski & J. Balderson (ANIC); 18♂, 12♀ macr., 10 km SSE of Bertiehaugh, water sweep, 12.16S 142.33E, 13.viii.1993, P. Zborowski & J. Balderson (ANIC); 23♂, 19♀ macr., Ling Ck, water sweep, 12.19S 142.10E,

14.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♀ macr., Glennie Ck, running creek, 12.21S 143.00E, 23.x.1992, T. Weir, P. Zborowski (ANIC); 8♂, 7♀ macr., 1 nymph, Schramm Ck, water sweep, 12.22S 142.37E, 11.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♂ macr., Schramm Ck, water sweep, 12.22S 142.37E, 17.viii.1992, P. Zborowski & J. Cardale (ANIC); 8♂, 7♀ macr., 4 nymphs, Schramm Ck, water sweep, 12.22S 142.37E, 19.v.1993, P. Zborowski & A. Roach (ANIC); 1♀ macr., Wenlock R., Stone Crossing, 12.23S 142.10E, 14.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♂, 2♀ macr., Vyces Crossing (Andoom Ck), water sweep, 12.30S 141.53E, 15.viii.1993, P. Zborowski & J. Balderson (ANIC); 8♂, 12♀ macr., Myall Ck, water sweep, 12.39S 142.16E, 25.v.1993, P. Zborowski & A. Roach (ANIC); 5♂, 19♀ macr., Batavia Downs HS, sweeping water, still pool, 12.40S 142.40E, 11.xii.1992, W. Dressler & P. Zborowski (ANIC); 2♀ macr., Lydia Ck, water sweep, 12.40S 142.40E, 18.i.1993, P. Zborowski (ANIC); 11♂, 11♀ macr., Lydia Ck, water sweep, 12.40S 142.40E, 7.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♂ apt., 13♂, 9♀ macr., Moonlight Ck, water sweep, 12.42S 142.30E, 22.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., Moonlight Ck, water sweep, 12.42S 142.30E, 24.v.1994, P. Zborowski (ANIC); 1♀ macr., 9 km NNW of Lockhart R., closed forest, stagnant pools in dry creek bed, 12.43S 143.18E, 25.x.1992, T. Weir & P. Zborowski (ANIC); 1♂, 1♀ macr., Iron Range, 12.44S 143.17E, 11–17.v.1968, G. Monteith (ANIC); 1♀ macr., Iron Range, Cape York Pen., 12.44S 143.17E, 1–4.v.1973, G.B. Monteith (QM); 1♂ macr., Iron Range, Cape York Pen., 12.44S 143.17E, 1–9.vi.1971, G.B. Monteith (UQIC); 1♀ macr., Iron Range, Cape York Pen., 12.44S 143.17E, 26.v–2.vi.1971, B.K. Cantrell (UQIC); 1♀ macr., Iron Range, Cape York Pen., 12.44S 143.17E, 28.iv–4.v.1968, G. Monteith (UQIC); 2♂, 2♀ macr., West Claudie R., closed forest, still rocky pools, non-flowing stream, 12.45S 143.14E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., Heskett Ck, water sweep, 12.54S 142.45E, 19.v.1994, P. Zborowski (ANIC); 4♂, 6♀ macr., Capsise Ck, water sweep, 12.57S 142.45E, 17.vi.1993, P. Zborowski & I. Naumann (ANIC); 15♂, 7♀ macr., Wenlock R. Crossing, still stagnant pools in dry river bed, 13.06S 142.56E, 26.x.1992, T. Weir & P. Zborowski (ANIC); 5♂, 2♀ macr., 20 nymphs, Langi Lagoon, Mungkan Kandju NP, perm. lagoon, clear, sticks, logs, lilli, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 36♂, 26♀ macr., 27 km NW by W of Rokeby, lagoon with rocks, vegetation, lillies, 13.31S 142.27E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 48♂, 41♀ macr., 3 nymphs, Archer R., water sweep, 13.33S 143.03E, 28.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 24♂, 35♀ macr., 2 nymphs, 17 km NW by N of Rokeby (Vardons Lagoon), small pools with debris, 13.34S 142.32E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., 10 km WNW of Rokeby (Mango Lagoon), lagoon with rocks at edge, 13.38S 142.35E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 2♂, 5♀ apt., 6♂, 8♀ macr., Coen R., 1 km E Rokeby, Mungkan Kandju NP, lagoon side channel, sandy, algae, 13.39S 142.41E, 23.vii.1998, A. Calder (ANIC); 1♂ macr., Coen R., 1 km E Rokeby, Mungkan Kandju NP, leaf packets in lagoon, 13.39S 142.41E, 23.vii.1998, A. Calder (ANIC); 3♂, 2♀ macr., Culliban Ck, water sweep, 13.39S 142.49E, 27.v.1993, P. Zborowski & A. Roach (ANIC); 5♂, 12♀ macr., Peach Ck, 13.40S 143.05E, 5.xi.1969, B. Cantrell (ANIC); 2♀ macr., F.W. Lake, 10 mi N Rocky R. via Coen, 13.40S 143.28E, 17.xii.1964, G. Monteith (UQIC); 9♂, 15♀ macr., 1 nymph, Emu Ck, water sweep, 13.43S 142.55E, 24.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., 11 km WbyN of Bald Hill, McIlwraith Range, search party campsite, 520 m, 13.44S 143.20E, 27.vi–12.vii.1989, T.A. Weir (ANIC); 11♂, 14♀ macr., Coen R., 13.57S 143.12E, 28.x.1969, B. Cantrell (UQIC, ANIC); 9♀ macr., Pretender Ck, lagoon, 14.08S 142.38E, 14.ix.1993, P. Zborowski & S. Shattuck (ANIC); 2♂ macr., Muck Ck, Cape Melville, 14.18S 144.26E, 5.vi.1994, B. Herbert & P. Graham (ANIC); 3♂, 8♀ macr., 5 nymphs, Duckhole Ck, water sweep, 14.25S

143.22E, 25.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., 15 km S of Yarraden, Coen District, 14.27S 143.18E, 27–28.vi.1975, G.B. Monteith (QM); 7♂, 3♀ macr., Edward R., water sweep, 14.40S 142.06E, 14.ix.1993, P. Zborowski & S. Shattuck (ANIC); 1♂, 2♀ macr., Ten Mile Ck, water sweep, 14.41S 143.28E, 23.iv.1994, P. Zborowski (ANIC); 4♂, 17♀ macr., Normanby R., Lakelield Nat. Pk (Orange Plain Waterhole), waterhole, 14.43S 144.10E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., Saltwater Ck, water sweep, 14.47S 143.30E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 2♂, 3♀ macr., Coleman R., water sweep, 14.48S 143.22E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 4♂, 4♀ macr., Lukin R., water sweep, 14.51S 142.58E, 15.ix.1993, P. Zborowski & S. Shattuck (ANIC); 3♂, 3♀ macr., King R., water sweep, 14.52S 143.06E, 17.viii.1993, P. Zborowski & J. Balderson (ANIC); 16♂, 11♀ macr., Long Lagoon, Coleman R., water sweep, 14.54S 142.50E, 16.viii.1993, P. Zborowski & J. Balderson (ANIC); 75♂, 76♀ macr., Morehead R. (as Moorehead), water sweep, 15.01S 143.39E, 29.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 13♂, 10♀ macr., 3 nymphs, Mt Webb Nat. Pk (Humbug Ck), 15.04S 145.07E, 28–30.ix.1980, T. Weir (ANIC); 1♀ macr., Mt Webb Nat. Pk, at light, 15.04S 145.07E, 27–30.iv.1981, J. Feehan (ANIC); 5♀ apt., 11♂, 7♀ macr., Healy Ck, water sweep, 15.08S 143.48E, 15.i.1994, P. Zborowski & E.D. Edwards (ANIC); 7♂, 8♀ macr., Hann R., water sweep, 15.11S 143.52E, 16.viii.1992, P. Zborowski & J. Cardale (ANIC); 53♂, 67♀ macr., Normanby R., 7 km Eby S New Laura, Lakefield NP, small pool, sandy, algae, 15.11S 144.24E, 29.vii.1998, A. Calder (ANIC); 149♂, 129♀ macr., 6.5 km ESE Old Laura, Lakefield NP, pool, sandy, debris, algae (dry end), 15.12S 144.25E, 28.vii.1998, A. Calder (ANIC); 18♂, 19♀ macr., Laura R., Lakefield Nat. Pk (Six Mile Waterhole), waterhole, debris, 15.16S 144.27E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 9♂, 6♀ macr., 2 nymphs, Bull Ck, water sweep, 15.18S 144.49E, 27.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., Laura R., pools, stony river bed, full sun, algae, 15.21S 144.27E, 27.v.1994, P. Zborowski (ANIC); 4♂, 3♀ macr., 4 nymphs, Kennedy R., water sweep, 15.26S 144.11E, 24.iv.1994, P. Zborowski (ANIC); 5♂, 8♀ macr., Kennedy R. Xing, temporary pool in dry river bed, sandy, 15.26S 144.11E, 16.vi.1992, T. Weir (ANIC); 1♂, 1♀ macr., Split Rock, 14 km S of Laura, 15.39S 144.31E, 23–26.vi.1975, G.B. Monteith (QM); 1♂, 1♀ macr., East Normanby R., water sweep, 15.45S 145.00E, 25.viii.1992, P. Zborowski & J. Cardale (ANIC); 2♂ macr., 5 km SE of Rossville, water sweep, 15.47S 145.17E, 21.ix.1992, P. Zborowski & L. Miller (ANIC); 4♂, 1♀ macr., Russell Ck, water sweep, 15.52S 145.19E, 26.iv.1994, P. Zborowski (ANIC); 5♂, 5♀ macr., Laura R., water sweep, 15.56S 144.50E, 30.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 1♂, 4♀ macr., 5 km SW of Ayton, water sweep, 15.57S 145.19E, 27.iv.1994, P. Zborowski (ANIC); 1♂, 1♀ macr., Little Mitchell R., CL0143, 16.19S 144.05E, 22.v.1979, I. Lansbury (ANIC); 1♀ macr., Mary Ck, 16.33S 145.12E, 4.xii.1968, Britton & Misko (ANIC); 4♂, 3♀ macr., Julatten, farm dam, CL0135, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂ macr., Julatten, rainforest creek, CLO138, 16.36S 145.20E, 21.v.1979, I. Lansbury (ANIC); 1♂ macr., Julatten, McDougalls Rd, waterlilly pool, CL0136, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Mornington Island Mission, 16.40S 139.10E, 7.v.1960, P. Aitken & N. Tindale (SAM); 1♀ macr., Mornington Island Mission, at light, 16.40S 139.10E, 11.v.1963, P. Aitken & N. Tindale (SAM); 3♀ macr., Rifle Ck at Mt Molloy, CL0144, CL0145, lilly pool, 16.41S 145.20E, 22.v.1979, I. Lansbury (ANIC); 1♂, 7♀ macr., Carr Ck, 18 km from Mareeba, CL0142, 16.50S 145.23E, 22.v.1979, I. Lansbury (ANIC); 2♂, 5♀ macr., 12 km N Mareeba, creek on Mt Molloy Rd, CL0141, 16.54S 145.26E, 22.v.1979, I. Lansbury (ANIC); 1♀ macr., Tinaroo Ck, 17.03S 145.28E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♀ macr., Tinaroo Falls Dam, inlet below Lookout Point, CL0146, 17.11S 145.34E, 23.v.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Peterson Ck, 12 km from Atherton, on

Yungaburra Road, CL0148, 17.17S 145.35E, 24.v.1979, I. Lansbury (ANIC); 1♀ macr., Walker Ck, 25 ml SE of Karumba, 17.44S 141.06E, 28.v.1972, G.B. & S.R. Monteith (UQIC); 1♀ macr., 15 ml SW of Normanton, 17.49S 140.54E, 25.v.1972, G.B. & S.R. Monteith (UQIC); 1♀ macr., Whitfield Ck, 6 miles N of Cardwell, 18.12S 145.58E, 8.xi.1969, T. Weir (ANIC); 10♂, 5♀ macr., Amphitheatre Camp 27 km NbyE Musselbrook, small pools, rocky, sandy, debris, clear, 18.21S 138.10E, 13.v.1995, T. Weir (ANIC); 2♂, 5♀ macr., Amphitheatre Springs 28 km NbyE Musselbro, spring fed pools, dark water, debris, algae, 18.21S 138.11E, 12.v.1995, T. Weir (ANIC); 5♂, 4♀ macr., Amphitheatre Springs, 28 km NbyE Mussel, at light, 18.21S 138.11E, 12.v.1995, I.D. Naumann (ANIC); 12♂, 11♀ macr., Musselbrook Ck 19 km NEbyE Musselbrook M. C., large & small pools, rocky, sandy, algae, 18.30S 138.17E, 15.v.1995, T. Weir (ANIC); 2♂, 22 apt., 15♂, 20♀ macr., Holts Ck 8 km N Musselbrook Mining Camp, large pools, rocky, sandy, debris, logs, 18.33S 138.11E, 10–20.v.1995, T. Weir (ANIC); 2♂ macr., Holts Ck, 8 km N Musselbrook Mining Camp, at light, 18.33S 138.11E, 15.v.1995, I.D. Naumann (ANIC); 2♂, 10♀ macr., Musselbrook Ck 11 km ENE Musselbrook M. C., clear shallow pool, rocky, sandy, twigs, 18.34S 138.13E, 15.v.1995, T. Weir (ANIC); 7♂, 7♀ macr., Murrays Spring 8 km WbyN Musselbrook M. C., large pool, rocky, sandy, waterlillies, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC); 1♀ macr., Murrays Spring, 8 km WbyN Musselbrook Min, at light, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC); 15♂, 13♀ macr., 7 nymphs, Murrays Ck, Musselbrook Mining Camp, small pools, rocky, sandy, algal growth, 18.36S 138.08E, 10.v.1995, T. Weir (ANIC); 4♂, 8♀ macr., Musselbrook Ck 2 km S Musselbrook M. C., large pool, rocky, sandy, 18.37S 138.08E, 9.v.1995, T. Weir (ANIC); 1♂, 2♀ macr., 8 km SEbyE Musselbrook Mining Camp, at light, 18.38S 138.11E, 11.v.1995, I.D. Naumann (ANIC); 1♂, 1♀ macr., 23 km ESE Musselbrook Mining Camp, Colless Ck, at light, 18.40S 138.20E, 9.v.1995, I.D. Naumann (ANIC); 1♂, 1♀ macr., 23 km ESE Musselbrook Mining Camp, at light, 18.40S 138.20E, 9.v.1995, T. Weir (ANIC); 18♂, 27♀ macr., Ridgepole Waterhole 24 km ESE Musselbrook, perm. waterhole, waterlillies, nardoo, algae, 18.40S 138.20E, 11.v.1995, T. Weir (ANIC); 2♂, 1♀ macr. (Indarri Waterfall) Lawn Hill NP, large perm. pool, near waterfall, tufa dams, 18.42S 138.29E, 16.v.1995, T. Weir (ANIC); 7♂, 11♀ macr., 15 km SEbyS Musselbrook Mining Camp, pool in rocky creek bed, sandy, murky, 18.43S 138.12E, 8.v.1995, T. Weir (ANIC); 3♂, 3♀ macr., Louie Ck at tufa dams, Lawn Hill NP, flowing, clear, sandy, vegetation, Pandanus, 18.46S 138.31E, 17.v.1995, T. Weir (ANIC); 3♂, 3♀ macr., Louie Ck, near stockyards, Lawn Hill NP, flowing creek, sandy, debris, Pandanus, 18.47S 138.31E, 17.v.1995, T. Weir (ANIC); 1♂, 3♀ macr., Louie Ck, Lawn Hill Nat. Pk, 18.47S 138.31E, 17–18.v.1995, I.D. Naumann (ANIC); 48♂, 50♀ macr., Waterfall Ck, 18 miles S of Ingham, 18.52S 146.12E, 8.xi.1969, T. Weir (ANIC); 2♂ macr., Bluewater Ck, 19 miles N of Townsville, 19.11S 146.33E, 7.xi.1969, T. Weir (ANIC); 1♂, 2♀ macr., Townsville, Inst of Marine Science, Rocky Ck, CL0152, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC); 3♂, 2♀ macr., Townsville, Institute of Marine Science, creek in thin dry forest, CL0151, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC); 1♂, 2♀ macr., 10 km SE Musselbrook Mining Camp, at light, 19.39S 138.12E, 13.v.1995, T. Weir (ANIC); 1♂, 1♀ macr., Upper East Funnel Ck, pyrethrum, 450 m, 21.34S 149.12E, 16.xi.1992, Monteith, Thompson, Janetzki (QM). **Western Australia:** 3♂ macr., Kalumburu Mission, sandstone, at light, 14.17S 126.38E, 24.v.1993, E.D. Edwards (ANIC); 1♂ macr., 10 km NWbyN Mining Camp, Mitchell Plateau, at light, stop 15, 14.45S 125.47E, 11–17.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 2♂ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 20♂, 11♀ macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 1♂

macr., 4 km S by W Mining Camp Mitchell Plateau, CALM Site 9/1, 'The Crusher', at light, 14.52S 125.50E, 2–6.vi.1988, I.D. Naumann (ANIC); 1♀ macr., 4 km SbyW of Mining Camp, Mitchell Plat., at light, stop 17, 14.52S 125.50E, 13.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 2♀ macr., Lower Robinson, Robinson R., CLM 11, undisturbed, seasonal, in channel, 16.50S 124.19E, 1994, CALM (CALMWA); 1♀ macr., Lennard R. Xing, Gibb R. Road, Kimberley, 17.23S 124.44E, 14–28.vii.1988, T.F. Houston (WAM).

Microvelia (Austromicrovelia) apunctata, sp. nov.

Material examined

Holotype. Apterous ♂, labelled '17.25S 129.34E, N[orthern] T[erritory], Campbell Spring, 38 km E by SE of Mt Panton, 29.v.1974, T. Weir & T. Angeles' (ANIC).

Paratypes. **Northern Territory:** 2♂ macr., Limestone Gorge, freshwater pool, 16.03S 130.23E, 23–26.vi.1986, M. Malipatil, Operation Raleigh (NTM); 16♂, 12♀ apt., 4♂, 5♀ macr., 1 nymph, same locality data as holotype, 17.25S 129.34E (ANIC); 1♂ macr., Giles or Wattle Ck, 7 km N Wave Hill Police Stn, on pool, 17.25S 130.50E, 13–14.xi.1984, M. Malipatil (NTM); 8♂, 7♀ apt., 3♂, 1♀ macr., 12 nymphs, Bigley Springs, 25 km SE by E of Mt Panton, 17.29S 129.25E, 29.v.1974, T. Weir & T. Angeles (ANIC). **Queensland:** 1♀ apt., Pascoe R. Crossing, stagnant pools in dry river bed, 12.53S 142.56E, 26.ix.2002, T. Weir & P. Zborowski (ANIC); 26♂, 16♀ apt., Coen R., 13.57S 143.12E, 28.x.1969, B. Cantrell (UQIC, ANIC); 1♀ apt., Kennedy R. Xing, temporary pool in dry river bed, sandy, 15.26S 144.11E, 16.vi.1992, T. Weir (ANIC); 1♀ macr., Murrays Ck, Musselbrook Mining Camp, large pool in rocky ck, polluted seepage, 18.36S 138.08E, 11.v.1995, T. Weir (ANIC); 1♂, 1♀ apt., Burdekin R. at Blue Range, riffle, 19.10S 145.25E, 20.x.1994, collector unknown (DNRQ); 1♂ apt., Pioneer R. at Balnagowan Crossing, swarming over rocks in river (thousands), 21.09S 149.01E, 3.xi.1969, T. Weir (ANIC).

Microvelia (Austromicrovelia) australiensis, sp. nov.

Material examined

Holotype. Apterous ♂, labelled '11.21S 142.24E, Q[ueensl]and, Mistake Ck, 20 Oct. 1992, T. Weir, P. Zborowski, pools in running creek' (ANIC).

Paratypes. **Northern Territory:** 2♂ apt., 12♂, 9♀ macr., 4 nymphs, Birraduk Ck, 18 km E by N of Oenpelli, 12.16S 133.13E, 4.vi.1973, T. Weir & A. Allwood (ANIC); 4♂, 1♀ macr., 1 km N of Cahill's Crossing (East Alligator R.), 12.25S 132.58E, 7.vi.1973, T. Weir & A. Allwood (ANIC); 1♀ macr., Mudginberri Station, via Jim Jim, 12.36S 132.52E, 19.viii.1971, T. Weir & A. Allwood (ANIC); 2♂, 1♀ macr., Jabiru, Kakadu NP, at light, 12.41S 132.50E, 11–15.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Georgetown Billabong, Magela Ck, Kakadu, billabong with water lillies & vegetation, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 1♀ apt., 14♂, 16♀ macr., 10 nymphs, Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 10♂, 8♀ apt., 9♂, 7♀ macr., 2 nymphs, Magela Ck, Arnhem Land, pools in flowing creek, sandy bottom, 12.45S 133.02E, 12.vii.1994, T. Weir & A. Roach (ANIC); 14♂, 13♀ apt., 20♂, 16♀ macr., 30 nymphs, Bowerbird Billabong, Magela Ck, Kakadu N, still

pools in rocky creek bed, sandy bo, 12.46S 133.02E, 12.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ apt., 1♂, 3♀ macr., 19 km NE by E of Mt Cahill, 12.47S 132.51E, 13.vi.1973, T. Weir & T. Angeles (ANIC); 1♂ macr., Koongarra, CL915, 15.xii.1977, J.T. Polhemus & Tim Angeles (JTPC); 5♂, 3♀ apt., 6♂, 7♀ macr., Koongarra Ck, nr Jabiru, Arnhem Land, CL0113, 12.50S 132.51E, 8–10.v.1979, I. Lansbury (ANIC); 1♀ apt., 20♂, 14♀ macr., 19 km E by N of Mt Cahill, 12.50S 132.52E, 14.vi.1973, T. Weir (ANIC); 4♂, 2♀ macr., 2 nymphs, 19 km E by N of Mt Cahill, 12.50S 132.52E, 18.xi.1972, T. Weir & A. Allwood (ANIC); 1♂ apt., 1♀ macr., Baroalba Pools, Kakadu NP, nr Jabiru, CL0118, 12.50S 132.53E, 10.v.1979, I. Lansbury (ANIC); 10♂, 3♀ apt., 38♂, 42♀ macr., 12 nymphs, Gubarra (Baroalba Springs), Kakadu NP, shaded pools, flowing ck, closed forest, 12.50S 132.53E, 13.vii.1994, T. Weir & A. Roach (ANIC); 1♂♀ macr., Muirella Park, Nourlangie Ck, Kakadu NP, deep billabong, fringing Pandanus, 12.51S 132.45E, 13.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Nourlangie Rock billabong, Kakadu NP, CL0117, 12.51S 132.49E, 10.v.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Anbangbang Billabong, 8 km E of Mirray (M, Kakadu NP, shallow billabong, grassy edg, 12.52E 132.48E, 13.vii.1994, T. Weir & A. Roach (ANIC); 2♂, 1♀ macr., Koongarra, 15 km E Mt Cahill, 12.52S 132.50E, 15.xi.1972, T. Weir & A. Allwood (ANIC); 2♂, 7♀ macr., Lightning Dreaming Gorge, 25 km E by S of Mt Cahill, 12.55S 132.56E, 12.vi.1973, T. Weir (ANIC); 1♂ macr., Coomalie Ck, near Darwin, CL0121, 13.02S 131.11E, 15.v.1979, I. Lansbury (ANIC); 1♂ apt., 6♂, 5♀ macr., 1 nymph, Bamboo Ck Tin Mine, Litchfield Nat. Pk, flowing creek, shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC); 10♂, 8♀ macr., Kakadu Nat. Pk, Deaf Adder Gorge, 13.04S 132.56E, 27.iii.1980, M.B. Malipatil (NTM); 4♂, 5♀ apt., 22♂, 18♀ macr., 8 nymphs, Florence Falls, Litchfield Nat. Pk, flowing creek in closed forest, shaded p, 13.06S 130.47E, 17.vii.1994, T. Weir & A. Roach (ANIC); 1♂ apt., 4♂ macr., 3 nymphs, Aida Ck Jumpup, Litchfield Nat. Pk, shallow flowing creek with pools, 13.08S 130.49E, 17.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 9♀ apt., 18♂, 6♀ macr., 1 nymph, Tolmer Falls, Litchfield Nat. Pk, flowing creek with pools, rocky edges, 13.12S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ apt., 20♂, 11♀ macr., 4 nymphs, Tjaynera Falls (Sandy Ck Falls), Litchfield Nat. Pk, flowing creek, shade, 13.15S 130.47E, 17.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Reynolds R. xing, Litchfield NP, pools in flowing river, Pandanus, grass, 13.18S 130.45E, 18.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Robin Falls, 12 miles [= 18 km] S of Adelaide R., 13.21S 131.08E, 20.iv.1972, T. Weir & T. Angeles (ANIC); 1♂ macr., Robin Falls, Stream, CL910, 13.21S 131.08E, 12.xii.1977, J.T. Polhemus (JTPC); 4♂, 1♀ apt., 5♂, 2♀ macr., Robin Falls, CL0119, 13.21S 131.08E, 15.v.1979, I. Lansbury (ANIC); 4♂, 4♀ apt., 6♂, 1♀ macr., U.D.P. Falls, freshwater pool, 13.26S 132.25E, 18–19.vii.1980, M.B. Malipatil (NTM); 5♂, 5♀ apt., 30♂, 40♀ macr., 15 nymphs, U.D.P. Falls, 67 miles E of Pine Ck, 13.26S 132.25E, 8.vii.1971, T. Weir & A. Allwood (ANIC); 2♂ macr., Butterfly Gorge Nature Pk, Douglas R., still pools, floating leaves, algae, sand, 13.45S 131.34E, 19.vii.1994, T. Weir & A. Roach (ANIC); 11♂, 9♀ apt., 9♂, 8♀ macr., 10 nymphs, Umbrawarra Gorge Nature Park, flowing creek, large rock pools, sandy bottom, 13.58S 131.42E, 20.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 7♀ macr., Edith Falls, Nitmiluk (Katherine Gorge) NP, flowing river, Pandanus, floating leaves, 14.11S 132.11E, 20.vii.1994, T. Weir & A. Roach (ANIC); 3♀ macr., Katherine Gorge Nat. Pk, Butterfly Gorge, freshwater stream, 14.19S 132.27E, 5.xii.1980, M.B. Malipatil (NTM); 1♂, 2♀ macr., Stop No1, Jarrnarm Walks, Keep R. NP, small stagnant pools in creek bed, grass, 15.45S 129.05E, 23.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., Cockatoo Lagoon, Keep R. NP, small muddy pools, floating leaves, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 4♂, 1♀ apt., 6♂, 7♀ macr., Limestone Gorge, E. Baines R, Gregory NP, pools in flowing creek, muddy, rocky,

16.03S 130.23E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Bullita Outstation, East Baines R., Gregory NP, deep billabong, rockshelf, a, 16.07S 130.25E, 21.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., McArthur R., 80 km SW Borroloola, 16.39S 135.51E, 13.v.1973, M.S. Upton (ANIC); 5♂, 5♀ macr., Border Waterhole 15 km WbyS Musselbrook M, small rocky pools, sandy, algae, roots, 17.37S 137.59E, 14.v.1995, T. Weir (ANIC); 1♂ macr., Border Waterhole 15 km WbyS Musselbrook M, large perm. pool, muddy edges, algae, 18.37S 137.59E, 14.v.1995, T. Weir (ANIC). **Queensland:** 1♂, 5♀ apt., same locality data as holotype, 11.21S 142.24E (ANIC); 2♂, 4♀ apt., 3 nymphs, Sam Ck, pools in rocky running creek, 11.22S 142.24E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 10♂, 7♀ apt., Eliot Ck (Eliot/Twin Falls), pools in rocky running creek, 11.23S 142.25E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 6♂, 4♀ apt., 2 nymphs, Eliot Ck (Fruit Bat Falls), on still waterpools in creek, 11.26S 142.26E, 14.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., Sailor Ck, water sweep, running water, 11.32S 142.26E, 8.xii.1992, P. Zborowski & W. Dressler (ANIC); 1♀ macr., Cockatoo Ck, Flight intercept trap, 11.39S 142.27E, 22.i–19.ii.1994, P. Zborowski (ANIC); 2♂, 1♀ apt., 1♂, 1♀ macr., Cockatoo Ck, pools in rocky running creek, 11.39S 142.27E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., Cockatoo Ck, water sweep, 11.39S 142.27E, 18.iii.1994, P. Zborowski (ANIC); 1♂ apt., Cockatoo Ck, water sweep, 11.39S 142.27E, 19.viii.1992, P. Zborowski & J. Cardale (ANIC); 5♂ macr., Cockatoo Ck Xing, 17 km NW of Heathlands, 11.39S 142.27E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 5♂, 4♀ macr., 12 km E by N of Heathlands, temporary pool, 11.43S 142.41E, 15–26.i.1992, T.A. Weir & I.D. Naumann (ANIC); 3♂, 3♀ apt., Heathlands, creek in Nepenthes meadow, 11.45S 142.35E, 20–22.vi.1992, T.A. Weir (ANIC); 1♀ macr., Heathlands, F.I.T. ANIC 1240, closed scrub(=heath), 11.45S 142.35E, 1–22.iii.1992, P. Feehney (ANIC); 1♂ macr., Heathlands, F.T.T. 1247, closed scrub(=heath), 11.45S 142.35E, 25.iv–7.vi.1992, T. McLeod (ANIC); 19♂, 22♀ macr., Heathlands, FIT ANIC 1239, closed scrub(=heath), 11.45S 142.35E, 26.i–29.ii.1992, P. Feehney (ANIC); 2♂ macr., Heathlands, in and on still water ponds (man made), 11.45S 142.35E, 15–26. Jan. 1992, T. Weir & I.D. Naumann (ANIC); 1♀ macr., Heathlands, running creek, 11.45S 142.35E, 20.x.1992, T. Weir & P. Zborowski (ANIC); 4♂, 3♀ macr., Heathlands, small still pools (man made), 11.45S 142.35E, 20–22.vi.1992, T.A. Weir (ANIC); 17♂, 17♀ apt., 2♂, 1♀ macr., Bertie Ck, pools in rocky running creek, 11.50S 142.30E, 21.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ apt., 3♂ macr., Dulhunty R. (as Dalhousie R.), water sweep, 11.50S 142.30E, 10.ix.1993, P. Zborowski & S. Shattuck (ANIC); 2♂ apt., Dulhunty R. Crossing, water sweep, 11.50S 142.30E, 18.xi.1992, A. Calder & P. Zborowski (ANIC); 1♂ apt., Palm Ck, water sweep, 12.03S 142.39E, 19.v.1993, P. Zborowski & A. Roach (ANIC); 1♀ macr., 10 km SSE of Bertiehaugh, water sweep, 12.16S 142.33E, 13.viii.1993, P. Zborowski & J. Balderson (ANIC); 3♂, 1♀ apt., 1♂ macr., 13 nymphs, Wenlock R. Crossing, at flowing river edge, 12.39S 142.47E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., Moonlight Ck, water sweep, 12.42S 142.30E, 22.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., Iron Range, Cape York Peninsula, 12.44S 143.17S 1–9.v.1971, G.B. Monteith (ANIC); 1♀ macr., West Claudie R., closed forest, still rocky pools, non-flowing stream, 12.45S 143.14E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 3♀ apt., 22♂, 10♀ macr., 2 nymphs, Canoe Ck, still pools in dry creek bed, 12.48S 143.03E, 26.x.1992, T. Weir & P. Zborowski (ANIC); 2♂, 4♀ macr., Pascoe R. Crossing, stagnant pools in dry river bed, 12.53S 142.56E, 26.ix.2002, T. Weir & P. Zborowski (ANIC); 2♂, 1♀ apt., 4♂, 8♀ macr., 6 nymphs, Middle Peak Ck, water sweep, 12.55S 142.52E, 23.v.1994, P. Zborowski (ANIC); 1♀ apt., 7♂, 6♀ macr., Wenlock R. Crossing, still stagnant pools in dry river bed, 13.06S 142.56E, 26.x.1992, T. Weir & P. Zborowski (ANIC); 3♀ macr., 16 km ESE of Birthday Mt, water sweep, 13.32S 142.59E, 17.vi.1993, P.

Zborowski & I. Naumann (ANIC); 1♀ macr., Archer R., water sweep, 13.33S 143.03E, 28.vii.1992, P. Zborowski & E.S. Nielsen (ANIC); 3♀ macr., Culliban Ck, water sweep, 13.39S 142.49E, 27.v.1993, P. Zborowski & A. Roach (ANIC); 1♀ macr., Emu Ck, water sweep, 13.43S 142.55E, 24.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂, 3♀ macr., Coen R., 13.57S 143.12E, 28.x.1969, B. Cantrell (UQIC, ANIC); 6♂, 3♀ macr., Duckhole Ck, water sweep, 14.25S 143.22E, 25.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂, 1♀ macr., Coleman R., water sweep, 14.48S 143.22E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂, 1♀ apt., 1♂, 1♀ macr., 1 nymph, 14 km WbyN of Hope Vale Mission, 15.16S 144.59E, 8–10.x.1980, T. Weir (ANIC); 3♂, 5♀ macr., Bull Ck, water sweep, 15.18S 144.49E, 27.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♂ macr., 5 km SSE of Rossville, water sweep, rainforest stream, 15.47S 145.17E, 19.viii.1993, P. Zborowski & J. Balderson (ANIC); 2♀ macr., Douglas Ck, 480 m, 17.05S 145.30E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 2♂ macr., Emu Ck, 720 m, site Haig 14, 17.06S 145.32E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂ apt., 5♂, 4♀ macr., Amphitheatre Camp 27 km NbyE Musselbrook, small pools, rocky, sandy, debris, clear, 18.21S 138.10E, 13.v.1995, T. Weir (ANIC); 12♂, 9♀ apt., 36♂, 48♀ macr., 20 nymphs, Amphitheatre Springs 28 km NbyE Musselbrook, spring fed pools, dark water, debris, algae, 18.21S 138.11E, 12.v.1995, T. Weir (ANIC); 1♀ macr., Musselbrook Ck 19 km NEbyE Musselbrook M. C., large & small pools, rocky, sandy, algae, 18.30S 138.17E, 15.v.1995, T. Weir (ANIC); 1♀ apt., 2♂, 1♀ macr., Murrays Spring 8 km WbyN Musselbrook M. C., large pool, rocky, sandy, waterlilies, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC). **Western Australia:** 4♀ macr., Kalumburu Mission, sandstone, at light, 14.17S 126.38E, 24.v.1993, E.D. Edwards (ANIC); 12 macr., 10 km NWbyN Mining Camp, Mitchell Plateau, at light, stop 15, 14.45S 125.47E, 11–17.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 2♂, 2♀ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 17♂, 5♀ macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 1♀ macr., 4 km SbyW of Mining Camp, Mitchell Plat., at light, stop 17, 14.52S 125.50E, 13.v.1983, D.C.F. Rentz & J. Balderson (ANIC).

Microvelia (Austromicrovelia) odontogaster, sp. nov.

Material examined

Holotype. Apterous ♂, labelled '12.51S 132.45E GPS, Muirella Park, Nourlangie Ck., Kakadu NP, 13 July 1994, T. Weir, A. Roach' and 'deep billabong with fringing *Pandanus*' (ANIC).

Paratypes. **Northern Territory:** 3♀ apt., 1♀ macr., Cooper Ck., 19 km E by S Mt Borradaile, 12.06 133.04E, 5.vi.1973, T. Weir & A. Allwood (ANIC); 2♂ apt., Magela Ck., Kakadu Nat. Pk., 12.41S 132.56E, still pools in sandy creek bed, 11.vii.1994, T. Weir, A. Roach (ANIC); 1♂ apt., Boroalba Pools, Kakadu NP, nr Jabiru, CL0118, 12.50S 132.53E, 10.v.1979, I. Lansbury (ANIC); 3♂, 6♀ apt., same locality data as holotype, 12.51S 132.45E (ANIC); 1♂, 2♀ apt., Coomalie Ck nr Darwin, CL913, 13.02S 131.11E, 11.xii.1977, J.T. Polhemus (JTPC); 2♂, 5♀ apt., Reynolds R. Crossing, Litchfield Nat. Pk., 13.18S 130.45E, pools in flowing river with fringing *Pandanus* and grass, 18.vii.1994, T. Weir, A. Roach (ANIC); 4♂, 4♀ apt., Edith Falls, Edith R., Nimiluk (Katherine Gorge) Nat. Pk., 14.11S 132.11E, flowing river with fringing *Pandanus* and floating leaves and bark, 20.vii.1994, T. Weir, A. Roach (ANIC); 2♀ apt., Crocodile Cr near Dorisvale, 14.29S 131.22E, freshwater pool. 17–18.xi.1984, M. Malipatil (NTM); 2♂ apt., Palm Ck, 14.58S 131.08E, freshwater pool,

17.xi.1984, M. Malipatil (NTM); 2♀ apt., Limestone Gorge, E. Baines R., Gregory NP, 16.03S 130.23E, pools in flowing creek, muddy, rocky, 21.vii.1994, T. Weir & A. Roach (ANIC).

***Microvelia (Austromicrovelia) ventrospinosa*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Escarpment Ck near Twin Falls [Canyon Ck], pool, Warrie N.P., Q[ueens]land, 15.viii.1985, L. Hill' (ANIC).

Paratypes. **New South Wales:** 2♂, 1♀ apt., Border Ranges Nat Pk, creek debris at side of creek, subtropical rainforest, 28.23S 153.04E, 28.x.1993, V.W.H. Lorimer (AM); 1♀ apt., Urumbilum R., EPA Survey – MRHI CLAR 30, 28.45S 152.57E, 11.v.1995, J. Ling (AM); 1♀ apt., Little Dandahra Ck, Mulligan's Hut, EPA Survey – MRHI CLAR 14, 29.31S 152.22E, 9.x.1995, J. King (AM); 2♂, 6♀ apt., Platypus Ck, EPA Survey – MRHI BELL 16, 30.31S 152.27E, 12.v.1995, E. Turak (AM); 1♀ apt., Kunderang Brook at The Racecourse, EPA Survey – MRHI MACL 17, 31.08S 152.17E, 8.iv.1995, N. Waddell (AM); 2♂, 3♀ apt., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 3.x.1995, E. Turak (AM); 1♀ apt., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 9.iv.1995, E. Turak (AM); 1♂ apt., Forbes R., off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 2.x.1994, J. King (AM); 1♀ apt., Trib. of Forbes R., S, Plateau Road, EPA Survey – MRHI HAST 17, 31.12S 152.19E, 9.iv.1995, E. Turak (AM); 1♀ apt., Trib. of Forbes R., S, Plateau Road, EPA Survey – MRHI HAST 17, 31.12S 152.19E, 3.x.1995, E. Turak (AM); 1♀ apt., Doyles R., Maxwells Flaot, EPA Survey – MRHI HAST 15, 31.29S 152.11E, 11.iv.1995, E. Turak (AM); 3♀ apt., Doyles R., Maxwells Flat, EPA Survey – MRHI HAST 15, 31.29S 152.11E, 4.x.1995, J. Ling (AM); 2♂, 1♀ apt., Lansdowne R., Mt Bally, EPA Survey – MRHI MANN 06, 31.40S 152.26E, 6.x.1995, J. Ling (AM); 1♀ apt., Caparra Ck, Caparra Hut, EPA Survey – MRHI MANN 10, 31.42S 152.11E, 5.x.1995, J. Ling (AM); 1♂ apt., Manning river, Gummi Trail, EPA Survey – MRHI MANN 14, 31.51S 151.34E, 3.x.1994, J. Ling (AM); 3♂ apt., Manning R., Henry's Bridge, EPA Survey – MRHI MANN 13, 31.53S 151.29E, 4.x.1995, J. King (AM); 1♂ macr., Chichester State Forest, on fungi on ground, collection 3301, 32.07S 151.40E, 19.i.1992, T. Gush (ANIC); 1♂, 1♀ apt., 30 km N of Singleton, Falbrook, Mt Royal State Forest, CL007, 32.11S 151.20E, 11.iii.1979, I. Lansbury (ANIC); 3♂, 1♀ apt., Jenolan R. u/s Caves House, EPA Survey – MRHI HAWK 11, 33.47S 150.00E, 24.v.1996, E. Turak (AM); 1♀ apt., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 31.v.1995, J. Ling (AM); 1♂ apt., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 17.v.1996, J. Ling (AM); 1♂, 2♀ apt., Minnamurra R. u/s Museum, EPA Survey – MRHI SHOAL 02, 34.38S 150.43E, 4.xii.1995, J. Ling (AM); 1♂ apt., Broger's Ck, EPA Survey – MRHI SHOAL 24, 34.42S 150.41E, 2.vi.1995, J. Ling (AM). **Queensland:** 1♂, 1♀ apt., 3 nymphs, Tamborine Mt, 27.55S 153.09E, 15.ii.1960, F.A. Perkins (ANIC, UQIC); 1♂ macr., Mt Tamborine, 27.55S 153.10E, viii.1960, E.A. Bernays (UQIC); 2♀ apt., Joalah Nat. Pk, Mt Tamborine, ANIC Berlesate 656, flood debris, litter, 27.58S 153.11E, 23.vii.1979, J.F. Lawrence (ANIC); 3♂ apt., same locality data as holotype, 28.14S 153.16E (ANIC).

Microvelia (Austromicrovelia) milleri, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled '36.58S 149.44E, creek flowing to Yowaka R., NSW, 26 Jun.1997, J. & R. Miller, Site 717' (ANIC).

Paratypes. **New South Wales:** 1♀ apt., Jerrabuttgulla Ck at Sweetwater, EPA Survey – MRHI SHOAL 11; 35.51S, 149.32E, 23.xi.1995, J. King (AM); 3♂, 1♀ apt., Paddy's Ck, EPA Survey – MRHI Bega 23, 36.20S 149.48E, 15.iii.1995, Eren Turak (AM, ANIC); 1♀ apt., Paddy's Ck, EPA Survey – MRHI Bega 23, 36.20S 149.48E, 26.x.1995, Eren Turak (AM); 1♂, 2♀ apt., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 15.x.1994, Joanne King (AM); 4♂, 5♀ apt., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 17.iii.1995, Joanne King (AM); 2♀ apt., Bemboka R., EPA Survey – MRHI Bega 12, 36.34S 149.27E, 24.xi.1995, Murray Root (AM); 1♀ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 18.iii.1995, Joanne King (AM); 4♀ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 24.xi.1995, Murray Root (AM, ANIC); 2♂, 4♀ apt., Rutherford's Ck, EPA Survey – MRHI Bega 11, 36.36S 149.25E, 15.x.1995, Frances Laurenson (AM, ANIC); 1♀ apt., same locality data as holotype (ANIC).

Microvelia (Barbivelia) barbifer, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled '14.22S 142.27E, QLD[Queensland], Holroyd R., 14 Sep. 1993, lagoon, P. Zborowski & S. Shattuck' (ANIC).

Paratypes. **Queensland:** 6♀ apt., Langi Lagoon, Mungkan Kandju NP, 13.27S 142.42E, perm. lagoon, clear, sticks, logs, lillies, 29.vi–5.vii.1998, T. Weir (ANIC); 27♂, 20♀ apt., 2♂ macr., 12 nymphs, same locality data as holotype 14.22S 142.27E (ANIC); 2♀ macr., Split Rock, 14 km S of Laura, 15.39S 144.31, 23–26.vi.1975, G.B. Monteith (QM).

Microvelia (Barbivelia) falcifer, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled 'N.T. Georgetown billabong nr. Jabiru sample, 21.ix.1982, M. Malipatil' (NTM).

Paratypes. **Northern Territory:** 1♀ apt., same locality data as holotype, 12.41S 132.56E (NTM); 1♀ apt., Norlangie Ck, 6 km NE of Mt Cahill, 12.49S 132.44E, 2.v.1973, T. Weir & T. Angeles (ANIC); 1♀ macr., Nourlangie Rock billabong, Kakadu NP, CL0117, 12.51S 132.49E, 10.v.1979 (ANIC); 1♀ macr., Yellow Waters, Nourlangie Ck, Kakadu NP, 12.54S 132.31E, deep billabong, fringing grass, Ludwigia, 14.vii.1994, T. Weir & A. Roach (ANIC).

Microvelia (Pacifcovelia) oceanica Distant, comb. nov.*Material examined*

Australian Capital Territory: 1♂, 1♀ macr., Sullivan's Ck, ANU campus, berlesate ANIC 1093, Azolla on pond, 35.15S 149.08E, 18.xi.1989, C.W. & L.B. O'Brien (ANIC); 1♂, 1♀ macr., Piccadilly Circus, 1240 m, flight intercept/trough trap, 35.22S 148.48E, i.1984, ii.1984, Lawrence, Weir & Johnson (ANIC); 1♀ macr., Canberra, Farrer, in pool, 35.22S 149.05E, 10.xii.1980, D.C.F. Rentz (ANIC); 17♂, 29♀ macr., Canberra, Farrer, in pool, 35.22S 149.05E, 20, 27.xi.1980, D.C.F. Rentz (ANIC). **New South Wales:** 1♂ macr., Kyogle, 28.37S 153.00E, 4.i.1953, R. Talbot (UQIC); 12 apt., 1♂ macr., Cataract R. at Sandy Hill, EPA Survey – MRHI CLAR 05, 28.56S 1252.14E, 10.x.1995, J. Ling (AM); 2♀ macr., Mangrove Ck, EPA Survey – MRHI CLAR 26, 29.43S 153.09E, 28.ix.1994, J. Ling (AM); 1♀ macr., Dorrigo, 30.20S 152.43E, date and collector unknown (SAM); 3♀ macr., Hat Head Nat. Pk, Big Smoke Campground, 31.04S 153.04E, 13.xi.1993, G. Cassis (AM); 1♂, 1♀ macr., Fowlers Gap, 31.05S 141.44E, 1979–1981, D.G. Read (ANIC); 1♀ macr., Forbes R. off Racecourse Trail, EPA Survey – MRHI HAST 18, 31.08S 152.21E, 3.x.1995, E. Turak (AM); 1♂ macr., Ellenborough R. u/s Ellenborough, EPA Survey – MRHI HAST 08, 31.28S 152.28E, 6.x.1995, E. Turak (AM); 2♀ apt., 2♀ macr., Lord Howe Island, 31.33S 159.06E, A.M. Lea (SAM); 2♀ macr., Polblue Swamp, Barrington Tops SF, 31.57S 151.25E, 17.xi.1981, T. Weir (ANIC); 1♀ macr., Imperial Dam near Broken Hill, 31.58S 141.27E, F.W. Shepherd (SAM); 2♂, 7♀ macr., Bogan R., 31.58S 147.15E, date unknown, J. Armstrong (AM); 1♀ macr., Chichester R., EPA Survey – MRHI HUNT 09, 32.10S 151.35E, 4.iv.1994, E. Turak (AM); 1♀ apt., 30 km N Singleton, Tuglo Wildlife Park, overgrown dam, CL008, 32.18S 151.10E, 11.iii.1979, I. Lansbury (ANIC); 1♂, 2♀ macr., Menindee Lakes Park, Trust Caravan Park, at light, 32.21S 142.24E, 26.xii.1973, G.F. Gross (SAM); 3♂, 5♀ apt., Myall Lakes, 32.26S 152.24E, date and collector unknown (SAM); 2♀ apt., Bombah Point Swamp, leaf-litter/detritus in swamp, 32.30S 152.17E, 1.v.1993, V.W.H. Lorimer (AM); 2♀ macr., Wallace Ck down Testers Hollow, EPA Survey – MRHI HUNT m4, 32.47S 151.32E, 17.x.1995, A. Leask (AM); 1♂, 1♀ macr., Lachlan R. d/s Kiacatoo Bridge, EPA Survey – MRHI LACH 17, 33.03S 146.46E, 19.iii.1996, J. King (AM); 1♀ macr., Lachlan R. d/s Kiacatoo Bridge, EPA Survey – MRHI LACH 17, 33.03S 146.46E, 8.xi.1995, E. Turak (AM); 8♂, 9♀ macr., 4 km SW Morisset, on surface of water pool, 33.08S 151.27E, 1.ix.1990, Tom Gush (ANIC); 3♂, 2♀ macr., Lachlan R., Murrin Bridge, EPA Survey – MRHI LACH 18, 33.12S 146.22E, 27.iii.1995, R. Cowell (AM); 1♂ macr., Mt Canobolas Park, from moss, 33.20S 148.59E, 27.x.1991, Tom Gush (ANIC); 1♂ macr., Belubula R., Taplow Flat, EPA Survey – MRHI LACH 12, 33.36S 148.52E, 23.iii.1995, R. Cowell (AM); 1♀ macr., Salvation Ck, EPA Survey – MRHI HAWK 03, 33.38S 151.14E, 19.xii.1995, E. Turak (AM); 1♀ apt., 1♀ macr., Lindfield, from pool, 33.47S 151.10E, 13.vi.1982, M. Stevens (ANIC); 1♀ macr., Lachlan R. u/s Cowra, EPA Survey – MRHI LACH 11, 33.53S 148.45E, 19.iii.1996, J. King (AM); 1♀ macr., Tuena Ck d/s Bears Gully, EPA Survey – MRHI LACH 10, 34.04S 149.22E, 26.iii.1995, R. Cowell (AM); 1♀ macr., Boorowa R. at Prosser's Crossing, EPA Survey – MRHI LACH 22, 34.09S 148.49E, 9.xi.1995, E. Turak (AM); 2♂, 4 apt., 5♂, 3♀ macr., 15 nymphs, Gol Gol, edge of flowing river, 34.11S 142.13E, 24.xi.1993, T. Weir & W. Dressler (ANIC); 1♀ macr., Grabben Gullen Ck u/s Lachlan R., EPA Survey – MRHI LACH 07, 34.32S 149.09E, 18.iii.1996, J. Ling (AM); 1♂ macr., Grabben Gullen Ck u/s Lachlan R., EPA Survey – MRHI LACH 07, 34.32S 149.09E, 26.iii.1995, R. Cowell (AM); 1♀ macr., Grabben Gullen Ck u/s Lachlan R., EPA Survey – MRHI LACH 07, 34.32S 149.09E, 27.x.1994, J. King (AM);

1♂, 1♀ macr., Darlington Point, edge of flowing river, 34.34S 146.00E, 25.xi.1993, T. Weir & W. Dressler (ANIC); 6♂, 18♀ apt., 18♂, 14♀ macr., 1 nymph, Gum Ck, 16 km WbyS Darlington Point, still water pools with vegetation, 34.36S 145.49E, 25.xi.1993, T. Weir & W. Dressler (ANIC); 40♂, 48♀ apt., 26♂, 22♀ macr., 80 nymphs, 2 km S Balranald, still water pools with vegetation, 34.39S 143.34E, 25.xi.1993, T. Weir & W. Dressler (ANIC); 1♂ macr., Coleambally Canal, 25 km SWbyW Leeton, edge of slow flowing canal, 34.40S 146.10E, 25.xi.1993, T. Weir & W. Dressler (ANIC); 1♀ macr., Murrumbidgee R., Waldaira, EPA Survey – MRHI BIDG 01, 34.42S 143.19E, 27.iii.1955, J. King (AM); 5♂, 2♀ apt., 2♀ macr., 10 nymphs, Yanga Ck, 7 km SEbyS Balranald, still muddy water with vegetation, 34.42S 143.35E, 25.xi.1993, T. Weir & W. Dressler (ANIC); 1♂ macr., Narrandera, Lake Talbot, still water edge of lake, 34.45S 146.34E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 4♀ apt., 16♂, 10♀ macr., 6 nymphs, Poisoned Waterholes Ck, 3 km SWbyW, Narrandera, still water pools, vegetation, 34.46S 146.31E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 2♀ apt., 3♂, 6♀ macr., 3 nymphs, Poisoned Waterholes Ck, 8 km SSE, Narrandera, still water pools, vegetation, 34.49S 146.35E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 12♂, 15♀ apt., 8♂, 8♀ macr., 35 nymphs, 18 km SSE Narrandera, temp. roadside pools with grass, 34.54S 146.37E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 1♂, 1♀ apt., 1♂, 1♀ macr., Mtn Ck, 4 km from Taemas Bridge, 35.00S 148.51E, 12.v.1985, L. Hill (ANIC); 1♂, 6♀ macr., 32 km NEbyE Lockhart, temp. roadside pool, 35.03S 147.00E, 26.xi.1993, T. Weir & W. Dressler (ANIC); 13♂, 40♀ macr., 10 mi W Wagga Wagga, temporary pool, 35.07S 147.11E, 3.iii.1969, G.B. Monteith (ANIC, UQIC); 1♀ macr., Billabong Ck at Jerilderie, EPA Survey – MRHI MURR 18, 35.21S 145.46E, 10.xi.1995, N. Waddell (AM); 3♂, 1♀ macr., Box Ck Esc. Chan., Conargo Road, EPA Survey – MRHI MURR m7, 35.24S 145.03E, 25.iii.1995, B. Gardiner (AM); 3♀ apt., Bawley Point, in tide pool, 35.30S 150.24E, 3.xii.1994, D. Rentz & K. McCarron (ANIC); 1♀ macr., Cabbage Tree Ck, 34 km SE Braidwood, shaded stream, wet sclerophyll, 35.35S 150.01E, 2.iv.1996, R.E. Roughley (ANIC); 4♂, 4♀ macr., Murray R., Howlong Common, EPA Survey – MRHI MURR 09, 36.00S 146.37E, 26.x.1994, Frances Laurenson (AM); 1♀ macr., Tooma R. d/s Tooma Dam, EPA Survey – MRHI MURR m9, 36.03S 148.17E, 23.xi.1995, A. Leask (AM); 4♂, 2♀ apt., 1♂, 1♀ macr., Sawpit Ck, Kosciusko Nat. Pk, 1200 m, 36.06S 148.12E, 14.iii.1979, T.A. Weir (ANIC); 2♂ apt., 7♂, 23♀ macr., The Lake Ck, 12 km NNE Jindabyne, 1160 m, 36.19S 148.40E, 16.iii.1979, T.A. Weir (ANIC); 1♂, 1♀ macr., The Lake Ck, 12 km NNE Jindabyne, 1160 m, CL023, 36.19S 148.40E, 16.iii.1979, I. Lansbury (ANIC); 1♂ macr., Diggers Ck, Kosciusko Nat. Pk, 1510 m, 36.21S 148.29E, 14.iii.1979, T.A. Weir (ANIC); 2♂, 2♀ apt., 4♂, 2♀ macr., Kara Ck, 13 km NEbyE Jindabyne, 940 m, 36.21S 148.44E, 16.iii.1979, T.A. weir (ANIC); 4♂, 4♀ macr., Thredbo R., 6 km NwbyN of Jindabyne, 900 m, 36.22S 148.36E, 15.iii.1969, T.A. Weir (ANIC); 1♀ apt., Betts Ck, Kosciusko Nat Pk, 1780 m, 36.26S 148.22E, 15.iii.1979, I. Lansbury (ANIC); 2♂, 4♀ apt., 2♀ macr., 2 nymphs, Betts Ck, Kosciusko Nat. Pk, 1780 m, 36.26S 148.22E, 15.iii.1979, T.A. Weir (ANIC); 2♀ macr., Merimbula, 36.54S 149.56E, ii.1993, E.C. Zimmerman (ANIC); 2♂, 1♀ apt., 1♂ macr., Wog Wog R, 4 km NE Mt Wog Wog, Typha pool isolated from stream, 37.05S 149.30E, 25.iii.1996, R.E. Roughley (ANIC).

Norfolk Island: 3♀ apt., Norfolk Is., Near Gaol, meadow, CL1423, 28.xii.1977, J.T. & M.S. Polhemus (JTPC); 4♂, 4♀ apt., 2♂, 3♀ macr., Norfolk Island, Kingston Common, 29.03S 167.57E, 1.xii.1984, T.A. Weir (ANIC); 3♂, 3♀ apt., 1♂, 1♀ macr., Norfolk Island, Douglas Drive, 29.02S 167.56E, 1.xii.1984, I.D. Naumann (ANIC).

Northern Territory: 2♀ apt., 1♂ macr., Roper R. at Mulurark, Eusey NP, limestone rocks in flowing river, algal, 14.57S 133.12E, 25.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ apt., 2♂, 5♀ macr., Salt Ck, Roper Hwy, 21 km SSE Mataranka, flowing creek, muddy edges, rocks, calcium, 15.01S 133.14E, 25.vii.1994, T. Weir

& A. Roach (ANIC); 3♂, 1♀ macr., Victoria R Xing on Victoria Highway, 15.36S 131.07E, 29.iv.1974, T. Weir & T. Angeles (ANIC); 2♂, 2♀ apt., 9♂, 10♀ macr., Cockatoo Lagoon, Keep R. NP, deep billabong, water lillies, fringing, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 8♂, 13♀ apt., 2 nymphs, Cockatoo Lagoon, Keep R. NP, small muddy pools, floating leaves, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 8♀ apt., 4♂, 11♀ macr., Bullita Outstation, East Baines R., Gregory NP, deep billabong, rockshelf, a, 16.07S 130.25E, 21.vii.1994, T. Weir & A. Roach (ANIC); 2♀ macr., 18 km N Dunmara on Stuart Highway, in lagoon, 16.31S 133.25E, 2.iv.1981, M. Malipatil & J. Hawkins (NTM); 1♀ apt., Negri R. Xing on Duncan Highway, 17.05S 129.00E, 15.xi.1984, M. Malipatil (NTM); 1♂, 5♀ macr., Campbell Spring, 38 km E by SE of Mt Panton, 17.25S 129.34E, 30.v.1974, T. Weir & T. Angeles (ANIC); 2♂, 6♀ macr., Bigley Springs, 25 km SE by E of Mt Panton, 17.29S 129.25E, 29.v.1974, T. Weir & T. Angeles (ANIC); 1♂, 4♀ apt., 8♂, 10♀ macr., Border Waterhole 15 km WbyS Musselbrook M, small rocky pools, sandy, algae, roots, 17.37S 137.59E, 14.v.1995, T. Weir (ANIC); 1♂ macr., Border Waterhole 15 km WbyS Musselbrook M, large perm. pool, muddy edges, algae, 18.37S 137.59E, 14.v.1995, T. Weir (ANIC); 1♂ macr., Barrow Ck, uv light, 21.31S 133.53E, 7.iv.1966, N. McFarland (SAM); 1♀ macr., Farm Dam S of Aileron, 22.38S 133.21E, 5.iv.1981, M. Malipatil & J. Hawkins (NTM); 4♂, 7♀ macr., Trephina Gorge Nat Pk, above John Hayes, flowing creek, rocky, vegetation at edge, 23.32S 134.21E, 4.iii.1995, T. Weir (ANIC); 3♂ apt., 2♀ macr., Redbank Gorge, West Macdonnells NP, large pool, sandy, overhang & float vege, 23.34S 132.31E, 9.iii.1995, T. Weir (ANIC); 1♂, 1♀ apt., 6♂, 5♀ macr., Redbank Gorge, West Macdonnells NP, perm. rock pools, sandy, silty bottom, 23.34S 132.31E, 9.iii.1995, T. Weir (ANIC); 8♂, 7♀ macr., Bitter Springs Ck Xing, Ross Highway, temp. pool in sandy creek bed, 23.34S 134.26E, 5.iii.1995, T. Weir (ANIC); 1♂, 3♀ macr., Ormiston Gorge, West Macdonnells, CL0097, 23.37S 132.43E, 28.iv.1979, I. Lansbury (ANIC); 4♂, 5♀ apt., 14♂, 24♀ macr., 9 nymphs, Ormiston Ck, below gorge, West Macdonnell, pools, sandy, rocks, algae, reeds, 23.38S 132.44E, 10.iii.1995, T. Weir (ANIC); 4♂, 8♀ apt., 2♂, 1♀ macr., 2 nymphs, Simpsons Gap, West Macdonnells NP, flowing (temp), large pools, grass at edge, 23.40S 133.43E, 6.iii.1995, T. Weir (ANIC); 1♂, 4♀ apt., 1♂, 1♀ macr., Finke R. above Glen Helen, West Macdo, flowing, rocky, bulrushes, grass, algae, 23.41S 132.40E, 10.iii.1995, T. Weir (ANIC); 4♂, 1♀ apt., 1♂ macr., 2 nymphs, Finke R. at Glen Helen Gorge, West Ma, flowing, pools, sandy, bulrushes, algae, 23.41S 132.40E, 6.iii.1995, T. Weir (ANIC); 2♂, 6♀ apt., 2♂, 2♀ macr., 1 nymph, mound springs above Pioneer Ck, West Mac, perm. spring, bulrushes, moss, 23.41S 132.43E, 8.iii.1995, T. Weir (ANIC); 4♂, 4♀ apt., 1♂ macr., 1 nymph, Finke R at Glen Helen Gorge, West Macdon, flowing, pools, sandy, bulrushes, algae, 23.41S 132.44E, 10.iii.1995, T. Weir (ANIC); 1♂ apt., 1♂ macr., Simpsons Gap, 17 km W by NW of Alice Springs, 23.41S 133.43E, 31.x.1974, T. Weir & T. Angeles (ANIC); 1♀ apt., 3♂, 3♀ macr., 2 nymphs, 2.5 km SSE Simpsons Gap, West Macdonells, dam, still, grass, vegetation at edge, 23.42S 133.44E, 6.iii.1995, T. Weir (ANIC); 9♂, 4♀ macr., Standley Chasm, CL0106, 23.43S 133.27E, 30.iv.1979, I. Lansbury (ANIC); 2♀ apt., 1♂ macr., Hugh R, 2.5 km SEbyS Paisley Bluff, flowing, pools, rocky, sandy, vegetation, 23.44S 133.21E, 7.iii.1995, T. Weir (ANIC); 1♂ apt., 2♂, 7♀ macr., Emily Gap nr Alice Springs, CL0088, 23.45S 133.57E, 26.iv.1979, I. Lansbury (ANIC); 1♂ apt., 6♂, 4♀ macr., 3 nymphs, Jessie Gap Nature Park, pools in sandy creek bed, grass at edge, 23.45S 134.01E, 5.iii.1995, T. Weir (ANIC); 3♂, 14♀ macr., Jessie Gap nr Alice Springs, CL0089/90, 23.45S 134.01E, 26.iv.1979, I. Lansbury (ANIC); 1♀ apt., 3♂, 2♀ macr., Ellery Gorge, 85 km W Alice Springs, 23.46S 133.04E, 5.xi.1979, T. Weir (ANIC); 4♂, 8♀ apt., 2♂, 5♀ macr., 4 nymphs, Ellery Ck Big Hole, West Macdonnells NP, large pool, vegetation at edge, 23.47S 133.04E, 7.iii.1995, T. Weir (ANIC); 1♂, 4♀ apt., 19♂,

37♀ macr., Ellery Ck, nr Alice Springs, West Macdonnells, CL0095, 23.47S 133.04E, 28.iv.1979, I. Lansbury (ANIC); 13♂, 15♀ apt., 31♂, 29♀ macr., 15 nymphs, Hugh R, 12.5 km SSE Paisley Bluff, flowing, pools, sandy, grass at edge, 23.49S 133.22E, 7.iii.1995, T. Weir (ANIC); 3♂, 4♀ apt., 3♂, 6♀ macr., Palm Valley, Finke Gorge NP, large pools, rocky, bulrushes, algae, gr, 24.03S 132.43E, 14.iii.1995, T. Weir (ANIC); 10♂, 11♀ macr., Palm Valley, Finke Gorge NP, temp. pools, rocky, sandy, algae, detriti, 24.03S 132.43E, 14.iii.1995, T. Weir (ANIC); 2♂, 3♀ apt., 1♂, 1♀ macr., Finke Gorge Nat Pk, Kanara Ck at Oasis, perm. rock pools, palms, grass, algae, 24.04S 132.44E, 12.iii.1995, T. Weir (ANIC); 3♂, 7♀ apt., 40♂, 30♀ macr., 1 nymph, Palm Valley, Finke Gorge Nat. Pk, 24.04S 132.45E, 10–12.vii.1974, T. Weir & T. Angeles (ANIC); 5♂, 6♀ apt., 8♂, 9♀ macr., Finke Gorge Nat Pk, above old Ranger Stn, temp. pools, rocky, grass, algae, 24.04S 132.46E, 12.iii.1995, T. Weir (ANIC); 8♂, 3♀ apt., 3♂, 11♀ macr., 4 nymphs, Finke R at Palm Bend, Finke Gorge NP, large pool, sandy, rocky, grass, algae, 24.04S 132.46E, 12.iii.1995, T. Weir (ANIC); 1♀ apt., 1♂, 5♀ macr., Little Palm Ck, Finke Gorge NP, rock pools, palms, algae, vegetation overh, 24.06S 132.46E, 13.iii.1995, T. Weir (ANIC); 78♂, 52♀ apt., 16♂, 23♀ macr., 100 nymphs, 'Boggy Hole', Finke Gorge NP, perm. pool in river bed, bulrushes, grass, 24.09S 132.52E, 15.iii.1995, T. Weir (ANIC); 3♂, 8♀ apt., 15♂, 10♀ macr., 6 nymphs, Finke R. at Running Water, temp. pools in sandy creek bed, 24.20S 132.53E, 15.iii.1995, T. Weir (ANIC); 1♂, 3♀ macr., Stokes Ck, left branch, Watarrka NP, perm. deep pool, rocky, sandy, bulrushes, 24.21S 131.45E, 16.iii.1995, T. Weir (ANIC); 1♂, 2♀ apt., 1♂, 3♀ macr., Finke R. Xing, Stuart Highway, temp. river, sandy, vegetation overhang, 24.33S 133.14E, 4.iii.1995, T. Weir (ANIC). **Queensland:** 1♀ macr., Rocky R. via Coen, 13.49S 143.28E, 7.xi.1969, B. Cantrell (ANIC); 1♀ macr., Ten Mile Ck, water sweep, 14.41S 143.28E, 23.iv.1994, P. Zborowski (ANIC); 2♀ macr., McIvor R., 40 km N Cooktown, 15.09S 145.06E, 7.v.1970, G.B. Monteith (UQIC); 3♀ macr., West Normanby R., 40 km W Cooktown, 15.18S 144.51E, 5.v.1970, G.B. Monteith (UQIC); 1♀ macr., Kennedy R. Xing, temporary pool in dry river bed, sandy, 15.26S 144.11E, 16.vi.1992, T. Weir (ANIC); 1♀ macr., 2.5 km W Cape Tribulation, Site 5, 180 m, berlesate, sieved rainforest litter, 16.05S 145.27E, i.1983, G.B. Monteith (QM); 1♀ apt., Julatten, McDougalls Rd, waterlilly pool, CL0136, 16.36S 145.20E, 20.v.1979, I. Lansbury (ANIC); 1♀ macr., Cairns District, 16.55S 145.46E, date unknown, A.M. Lea (SAM); 2♂, 10♀ apt., 1♀ macr., Tinaroo Falls Dam, inlet below Lookout Point, CL0146, 17.11S 145.34E, 23.v.1979, I. Lansbury (ANIC); 1♀ macr., Normanton, 17.40S 141.04E, 14.iv.1961, collector unknown (UQIC); 1♂ macr., Normanton, at light, 17.40S 141.04E, 4.ix.1982, R.I. Storey (QDPI); 3♂, 4♀ macr., Amphitheatre Camp 27 km NbyE Musselbrook, small pools, rocky, sandy, debris, clear, 18.21S 138.10E, 13.v.1995, T. Weir (ANIC); 1♀ macr., Cardwell Ra. (South side), rock pools, 18.26S 146.06E, 2.vi.1953, T.E. Woodward (UQIC); 1♀ macr., Musselbrook Ck 19 km NEbyE Musselbrook M. C., large & small pools, rocky, sandy, algae, 18.30S 138.17E, 15.v.1995, T. Weir (ANIC); 26♂, 41♀ macr., Holts Ck 8 km N Musselbrook Mining Camp, large pools, rocky, sandy, debris, logs, 18.33S 138.11E, 10–20.v.1995, T. Weir (ANIC); 3♂, 3♀ apt., 30♂, 46♀ macr., 8 nymphs, Murrays Spring 8 km WbyN Musselbrook M. C., large pool, rocky, sandy, waterlillies, 18.35S 138.03E, 9–20.v.1995, T. Weir (ANIC); 6♂, 7♀ macr., Murrays Ck, Musselbrook Mining Camp, large pool in rocky ck, polluted seepage, 18.36S 138.08E, 11.v.1995, T. Weir (ANIC); 2♀ apt., 12♂, 21♀ macr., 2 nymphs, Murrays Ck, Musselbrook Mining Camp, small pools, rocky, sandy, algal growth, 18.36S 138.08E, 10.v.1995, T. Weir (ANIC); 1♂ apt., 22♂, 18♀ macr., 2 nymphs, Musselbrook Ck 2 km S Musselbrook M. C., large pool, rocky, sandy, 18.37S 138.08E, 9.v.1995, T. Weir (ANIC); 1♂ macr., Musselbrook Ck, 1 km S Musselbrook Mining, at light, 18.37S 138.08E, 10.v.1995, T. Weir (ANIC); 1♀ macr.,

8 km SEbyE Musselbrook Mining Camp, at light, 18.38S 138.11E, 11.v.1995, T. Weir (ANIC); 2♂, 1♀ macr., Holts Ck 8 km N Musselbrook Mining Camp, FIT, open forest, spinfex, sandy soil, 18.38S 138.11E, 10–20.v.1995, T. Weir (ANIC); 2♂, 4♀ apt., 18♂, 14♀ macr., 2 nymphs, Ridgepole Waterhole 24 km ESE Musselbrook, perm. waterhole, waterlillies, nardoo, algae, 18.40S 138.20E, 11.v.1995, T. Weir (ANIC); 3♂, 3♀ macr., 15 km SEbyS Musselbrook Mining Camp, pool in rocky creek bed, sandy, murky, 18.43S 138.12E, 8.v.1995, T. Weir (ANIC); 1♀ macr., 16 km SSE Musselbrook Mining Camp, at light, 18.44S 138.12E, 18.v.1995, T. Weir (ANIC); 4♂, 4♀ macr., Louie Ck, near stockyards, Lawn Hill NP, flowing creek, sandy, debris, Pandanus, 18.47S 138.31E, 17.v.1995, T. Weir (ANIC); 1♂ macr., Townsville, Inst of Marine Science, Rocky Ck, CL0152, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC); 7♀ macr., Canobie Station via Julia Ck, light trap, 19.29S 140.56E, 23–25.xi.1984, D.S. Gibson (ANIC); 3♀ apt., 1♀ macr., Ayr, stagnant water, 19.34S 147.24E, 1.vi.1953, T.E. Woodward (UQIC, ZMUC); 1♀ macr., Bow Park via Julia Ck, light trap, 20.01S 141.56E, 21–23.xi.1984, D.S. Gibson (ANIC); 1♀ macr., Mt Dryander, 650 m, rainforest, intercept, 20.15S 148.33E, III.1993, D. Cook & G.B. Monteith (QM); 1♂, 2♀ apt., 5♂, 1♀ macr., 2 nymphs, Lake Moondarra, 15 km NNE Mount Isa, deep lake, rocks, water weed at edge, 20.36S 139.33E, 27.vii.1994, T. Weir & A. Roach (ANIC); 2♀ macr., Hughenden Station via Hughenden, light trap, 20.51S 144.14E, 19–21.xi.1984, D.S. Gibson (ANIC); 1♂ macr., Finch Hatton Gorge, via Finch Hatton, 21.04S 148.38E, 3.xi.1969, T. Weir (ANIC); 2♂ macr., 3.3 km SSE Edgbaston HS, 31 km NE Aramac, small artesian mud spring, 22.46S 145.26E, 4.v.1988, W. Zeidler (SAM); 1♀ apt., Hedlow Ck, 17 km W Rockhampton, 23.13S 150.37E, 27.iv.1969, T. Weir (ANIC, UQIC); 10♂, 37♀ apt., 6♂, 3♀ macr., Emu Park, freshwater lagoon, 23.16S 150.50E, 27.iv.1969, T. Weir (ANIC, UQIC); 6♂, 6♀ apt., 5♂, 3♀ macr., Limestone Ck, 10 mi W Rockhampton, 23.17S 150.35E, 27.iv.1969, T. Weir (ANIC, UQIC); 2♂, 2♀ apt., 5♂, 9♀ macr., Frenchmans Ck, via Rockhampton, 23.21S 150.34E, 15.iv.1969, T. Weir (ANIC, UQIC); 1♀ apt., 4♂, 4♀ macr., Washpool Ck via Rockhampton, 23.30S 149.29E, 15.vi.1969, T. Weir (ANIC, UQIC); 1♂, 7♀ macr., Blackdown Tableland via Dingo, 850–950 m, 23.48S 149.08E, 27.ii.1996, G. Monteith (QM); 1♂, 2♀ apt., 2♀ macr., Glassford Ck, Monto-Many Peaks Rd (as Gladford Ck), 24.35S 151.20E, 18.xi.1957, T.E. Woodward (UQIC); 1♂ macr., Carnarvon Ck, 16 km NE of Park, pools in creek bed, yellow pans, 25.00S 148.20E, 28.xi.1992, D. Bickel (AM); 8♂, 12♀ macr., Dargonelly Rockhole, 25.02S 147.54E, 27.ii.1996, G. Monteith & C. Burwell (QM); 1♂ apt., 19♂, 16♀ macr., Carnarvon Gorge, 25.03S 148.12E, 29.v.1954, T.E. Woodward (ANIC, UQIC); 1♀ macr., Carnarvon Nat Pk, Wards Canyon, 25.03S 148.12E, 27.xi.1993, G. Cassis (AM, ANIC); 1♂, 3♀ apt., 2♂, 5♀ macr., Boggomoss No 19 via Taroom, night hand collection 034, 25.25 s 150.01E, 11.xi.1996, Qld Mus survey (QM); 3♂, 16♀ apt., 7♂, 24♀ macr., Boggomoss No 19 via Taroom, aquatic coll 075, 25.25S 150.01E, 11.xi.1996, G. Thompson (QM); 1♀ macr., Taroom Dist, Boggomoss 19, berlesate 915, open forest litter 180 m, 25.25S 150.01E, 11.xi.1996, G.B. Monteith (QM); 2♀ apt., 6♂, 12♀ macr., Boggomoss No 3 via Taroom, aquatic coll 079, 25.26S 150.01E, 12.xi.1996, G. Thompson (QM); 1♀ apt., 5♂, 8♀ macr., Taroom Dist. Boggom. 3, 163, 25.26S 150.01E, 14.vi.1996, R. Kristensen (QM); 5♂, 1♀ apt., 1♂ macr., Taroom Dist. Boggom. 5, 160, 25.26S 150.02E, 11.vi.1996, R. Kristensen (QM); 1♀ apt., 3♂, 3♀ macr., Boggomoss No 21 via Taroom, aquatic coll 073, 25.27S 150.03E, 11.xi.1996, Thompson & Monteith (QM); 1♀ macr., Boggomoss No 21 via Taroom, at light 028, 25.27S 150.03E, 10.xi.1996, G.B. Monteith (QM); 2♂, 2♀ apt., 1♂ macr., Boggomoss 12/1 (Nathan G) via Taroom, aquatic coll 081, 25.27S 150.08E, 14.xi.1996, G. Thompson (QM); 1♂ macr., Boggomoss 12/1 (Nathan G) via Taroom, at light 054, 25.27S 150.08E, 13.xi.1996, G.B. Monteith (QM); 1♀ macr., Boggomoss 12/2

(Nathan G) via Taroom, aquatic coll 084, 25.27S 150.09E, 14.xi.1996, G. Thompson (QM); 2♂, 2♀ macr., Taroom Dist, Boggomoss 11, 162, 25.28S 150.03E, 14.vi.1996, R. Kristensen (QM); 1♀ apt., Boggomoss No 30 via Taroom, aquatic coll 086, 25.29S 150.08E, 14.xi.1996, G. Thompson (QM); 5♀ macr., Fraser Island, 2nd creek SE, 25.30S 153.03E, 20.v.1971, D.L. Hancock (UQIC); 1♀ apt., 1♂, 5♀ macr., Boggomoss No 10 via Taroom, aquatic coll 089, 25.31S 150.03E, 14.xi.1996, G. Thompson (QM); 3♂, 11♀ macr., Hell Hole Gorge Nat. Pk, pools in creek bed, 25.43S 144.11E, 22–24.x.1997, T. Weir (ANIC); 1♀ apt., Fat Hen Ck via Kilkeven, 26.07S 152.18E, 19.viii.1957, F.A. Perkins (UQIC); 1♀ apt., 2♂ macr., Taroom Dist. Boggom[oss]. 2, 159, 26.26S 150.01E, 8.vi.1996, R. Kristensen (QM); 2♂, 7♀ macr., Bribie Island, 27.03S 153.08E, 16.ix.1969, H. Burton (UQIC); 1♂ macr., Caboolture, 27.05S 152.57E, 12.ix.1966, B.F. Franzmann (UQIC); 1♂, 10♀ macr., Kirkleigh near Somerset Dam, 27.07S 152.33E, iii.1954, I.D. Hiscock (UQIC); 2♀ macr., Balonne R. at Weribone, edge, 27.19S 148.49E, 30.vii.1994, collector unknown (DNRQ); 2♀ macr., Mt Glorious State Forest, subtropical rainforest, 27.20S 152.46E, 29.ix.1989, 28.x.1989, Y. Basset (QM); 2♂ macr., South Pine R. via Samford, 27.22S 152.22E, 16.ii.1969, T. Weir (ANIC); 4♀ macr., Camp Mt district, Samford Valley, 27.24S 152.52E, xii.1962, T.E. Woodward (UQIC); 1♂, 5♀ macr., Enoggera Reservoir, Brisbane, 27.27S 152.55E, 13.vi.1953, T.E. Woodward (UQIC); 1♂ macr., Ashgrove, Brisbane, Walton Bridge, 27.27S 152.59E, 3.v.1960, I.C. Yeo (UQIC); 1♂, 1♀ macr., Brisbane, 27.28 S 153.02 E, 31.vii.1962, K. Barnard (UQIC); 1♀ macr., Brisbane, Gold Ck at Brookfield, CL0156, 27.28S 152.55E, 6.vi.1979, I. Lansbury (ANIC); 1♂, 1♀ macr., Brisbane, 27.28S 153.02E, 14.iv.1956, Kirkpatrick (UQIC); 1♂ macr., Brisbane, 27.28S 153.02E, 2.x.1962, B.F. Stone (UQIC); 1♂ macr., Brisbane, 27.28S 153.02E, 24.xii.1958, J. Martin (UQIC); 2♀ apt., Brisbane, 27.28S 153.02E, 27.vi.1927, collector unknown (QM); 9♂, 15♀ macr., Brisbane, 27.28S 153.02E, 30.v.1962, F.J.D. McDonald (UQIC); 1♀ macr., Upper Brookfield, 27.29S 152.52E, 10.xii.1962, G. Monteith (UQIC); 1♀ macr., Dunwich, 27.30S 153.24E, 15–18.iv.1960, P.R. Webb (UQIC); 2♀ macr., Raby Bay, 27.31S 153.02E, 18.viii.1957, S. Sekhon (UQIC); 1♀ macr., Cleveland, 27.32S 153.17E, 20.v.1954, W. Yarrow (JTPC); 1♀ macr., Colleges Xing, Mt Crosby Road, Brisbane district, 27.33S 152.49E, 9.iii.1968, G.J. Toop (UQIC); 3♀ macr., Gatton, 27.34S 152.17E, 27–28.x.1932, collector unknown (UQIC); 1♂, 5♀ apt., 1♀ macr., 1 nymph, Brisbane, Moggill Farm, roadside pool, CL0155, 27.34S 152.53E, 6.vi.1979, I. Lansbury (ANIC); 1♀ macr., Moggill, 27.34S 152.53E, 17.iv.1956, T.E. Woodward (UQIC); 1♀ macr., Ipswich, 27.37S 152.47E, 13.ix.1952, J. Davis (UQIC); 1♀ macr., Greenbank, 27.43S 152.59E, 13.xii.1962, G.B. Monteith (UQIC); 1♀ macr., Cunnamulla, Caravan Park, at light, 28.04S 145.41E, 27.xii.1973, G.F. Gross (SAM); 1♀ macr., Tallebudgera, 28.08S 153.26E, 17.iv.1954, K.L.S. Harley (UQIC); 2♂ macr., Warrego R. at Allan News, edge, 28.09S 145.42E, 28.vii.1994, collector unknown (DNRQ); 1♂, 2♀ macr., South Emu Ck via Emu Vale, 28.13S 152.25E, 22.v.1969, T. Weir (ANIC); 1♂ apt., 1♂ macr., Farm Ck, 15 mi E of Emu Vale, 3000ft, 28.16S 152.19E, 17–22.v.1969, T. Weir (ANIC, UQIC, MV); 2♂ macr., Yowah Ck, 91 km NNE Hungerford, 28.19S 144.55E, 3.iv.1994, G.V. Maynard & G. Davis (UQIC); 3♂, 2♀ macr., Narrandera, temporary pool, 34.35S 146.33E, 5.iv.1969, G.B. Monteith (UQIC). **South Australia:** 2♂, 2♀ macr., Purni Bore, Simpson Desert, on surface of water, 26.17S 136.05E, 20.viii.1977, P.J.M. Greenslade (SAM); 6♂, 36♀ macr., Stuart Highway, 42 km SE by S Marla, temp. roadside pool, vegetation at edge, 27.38S 133.53E, 4.iii.1995, T. Weir (ANIC); 2♀ apt., Coward Springs, nr R.S., 29.24S 136.47E, 15.v.1981, J.A. Forrest (SAM); 1♂ macr., Mudla Bore, 35 km NE Billa Kalina HS, at light, 29.37S 136.19E, 4.xii.1974, J.A. Herridge (SAM); 1♀ macr., Paralana Hot Springs, at light, 30.11S 132.27E, 21.x.1969, G. Inglis & A. Kowanka (SAM); 1♀ macr., Owieandana, N Flinders Range,

30.27S 138.57E, Hale & Tindale (SAM); 4♀ macr., Aroona Dam, beating (sic), 30.35S 138.22E, 17.v.1981, J.A. Forrest (SAM); 1♀ apt., 2♂, 8♀ macr., 1 nymph, Aroona Dam nr Copley, in water, 30.35S 138.22E, 25.x.1966, G.F. Gross (SAM); 1♂ macr., Brachina Ck, at light, 31.20S 138.35E, 8.xi.1987, J.C. Cardale (ANIC); 1♀ macr., Buckaringa Gorge, Flinders Ranges, c. 30 km NNW of Quorn, light trap, 32.07S 138.02E, 19.xii.1985, Reid, Gullan & Lewis (ANIC); 2♀ macr., Mambray Ck, Mt Remarkable Nat Pk, 32.51S 137.57E, 7.v.1981, J.A. Forrest (SAM); 7♀ macr., Kimba, at light, 33.08S 136.25E, 28.xii.1960, P. Aitken (SAM); 1♂ macr., Ral Ral Ck, Calperum Stn, 15 km NbyW Renm, murky, silty, grass edge, sticks, vegetation, 34.03S 140.43E, 23.v.1996, T. Weir & K. Pullen (ANIC); 1♂, 5♀ apt., 3♂, 9♀ macr., 5 nymph, Paringa Bridge, 3 km EbyS Renmark, still water pond with vegetation, 34.11S 140.46E, 24.xi.1993, T. Weir & W. Dressler (ANIC); 41♂, 43♀ apt., 3♂ macr., 15 nymphs, 8 km WbyN of Barmera, still water pond with vegetation, 34.15S 140.24E, 24.xi.1993, T. Weir & W. Dressler (ANIC); 2♀ macr., Mannum, 34.55S 139.18E, 4.vii.1959, Kirkpatrick (UQIC); 4♀ macr., Adelaide, 34.56S 138.36E, date unknown, H.M. Hale (SAM); 1♂ macr., Adelaide, 34.56S 138.36E, date unknown, R. Carpenter (SAM); 1♂ macr., Warradale, 8 mi SW Adelaide, mv light, 35.00S 138.32E, 1.xii.1972, P.B. McQuillan (SAM); 1♂, 15♀ apt., 8♂, 19♀ macr., Murray Bridge, 35.07S 139.16E, date unknown, H.M. Hale (SAM); 1♀ macr., Port Willunga, 35.16S 138.28E, date unknown, H.M. Hale (SAM); 12♀ apt., 2♀ macr., Myponga, 35.23S 138.28E, date unknown, H.M. Hale (SAM); 32♂, 45♀ apt., 6♂, 4♀ macr., Lake Albert, 5 km from Meningie, CL0079/80, 35.38S 139.18E, 14–15.iv.1979, I. Lansbury (ANIC); 1♂ apt., 3♂ macr., Kangaroo Island, Rocky Ck, between Amen Corner & Stokes Bay, CL0075, 35.41S 137.13E, 10.iv.1979, I. Lansbury (ANIC); 1♂ macr., Kangaroo Island, Cygnet R., on Parndana to Emu Bat Rd, CL0065, 35.44S 137.22E, 7.iv.1979, I. Lansbury (ANIC); 2♀ apt., 1♀ macr., Kangaroo Island, nr American R turnoff, farm dam, CL0066, 35.47S 137.46E, 8.iv.1979, I. Lansbury (ANIC); 2♂, 2♀ apt., 2♂, 2♀ macr., Kangaroo Island, river beyond Karatta, Kingscote Rd, CL0073, 35.59S 136.56E, 9.iv.1979, I. Lansbury (ANIC); 2♂, 8♀ macr., Mosquito Ck at Struan nr Naracoorte, CL0084, 37.06S 140.47E, 23.iv.1979, I. Lansbury (ANIC); 3♀ apt., Bool Lagoon & Mosquito Ck junction, CL0086, 37.07S 140.42E, 23.iv.1979, I. Lansbury (ANIC); 1♀ macr., Mt Gambier, Piccaninie Blue Pond, near Glenelg R., CL0081, 38.03S 140.55E, 20.iv.1979, I. Lansbury (ANIC). **Tasmania:** 1♀ macr., Devonport, 41.11S 146.21E, date unknown, Lea (SAM); 1♂, 5♀ apt., 3♀ macr., Eugenana, Arboretum lake, 41.14S 146.18E, 28.ix.1986, L. Hill (ANIC); 1♂ apt, 1♀ macr., 5 km E Strathgordon, CL1413, 42.46S 146.06E, 22.xii.1978, J.T. & M.S. Polhemus (JTPC); 2♂, 3♀ apt., Olga R. flood bank, transect line 7, soil pit 38, pool in button grass plain, 42.50S 145.49E, 9.ii.1976, P. Lake, D. Coleman, P. Allbrook (ANIC); 1♂, 3♀ apt., 1♀ macr., Lake Pedder Track nr McPartlan Pass, small pool in button grass, 42.51S 146.11E, 6.iv.1976, R. Swain (ANIC). **Victoria:** 1♂, 2♀ macr., Robinvale, still water, river overflow, 34.35S 142.46E, 24.xi.1993, T. Weir & W. Dressler (ANIC); 4♀ macr., Hattah Lakes, 34.45S 142.20E, 20.iv.1968, G.W. Anderson (ANIC); 1♂, 1♀ apt., 16 km W Serpentine, CL878, 4.xii.1977, J.T. Polhemus (JTPC); 1♀ macr., Wannon R, Grampians, 37.19S 142.31E, 22.xi.1969, E.F. Riek (ANIC); 1♀ macr., Shaw Ck headwaters, Snowy Plains, 37.23S 146.45E, 15.iii.1977, MV Survey DEPT, G.R.E.S. (NTM); 1♀ apt., Cann R., 37.34S 149.09E, date unknown, J. Baum (AM); 1♂ apt., 1♂ macr., Upper Yarra Dam, old river bed below, CL0050, 37.40S 145.54E, 29.iii.1979, I. Lansbury (ANIC); 1♂ macr., Thomson R., Thomson Valley Rd, Site T1, 37.45S 146.15E, 11.ii.1977, MV Survey Dept. G.R.E.S. (MV); 1♀ macr., Glenmaggie, farm dam near campsite, 37.54S 146.45E, 7.v.1977, M. Malipatil (MV); 1♂, 2♀ macr., West Branch, between Maude & Steglitz, 37.57S 144.10E, 27.iii.1979, I. Lansbury (ANIC); 2♂ apt., Macalister R. – Thomson R. Junct., swamp, Site T26, 38.02S 146.59E, 23.ii.1978,

N.M.V. Survey Dept. G.R.E.S. (NTM); 1♂, 1♀ apt., Macallister R – Thomson junction, swamp, Site T26, 38.02S 146.59E, 7.v.1977, N.M.V. Survey Dept. G.R.E.S. (MV); 1♂, 1♀ apt., 12 macr., Yallock Ck, Melbourne, CL0024, 38.12S 145.32E, 25.iii.1979, I. Lansbury (ANIC); 2♀ apt., 1♀ macr., Lake Purrumbete, CL0032, 38.17S 143.14E, 26.iii.1979, I. Lansbury (ANIC). **Western Australia:** 1♀ apt., 1♂, 1♀ macr., Spillway Ck, 11 km NNE Ord R. Dam, still water at edge of strong flowing cr, 16.02S 128.47E, 24.vii.1994, T. Weir & A. Roach (ANIC); 2♀ apt., Wahroonga Station, Gascoyne District, in bore drain, 25.29E 114.24E, 16.x.1969, collector unknown (SAM); 1♀ macr., West Pinjar, light trap, 31.42S 115.49E, 10–16.i.1974, J.A. Mahon (ANIC).

***Microvelia (Pacifcovelia) tasmaniensis*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled 'Cape Portland lagoon, TAS[mania], 1. Nov. 1972, R. Mawbey + B. Knott' (ANIC).

Paratypes. 2♀ apt., 1♀ macr., Tasmania, 5 km E Strathgordon, CL1413, 42.46S 146.06E, 22.xii.1978, J.T. & M.S. Polhemus (JTPC).

***Microvelia (Pacifcovelia) macgregory* Kirkaldy, comb. nov.**

Material examined

Norfolk Island: 3♂, 3♀ apt., 1♂, 1♀ macr., Norfolk Is., Near Gaol, meadow, CL1423, 28.xii.1977, J.T. & M.S. Polhemus (JTPC); 1♂ apt., Norfolk Is., W. side, swamp, CL1428, 29.xii.1977, J.T. & M.S. Polhemus (JTPC); 3♂, 4♀ apt., 1♂ macr., Norfolk Island, Douglas Drive, 29.02S 167.56E, 1.xii.1984, I.D. Naumann (ANIC); 1♂ macr., Norfolk Island, Red Road Track, NNP, 29.01S 167.57E, ex pantraps, 14.xi–2.xii.1984, I.D. Naumann (ANIC); 3♀ apt. Norfolk Island, Douglas Drive, 29.02S 167.56E, 1.xii.1984, T.A. Weir (ANIC).

***Microvelia (Pacifcovelia) lilliput*, sp. nov.**

Material examined

Holotype. Apterous ♂, labelled '13.31S 142.27E Q[ueens]L[an]D, 27 km NWbyW of Rokeby, 27 Oct. 1992, T. Weir, P. Zborowski, lagoon with rocks, vegetation and water lillies' (ANIC).

Paratypes. **Northern Territory:** 1♂, 5♀ apt., 2♂, 1♀ macr., Fogg Dam, 12.34S 131.18E, 5.iv.1980, M.B. Malipatil (NTM); 2♂, 5♀ apt., 1♀ macr., Jabiru East (Retention Pond No 1), Kakadu NP, man made pond, grassy edges, 12.40S 132.54E, 15.vii.1994, T. Weir & A. Roach (ANIC); 1♂ apt., Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 2♀ macr., Arnhem Highway, Leaning Tree Lagoon, CL0126, 12.42S 131.25E, 17.v.1979, I. Lansbury (ANIC); 2♀ apt., 11♂, 8♀ macr., Arnhem Highway, Flying Fox Ck, CL0134, 12.42S 132.20E, 17.v.1979, I. Lansbury (ANIC); 1♂ apt., 1♀ macr., Magela Ck near Gulungul, 12.42S 132.57E, 2.xi.1982, M. Malipatil (NTM); 2♀ macr., 16 km E by N of Mt Cahill, 12.50S 132.51E, 13.vi.1973, T. Weir & T. Angeles (ANIC); 1♂ apt., 1♂ macr., Nourlangie

Rock billabong, Kakadu NP, CL0117, 12.51S 132.49E, 10.v.1979, I. Lansbury (ANIC); 5♂, 4♀ macr., 4 miles SW of Finnis R. Station HS, 12.53S 130.32E, 28.vii.1971, T. Weir & A. Allwood (ANIC); 1♂ apt., 1♀ macr., Arnhem Highway, nr Mary R., grassy pools, CL0130, 12.54S 131.38E, 17.v.1979, I. Lansbury (ANIC); 2♀ macr., Lake Bennett area, 25 km SE Manton Dam, freshwater pool, 13.00S 131.17E, 29–30.xii.1979, M.B. Malipatil (NTM); 3♂, 6♀ macr., Giyamungkurr (Black Jungle Spring), Kakadu NP, narrow billabong, Pandanus, grass, 13.03S 132.10E, 14.vii.1994, T. Weir & A. Roach (ANIC); 1♂ macr., 46 km WSW of Mt Cahill, South Alligator R., 13.03S 132.19E, 19.v.1973, M.S. Upton (ANIC); 1♀ macr., Tjaynera Falls (Sandy Ck Falls), Litchfield Nat. Pk, flowing creek, shade, 13.15S 130.47E, 17.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., 1♂, 2♀ macr., U.D.P. Falls, in billabong, 13.26S 132.25E, 18–19.vii.1980, M.B. Malipatil (NTM); 1♂ macr., Adelaide R. Crossing, Daly R. Road, 13.29S 131.04E, 10.viii.1980, M.B. Malipatil (NTM); 1♂, 1♀ macr., Daly R., mv light, 13.45S 130.42E, 9–10.viii.1980, M.B. Malipatil (NTM); 1♂, 6♀ macr., Red Lily Lagoon nr Daly R., 13.45S 130.42E, 9.viii.1980, M.B. Malipatil (NTM); 2♂ macr., 10 mi E of Daly R., at light, 13.45S 130.50E, 28.vi.1972, B.K. Head (SAM); 1♀ macr., Douglas Hot Springs Nature Park, Douglas R, pools in flowing river, algal, 13.46S 131.26S 20.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Umbrawarra Gorge Nature Park, flowing creek, large rock pools, sandy bottom, 13.58S 131.42E, 20.vii.1994, T. Weir & A. Roach (ANIC); 9♂, 4♀ apt., 1♀ macr., Cockatoo Lagoon, Keep R. NP, deep billabong, water lillies, fringing, 15.59S 129.02E, 23.vii.1994, T. Weir & A. Roach (ANIC). **Queensland:** 1♂, 2♀ apt., 2 nymphs, 21 km W by N of Bertiehaugh, water sweep, billabong, 12.10S 142.19E, 14.viii.1993, P. Zborowski & J. Balderson (ANIC); 1♀ apt., Schramm Ck, water sweep, 12.22S 142.37E, 17.viii.1992, P. Zborowski & J. Cardale (ANIC); 3♂, 2♀ macr., Wenlock R., Stone Crossing, 12.23S 142.10E, 14.viii.1993, P. Zborowski & J. Balderson (ANIC); 2♂, 1♀ apt., 4 km W of Moreton, water sweep, 12.28S 142.36E, 21.viii.1992, P. Zborowski & J. Cardale (ANIC); 1♂, 1♀ apt., Willum Swamp near Weipa, 12.40S 142.00E, 7.xii.1994, B. Herbert (ANIC); 4♂, 2♀ apt., Willum swamp, near Weipa, 12.40S 142.00E, 21.ix.1994, B. Herbert & C. Agcopra (ANIC); 1♀ macr., Iron Range, 12.44S 143.17E, 11–17.v.1968, G. Monteith (ANIC); 1♀ apt., Archer R., stagnant rocky pools, 13.26S 142.19E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 12♂, 29♀ macr., Langi Lagoon, Mungkan Kandju NP, at light, open forest, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 3♂, 3♀ apt., 1♂, 2♀ macr., 3 nymphs, Langi Lagoon, Mungkan Kandju NP, perm. lagoon, clear, sticks, logs, lillies, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 11♂, 26♀ apt., 20 nymphs, same locality data as holotype, 13.31S 142.27E (ANIC); 3♂, 3♀ apt., 1♂ macr., 2 nymphs, 10 km WNW of Rokeby (Mango Lagoon), lagoon with rocks at edge, 13.38S 142.35E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 2♀ apt., Lakefield Nat. Pk, 15 km S by W Marina Pl (Sweetwater Lake), lagoon with vegetation, 14.41S 143.50E, 28.x.1992, T. Weir & P. Zborowski (ANIC); 2♂, 2♀ apt., Normanby Riv, Lakefield NP (Orange Plain, waterhole with debris and vegetation, 14.43S 144.10E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ apt., 1♂, 4♀ macr., Dead Horse Ck, water sweep, 15.05S 143.43E, 16.vi.1993, P. Zborowski & I. Naumann (ANIC); 2♂, 9♀ macr., Hann R., 110 km S of Coen, 15.11S 143.52E, 27.vi.1970, J.C. Le Souef (MV); 1♀ macr., Hann R., 50 miles N of Laura, 15.11S 143.52E, x.1969, B. Cantrell (ANIC); 4♂, 4♀ apt., 2 nymphs, Petersen Ck, Lake Tinaroo, 17.15S 145.34E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♀ macr., Frenchmans Ck, via Rockhampton, 23.21S 150.34E, 15.iv.1969, T. Weir (ANIC, UQIC); 1♂ apt., Dawson R. at Capricorn Highway, 23.48S 149.46E, 5.iv.1969, T. Weir (ANIC). **Western Australia:** 2♂, 7♀ macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common

& M.S. Upton (ANIC); 1♀ macr., 4 km S by W Mining Camp Mitchell Plateau, CALM Site 9/1, 'The Crusher', at light, 14.52S 125.50E, 2–6.vi.1988, I.D. Naumann (ANIC).

Microvelia (Pacifiovelia) kakadu, sp. nov.

Material examined

Holotype. Apterous ♂, labelled '15.45S 129.05E GPS, Stop No. 1, Jarnarm Walks Keep Riv. NP, N[orthern]T[erritory], 29 July 1994, T. Weir, A. Roach' and 'small stagnant pools in creek bed, long fringing grass' (ANIC).

Paratypes. **Northern Territory:** 3♀ macr., 7 km NWbyN of Cahills Crossing, East Alligator R., 12.23S 132.56E, 27.v.1973, M.S. Upton (ANIC); 1♀ apt., 1♀ macr., Kakadu Nat. Pk, Saucery Rock, near Cannon Hill, 12.23S 132.57E, 28.iii.1980, M.B. Malipatil (NTM); 1♀ macr., Cahills Crossing, East Alligator R., at light, 12.26S 132.58E, 29.v.1973, E.G. Matthews (ANIC); 1♂ macr., Noonamah (as Noonama), 12.38S 131.04E, vii.1969, LeSouef (NTM); 2♀ apt., 2♂, 2♀ macr., Mamukala, 29 km WbyN Jabiru, Kakadu NP, shallow billabong, grassy edges, water l, 12.39S 132.34E, 15.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 2♀ macr., South Alligator Inn, 12.40S 132.30E, 14.v.1983, J. T. Doyen (ANIC); 3♂ macr., Jabiru East (Retention Pond No 1), Kakadu NP, man made pond, grassy edges, 12.40S 132.54E, 15.vii.1994, T. Weir & A. Roach (ANIC); 3♀ apt., 12 km NNW of Mt Cahill, 12.46S 132.39E, 15.vi.1973, T. Weir & T. Angeles (ANIC); 2♂ macr., 16 km E by N of Mt Cahill, 12.50S 132.51E, 13.vi.1973, T. Weir & T. Angeles (ANIC); 2♀ macr., Lake Bennett area, 25 km SE Manton Dam, freshwater pool, 13.00S 131.17E, 29–30.xii.1979, M.B. Malipatil (NTM); 1♀ apt., 2♀ macr., Tjaynera Falls (Sandy Ck Falls), Litchfield Nat. Pk, flowing creek, shade, 13.15S 130.47E, 17.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ macr., Red Lily Lagoon nr Daly R., 13.45S 130.42E, 9.viii.1980, M.B. Malipatil (NTM); 2♂, 4♀ macr., 10 mi E of Daly R., at light, 13.45S 130.50E, 28.vi.1972, B.K. Head (SAM); 37♂, 46♀ apt., 7♂, 12♀ macr., same locality data as holotype, 15.45S 129.05E (ANIC); 1♂ macr., Negri R. Xing on Duncan Highway, 17.05S 129.00E, 15.xi.1984, M. Malipatil (NTM). **Queensland:** 9♂, 1♀ apt., 12 nymphs, Dinah Ck, water sweep, 12.37S 141.55E, 19.ii.1994, P. Zborowski (ANIC); 1♂, 2♀ macr., Langi Lagoon, Mungkan Kandju NP, at light, open forest, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 1♀ apt., 27 km NW by W of Rokeby, lagoon with rocks, vegetation, lillies, 13.31S 142.27E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ apt., Normanby Riv, Lakefield NP (Orange Plain, waterhole with debris and vegetation, 14.43S 144.10E, 29.x.1992, T. Weir & P. Zborowski (ANIC); 1♀ macr., Hann R., 110 km S of Coen, 15.11S 143.52E, 27.vi.1970, J.C. Le Souef (MV); 1♀ macr., Hann R., 73 km NW by W of Laura, 15.11S 143.52E, 27.vi.1986, T. Weir & A. Calder (ANIC); 4♂, 6♀ apt., Petersen Ck, Lake Tinaroo, 17.15S 145.34E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂ macr., Amphitheatre Springs 28 km NbyE Musselbro, spring fed pools, dark water, debris, algae, 18.21S 138.11E, 12.v.1995, T. Weir (ANIC); 1♂ apt., 1♀ macr., Ayr, stagnant water, 19.34S 147.24E, 1.vi.1953, T.E. Woodward (UQIC, ZMUC); 2♂, 2♀ apt., Hedlow Ck, 17 km W Rockhampton, 23.13S 150.37E, 27.iv.1969, T. Weir (ANIC, UQIC); 1♀ apt., Emu Park, freshwater lagoon, 23.16S 150.50E, 27.iv.1969, T. Weir (ANIC, UQIC); 1♀ apt., Limestone Ck, 10 mi W Rockhampton, 23.17S 150.35E, 27.iv.1969, T. Weir (ANIC, UQIC). **Western Australia:** 1♂, 1♀ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 22 macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton

(ANIC); 1♀ macr., 4 km SbyW of Mining Camp, Mitchell Plat., at light, stop 17, 14.52S 125.50E, 13.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 1♂ macr., 4 km S by W Mining Camp Mitchell Plateau, CALM Site 9/1, 'The Crusher', at light, 14.52S 125.50E, 2–6.vi.1988, I.D. Naumann (ANIC).

Microvelia (Picaultia) douglasi Scott, comb. nov.

Material examined

Northern Territory: 1♀ macr., Melville Island, Pickertaramoor, 11.45S 130.53E, 23.iv.1976, T. Weir (ANIC); 1♂, 1♀ macr., Cooper Ck, 19 km EbyS Mt Borradaile, 12.06S 133.04E, 5.vi.1973, M.S. Upton (ANIC); 1♀ macr., Birraduk Ck, 18 km E by N of Oenpelli, 12.16S 133.13E, 4.vi.1973, T. Weir & A. Allwood (ANIC); 1♀ macr., East Alligator R., Oenpelli, 12.19S 133.03E, 20.xi.1948, J.E. Bray (AM); 4♀ macr., 7 km NWbyN of Cahills Crossing, East Alligator R., 12.23S 132.56E, 27.v.1973, M.S. Upton (ANIC); 23♂, 16♀ macr., Holmes Jungle Nature Park, Darwin, shaded slow flowing stream, closed forest, 12.24S 130.56E, 10.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Cahills Crossing, East Alligator R., at light, 12.26S 132.58E, 29.v.1973, E.G. Matthews (ANIC); 1♀ macr., Port Darwin, 12.27S 130.48E, date and collector unknown (SAM); 1♀ macr., Darwin, 12.27S 130.50E, 1–18iv.1980, M.B. Malipatil (NTM); 1♂ macr., Darwin, 12.27S 130.50E, 19.vi.1969, J.C. Le Souef (MV); 1♀ macr., Swim Ck Crossing, Point Stuart Station, 12.31S 131.51E, 10–13.x.1971, T. Weir & A. Allwood (ANIC); 1♀ macr., Coastal Plains Res. Stn, CSIRO, near Darwin, at light, 12.34S 131.18E, 6.v.1966, E.C.B. Langfield (ANIC); 1♀ macr., Fogg Dam, 12.34S 131.18E, 5.iv.1980, M.B. Malipatil (NTM); 1♀ macr., Magela Ck, 1 km NNW of Mudginberri H.S., 12.36S 132.52E, 25.v.1973, T. Weir & N. Forrester (ANIC); 1♂ macr., Mudginberri Station, via Jim Jim, 12.36S 132.52E, 19.viii.1971, T. Weir & A. Allwood (ANIC); 1♂ macr., South Alligator Inn, 12.40S 132.30E, 14.v.1983, J. T. Doyen (ANIC); 2♂ macr., Georgetown Billabong, Magela Ck, Kakadu, billabong with water lillies & vegetation, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Magela Ck, Kakadu Nat. Pk, still pools in sandy creek bed, 12.41S 132.56E, 11.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 1♀ apt., 2♀ macr., Kakadu Nat. Pk, Malabanbandju Ck, on Pine Ck Road, 8 km S of Arnhem Hwy, 12.43S 132.48E, 26.iii.1980, M.B. Malipatil (NTM); 1♂, 1♀ macr., Baroalba Spring, berlesate ANIC 470, rainforest, 12.47S 132.51E, 20.xi.1972, R.W. Taylor (ANIC); 6♂, 5♀ macr., 16 km E by N of Mt Cahill, 12.50S 132.51E, 13.vi.1973, T. Weir & T. Angeles (ANIC); 1♂ macr., 16 km EbyN of Mt Cahill, 12.50S 132.51E, 16.xi.1972, D.H. Colless (ANIC); 1♂, 1♀ macr., 19 km E by N of Mt Cahill, 12.50S 132.52E, 14.vi.1973, T. Weir (ANIC); 7♂, 3♀ macr., 3 nymphs, Anbangbang Billabong, 8 km E of Mirray (M, Kakadu NP, shallow billabong, grassy edg, 12.52E 132.48E, 13.vii.1994, T. Weir & A. Roach (ANIC); 12♂, 14♀ macr., 4 miles SW of Finnis R. Station HS, 12.53S 130.32E, 28.vii.1971, T. Weir & A. Allwood (ANIC); 1♂, 1♀ macr., Lake Bennett area, 25 km SE Manton Dam, freshwater pool, 13.00S 131.17E, 29–30.xii.1979, M.B. Malipatil (NTM); 2♀ macr., Finnis R. xing, 9 km WNW Batchelor, shallow water, lots of floating leaves, 13.01S 130.57E, 17.vii.1994, T. Weir & A. Roach (ANIC); 1♂ apt., 12♂, 21♀ macr., Giyamungkurr (Black Jungle Spring), Kakadu NP, narrow billabong, Pandanus, grass, 13.03S 132.10E, 14.vii.1994, T. Weir & A. Roach (ANIC); 3♂♀ macr., Bamboo Ck Tin Mine, Litchfield Nat. Pk, flowing creek, shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC); 2♂, 1♀ macr., Tortilla Flats (Sixty Mile Rice Project), ex Paragrass, 13.05S 131.06E, 6.ix.1983, J. Waldeck (NTM); 3♂, 3♀ macr., Tjaynera Falls (Sandy Ck Falls), Litchfield Nat. Pk, flowing creek, shade, 13.15S 130.47E, 17.vii.1994, T. Weir & A. Roach (ANIC); 2♀ macr.,

Reynolds R. xing, Litchfield NP, pools in flowing river, Pandanus, grass, 13.18S 130.45E, 18.vii.1994, T. Weir & A. Roach (ANIC); 5♂, 2♀ macr., U.D.P. Falls, mv light, 13.26S 132.25E, 18–19.vii.1980, M. Malipatil (NTM); 1♂ macr., Daly R., mv light, 13.45S 130.42E, 9–10.viii.1980, M.B. Malipatil (NTM); 2♂, 8♀ macr., 10 mi E of Daly R., at light, 13.45S 130.50E, 28.vi.1972, B.K. Head (SAM); 1♂ macr., Roper R. at Mulurark, Elsey NP, limestone rocks in flowing river, algal, 14.57S 133.12E, 25.vii.1994, T. Weir & A. Roach (ANIC); 3♂ macr., Salt Ck, Roper Hwy, 21 km SSE Mataranka, flowing creek, muddy edges, rocks, calcium, 15.01S 133.14E, 25.vii.1994, T. Weir & A. Roach (ANIC); 1♂ apt., Stop No1, Jarnarm Walks, Keep R. NP, small stagnant pools in creek bed, grass, 15.45S 129.05E, 23.vii.1994, T. Weir & A. Roach (ANIC). **Queensland:** 1♂ macr., Lockerbie Scrub, light trap, 64.063, 10.48S 142.28E, 29–31.v.1984, M.M. Harris (ANIC); 4♂, 3♀ macr., Bamaga, Cape York Pen., 10.53S 142.44E, 15–18.vi.1969, G.B. Monteith (UQIC); * holotype*6♂, 5♀ apt., 1♂ macr., Burster Ck, reedy pond in creek, 10.56S 142.23E, 17 Oct. 1992, T. Weir & P. Zborowski (ANIC); 2♀ apt., 1♂ macr., Jardine R., 11.09S 142.22E, G.B. Monteith (UQIC); 1♀ macr., 11 km ENE of Mt Tozer, mv light, 12.43S 143.18E, 9.vii.1986, J.C. Cardale (ANIC); 1♀ macr., Langi Lagoon, Mungkan Kandju NP, at light, open forest, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 1♂, 1♀ apt., 1♂, 1♀ macr., Bobs Lagoon, Mungkan Kandju NP, perm. lagoon, clear, floating vegetation, 13.27S 142.44E, 3.vii.1998, T. Weir (ANIC); 1♀ apt., 1♀ macr., 27 km NW by W of Rokeby, lagoon with rocks, vegetation, lillies, 13.31S 142.27E, 27.x.1992, T. Weir & P. Zborowski (ANIC); 1♂, 1♀ macr., Silver Plains, Cape York, 13.59S 143.33E, v. –vi.1958, Darlington (SAM); 1♂ macr., Saltwater Ck, water sweep, 14.47S 143.30E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 3♀ macr., Mt Webb Nat. Pk, berlesate ANIC 717, rainforest, 15.04S 145.07E, 27–20.iv.1981, A. Calder & J. Feehan (ANIC); 2♂, 1♀ macr., McIvor R., 40 km N Cooktown, 15.09S 145.06E, 7.v.1970, G.B. Monteith (UQIC); 3♀ macr., Hann R., 110 km S of Coen, 15.11S 143.52E, 27.vi.1970, J.C. Le Souef (MV); 6♂, 2♀ macr., West Normanby R., 40 km W Cooktown, 15.18S 144.51E, 5.v.1970, G.B. Monteith (UQIC); 1♂ macr., Kennedy R. Xing, temporary pool in dry river bed, sandy, 15.26S 144.11E, 16.vi.1992, T. Weir (ANIC); 1♀ macr., Kowanyama, truck trap, 15.28S 141.45E, 23–26.ix.1975, Q.I.M.R. (UQIC); 1♀ macr., Trevethan Ck, water sweep, 15.37S 145.13E, 25.iv.1994, P. Zborowski (ANIC); 1♂, 1♀ macr., Gap Ck, 5 km ESE of Mt Finnigan, at light, 15.50S 145.20E, 13–16.v.1981, I.D. Naumann (ANIC); 1♂ macr., Bramston Beach, nr Innisfail, netting from car, canefields, 17.19S 146.00E, 12.vii.1984, B. Halliday (ANIC); 1♀ apt., Townsville, Institute of Marine Science, creek in thin dry forest, CL0151, 19.11S 146.46E, 30.v.1979, I. Lansbury (ANIC). **Western Australia:** 1♂, 2♀ macr., Drysdale R., Drysdale R. survey 1975, Site C5, 14.39S 126.57E, 18–21.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 15♂, 24♀ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 16♂, 19♀ macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 1♂ macr., 4 km SbyW of Mining Camp, Mitchell Plat., at light, stop 17, 14.52S 125.50E, 13.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 5♂, 5♀ macr., Drysdale R., Drysdale Survey 1975, Site A1, 15.02S 126.55E, 3–8.viii.1975, I.F.B. Common & M.S. Upton (ANIC).

Microvelia (Picaultia) justi, sp. nov.*Material examined*

Holotype. Macropterous ♂, labelled '14.52S 125.50E', W[estern] A[ustralia], 4 km SbyW of Mining Camp, Mitchell Plateau, Kimberley Dist. 13 May 1983, D. Rentz & J. Balderson, Stop 17' (ANIC).

Paratypes. **Northern Territory:** 1♂, 1♀ macr., Bamboo Ck Tin Mine, Litchfield Nat. Pk, flowing creek, shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC). **Queensland:** 1♂ macr., Cockatoo Ck, flight intercept trap, 11.39S 142.27E, 20.iv–20.v.1994, P. Zborowski (ANIC); 1♀ macr., Langi Lagoon, Mungkan Kandju NP, at light, open forest, 13.27S 142.42E, 29.vi–5.vii.1998, T. Weir (ANIC); 2♂ macr., Rocky R. via Coen, 13.49S 143.28E, 7.xi.1969, B. Cantrell (ANIC); 1♀ macr., Julatten, rainforest creek, CLO138, 16.36S 145.20E, 21.v.1979, I. Lansbury (ANIC); 1♀ macr., Kuranda, 16.49S 145.38E, xii.1926, Hale & Tindale (SAM); 1♂ macr., Lacey's Ck, Mission Beach, 17.51S 146.04E, 21.iv.1970, G.B. Monteith (UQIC); 1♀ macr., Kirrama SF, 15 km W of Kennedy, QM Berlesate 589, rainforest litter, 800 m, 18.13S 145.48E, 8.v.1983, D.K. Yeates (QM). **Western Australia:** 1♀ macr., 10 km NWbyN Mining Camp, Mitchell Plateau, at light, stop 15, 14.45S 125.47E, 11–17.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 1♂, 2♀ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 1♂ macr., Carson Escarpment, Drysdale R. Survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 1♀ macr., 4 km S by W Mining Camp Mitchell Plateau, CALM Site 9/1, 'The Crusher', at light, 14.52S 125.50E, 2–6.vi.1988, I.D. Naumann (ANIC); 9♂, 9♀ macr., same locality data as holotype, 14.52S 125.50E (ANIC).

Microvelia (Picaultia) paramega, sp. nov.*Material examined*

Holotype. Apterous ♂, labelled '15.45S 129.05E GPS, Stop No. 1, Jarnarm Walks Keep Riv. NP, N[orthern] T[erritory], 23 July 1994, T. Weir, A. Roach' and 'small stagnant pools in creek bed, long fringing grass' (ANIC).

Paratypes. **Northern Territory:** 1♂ apt., 6♂, 5♀ macr., 1 km N of Cahills Crossing (East Alligator R.), 12.25S 132.58E, 7.vi.1973, T. Weir & A. Allwood (ANIC); 1♀ macr., Mudginberri Station, via Jim Jim, 12.36S 132.52E, 19.viii.1971, T. Weir & A. Allwood (ANIC); 9♀ macr., South Alligator Inn, 12.40S 132.30E, 14.v.1983, J. T. Doyen (ANIC); 2♂ apt., 4♂, 5♀ macr., Gubarra (Baroalba Springs), Kakadu NP, shaded pools, flowing ck, closed forest, 12.50S 132.53E, 13.v.1994, T. Weir & A. Roach (ANIC); 4♂, 14♀ macr., Koongarra, nr Jabiru, small pool, CL0115, 12.52S 132.05E, 15.v.1979, I. Lansbury (ANIC); 3♀ macr., Lightning Dreaming Gorge, 25 km E by S of Mt Cahill, 12.55S 132.56E, 12.vi.1973, T. Weir (ANIC); 2♀ apt., Giyamungkurr (Black Jungle Spring), Kakadu NP, narrow billabong, Pandanus, grass, 13.03S 132.10E, 14.vii.1994, T. Weir & A. Roach (ANIC); 1♀ macr., Bamboo Ck Tin Mine, Litchfield Nat. Pk, flowing creek, shaded pools, 13.04S 130.43E, 18.vii.1994, T. Weir & A. Roach (ANIC); 1♀ apt., 3♂, 2♀ macr., Kakadu Nat. Pk, Deaf Adder Gorge, 13.04S 132.56E, 27.iii.1980, M.B. Malipatil (NTM); 1♂, 1♀ macr., U.D.P. Falls, 67 miles E of Pine Ck, 13.26S 132.25E, 8.vii.1971, T. Weir & A. Allwood (ANIC); 2♀ apt., 1♂ macr., Umbrawarra

Gorge Nature Park, flowing creek, large rock pools, sandy bottom, 13.58S 131.42E, 20.vii.1994, T. Weir & A. Roach (ANIC); 1♂, 3♀ macr., Katherine Gorge Nat. Pk, Butterfly Gorge, freshwater stream, 14.19S 132.27E, 5.xii.1980, M.B. Malipatil (NTM); 6♂, 11♀ apt., 7♂, 6♀ macr., same locality data as holotype, 15.45S 129.05E (ANIC). **Queensland:** 1♀ macr., Cockatoo Ck, flight intercept trap, 11.39S 142.27E, 19.ii–20.iii.1994, P. Zborowski (ANIC); 1♀ macr., Cockatoo Ck, Flight intercept trap, 11.39S 142.27E, 22.i–19.ii.1994, P. Zborowski (ANIC); 1♂, 1♀ macr., 3 nymphs, Bertie Ck, water sweep, 11.45S 142.35E, 17.iii.1994, P. Zborowski (ANIC); 1♂ macr., Heathlands, F.I.T. ANIC 1240, closed scrub(=heath), 11.45S 142.35E, 1–22.iii.1992, P. Feehney (ANIC); 4♂, 4♀ macr., Heathlands, FIT ANIC 1239, closed scrub (=heath), 11.45S 142.35E, 26.i. – 29.ii.1992, P. Feehney (ANIC); 2♂, 1♀ macr., Heathlands, in and on still water ponds (man made), 11.45S 142.35E, 15–26. Jan. 1992, T. Weir & I.D. Naumann (ANIC); 28♂, 38♀ macr., Heathlands, small still pools (man made), 11.45S 142.35E, 20–22.vi.1992, T.A. Weir (ANIC); 1♀ macr., Catfish Ck, water sweep, 12.08S 142.16E, 11.ix.1993, P. Zborowski & S. Shattuck (ANIC); 7♂, 6♀ apt., 17♂, 7♀ macr., 1 nymph, 9 km NNW of Lockhart R., closed forest, stagnant pools in dry creek bed, 12.43S 143.18E, 25.x.1992, T. Weir & P. Zborowski (ANIC); 1♂ macr., 3 km ENE of Mt Tozer, 12.44S 143.14E, 28.vi–4.vii.1986, T. Weir & A. Calder (ANIC); 2♀ macr., Iron Range, Cape York Pen., 12.44S 143.17E, 1–4.v.1973, G.B. Monteith (QM); 1♀ macr., West Claudie R, Iron Range, flight trap, rainforest, 12.45S 143.14E, 3–10.xii.1985, G. Monteith & D. Cook (QM); 12 apt., 3♂, 3♀ macr., West Claudie R., closed forest, still rocky pools, non-flowing stream, 12.45S 143.14E, 24.x.1992, T. Weir & P. Zborowski (ANIC); 33♂, 30♀ macr., 11 km WbyN of Bald Hill, McIlwraith Range, search party campsite, 520 m, 13.44S 143.20E, 27.vi–12.vii.1989, T.A. Weir (ANIC); 1♀ apt., 14♂, 17♀ macr., Rocky R. via Coen, 13.49S 143.28E, 7.xi.1969, B. Cantrell (ANIC); 1♀ macr., Saltwater Ck, water sweep, 14.47S 143.30E, 26.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♀ macr., Dead Horse Ck, water sweep, 15.05S 143.43E, 16.vi.1993, P. Zborowski & I. Naumann (ANIC); 1♀ macr., Hann R., 110 km S of Coen, 15.11S 143.52E, 27.vi.1970, J.C. Le Souef (MV); 2♂, 1♀ macr., Miller's Crossing 30 ml N. of Cooktown, 15.15S 145.06E, 24–25.xi.1965, G. Monteith (UQIC); 1♂ macr., Emu Ck, 720 m, site Haig 14, 17.06S 145.32E, 1.viii.1992, E. Nielsen & A. Gillison (ANIC); 1♂ macr., Charmillin Ck Xing, Tully Falls Rd, pitfalls & intercept traps, 950 m, 17.42S 145.31E, 5.1.1990, Monteith, Thompsom, Janetzki (QM); 1♂, 3♀ macr., Amphitheatre Camp 27 km NbyE Musselbrook, small pools, rocky, sandy, debris, clear, 18.21S 138.10E, 13.v.1995, T. Weir (ANIC); 18♂, 25♀ apt., 14♂, 23♀ macr., Amphitheatre Springs 28 km NbyE Musselbro, spring fed pools, dark water, debris, algae, 18.21S 138.11E, 12.v.1995, T. Weir (ANIC); 2♂, 1♀ macr., Alligator Ck, Bowling Green Nat. Pk, bucket light trap, 19.26S 146.57E, 20.v.1999, L. Kaila (ANIC); 1♀ macr., Boggomoss 30 via Taroom, pitfall traps, 058, T34392, 25.29S 150.08E, i.1997, D. Cook & G. Monteith (QM). **Western Australia:** 9♂, 13♀ macr., Drysdale R., Drysdale R. survey 1975, Site C5, 14.39S 126.57E, 18–21.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 1♀ macr., 10 km NWbyN Mining Camp, Mitchell Plateau, at light, stop 15, 14.45S 125.47E, 11–17.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 9♂, 1♀ macr., Mining Camp, Mitchell Plateau, Kimberley, at light, stop 7, 14.49S 125.50E, 9–19.v.1983, D. Rentz & J. Balderson (ANIC); 9♂, 22♀ macr., Carson Escarpment, Drysdale R. survey 1975, Site B1, 14.49S 126.49E, 9–15.viii.1975, I.F.B. Common & M.S. Upton (ANIC); 2♀ macr., 4 km S by W Mining Camp Mitchell Plateau, CALM Site 9/1, 'The Crusher', at light, 14.52S 125.50E, 2–6.vi.1988, I.D. Naumann (ANIC); 11♀ macr., 4 km SbyW of Mining Camp, Mitchell Plat., at light, stop 17, 14.52S 125.50E, 13.v.1983, D.C.F. Rentz & J. Balderson (ANIC); 1♂ macr., Prince Frederick Harbour, 'Marun', CALM Site 8/4, at light, 15.00S 125.21E, 6–11.vi.1988, I.D. Naumann (ANIC); 1♀ macr., Charnley

R., 2 km SW Rolly Hill, CALM Site 25/2, at light closed forest m, 16.22S 125.12E, 16–20.vi.1988, I.D. Naumann (ANIC).

Microvelia (Picaultia) cassis, sp. nov.

Material examined

Holotype. Apterous ♂, labelled 'Cowarra Ck, Houston Mitchell Drive, 31.32.17S 152.48.11E, Edge, 10 Oct.1995' and 'NSW EPA Survey, MRHI HAST 01, EPA 10227, J. King' (AM).

Paratypes. **New South Wales:** 1♂, 1♀ apt., same locality data as holotype, 31.32.17S 152.48.11E (AM); 1♀ apt., Cowarra Ck, Houston Mitchell Drive, 31.32.17S 152.48.11E, Edge, 10.x.1995, NSW EPA Survey, MRHI HAST 01, EPA 10188, F. Laurenson (AM); 1♂ apt., Tommy Owen's Ck, Brimbin Res., 31.49.24S 152.26.30E, Edge, 11.x.1995, NSW EPA Survey, MRHI MANN 07, EPA 19032, N. Waddell (AM).