

**New data on Australian species of the genus *Macroscytus*
(Hemiptera: Heteroptera: Cydnidae)**

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Abstract. New distribution data for six Australian species of the genus *Macroscytus* Fieb. are presented. First state records are provided for *M. australis* (Northern Territory, Western Australia, Norfolk Island), *M. australoides* (Northern Territory, Victoria), and *M. pseudaustralis* (South Australia, Northern Territory and Victoria).

Key words: Hemiptera, Heteroptera, Cydnidae, *Macroscytus*, faunistics, new records, Australia, Norfolk Island, Australian Faunal Directory.

Introduction

The genus *Macroscytus* Fieber includes 56 species distributed only in the Old World regions, with 12 species known from Australia (Lis 1999, 2000, 2003).

During our studies on the Cydnidae borrowed from different institutions we have found many Australian specimens not considered in the revisional study on the genus (Lis 2000). They represented six species; for three of them we provide new state records.

The material used in the study has been borrowed from the following institutional collections (its acronyms used in the text are given in parentheses):

- (1) the Natural History Museum, London, UK (BMNH);

- (2) Bernice P. Bishop Museum, Honolulu, USA (BPBM);
- (3) Department of Primary Industries, Mareeba, Australia (DPI);
- (4) E. Heiss Collection, Tirols Landesmuseum, Innsbruck (EHC);
- (5) Museum of Zoology, Lund University, Sweden (MZLU);
- (6) National Museum of Victoria, Melbourne, Australia (NMV);
- (7) Museums and Galleries of the Northern Territory, Darwin, Australia (NTM);
- (8) South Australian Museum, Adelaide, Australia (SAM);
- (9) Queensland Museum, Brisbane, Australia (QM);
- (10) University of Queensland Insects Collection, Brisbane, Australia (UQIC);
- (11) Western Australian Museum, Perth, Australia (WAM); Zoologische Staatssammlung München, Germany (ZSMC).

Distribution data for each species follow Lis (1999, 2000).

New records

***Macroscytus annulipoides* J. A. Lis, 1999**

Material examined

Queensland: 1 ex., Iron Range, Cape York Pen., N. Qld, 26 May - 2 June 1971, B. K. Cantrell (UQIC); 1 ex., Ec Qld., Sarina, 31. I - 1. II. 64, J. Sedlacek, M.V. Light Trap (BPBM); 1 ex., Mt. Webb Nat. Park, 50 km N. Cooktown, Qld., 11-14 July 1976, G. B. & S. R. Monteith (QM).

Distribution

Endemic to Australia (known only from Queensland).

***Macroscytus arnhemicus* J.A. Lis, 1999**

Material examined

Northern Territory: 1 ex., N. T., Victoria R., 7km W Timber Ck., Police Stn, M.V. Light, 16Nov.1984, M. Malipatil (NTM).

Distribution

Endemic to Australia (known only from Queensland, and Northern Territory).

***Macroscytus australis* (Erichson, 1842)**

Material examined

New South Wales: 2 exx., Sydney, N. S. W., 1900-1903, J. J. Walker, 1910-384, British Museum, London 5468 (BMNH); 1 ex., N. S. W., Wilcannia, at light. 22 Jan. 1974, G. F. Gross (SAM); 1 ex., N. S. W., Broken Hill, 11 November 1976, G. F. Gross (SAM); 3 exx., Tooloom Rge., C2000'N. N. S. W., May '58, Darlington (SAM).

Northern Territory: 1 ex., Australia N.T., Ayers Rock, 29 X 89, Heiss (EHC).

Queensland: 1 ex., Mackay, Qld., II 1964, J. E. Dunwoody (UQIC); Bakerville, N. Qld., 1 ex., 20-XII- 1969, 1 ex., 22-XII-1969, J. D. Brown, water trap (DPI); 1 ex., Bakerville N. Qld., March 1970, J. H. Barrett, ex oil bath (DPI); 2 exx., Atherton Q., 3-XII-1972, J. A. Barrett, Water trap (DPI); 5 exx., 1 ex., under dung (marname), Atherton, 10-I-1973, J. H. Barrett (DPI); Tolga Q., x lettuce, 1-X-1970, J. H. Barrett (DPI); 1 ex., Lamington Nat., Pk., S. E. Qld., 17-21.V.1965, S. R. Curtis (UQIC); 1 ex., Gympie, Q., 9-V-1965, B. A. Mooney (UQIC); 1 ex., Blackhall, Qld., 27-II-1975, R. Easton (NMV); 2 exx., Cato Is., Soomls. E.N.E. Brisbane, July 1965, F.J. Briggs (NMV); 2 exx., Blackhall, Qld., 27.II.1975, R. Easton (NMV); 1 ex., Ferntree, Cooly, 22.9.10, D. by F. P. Spry, 5.10.22 (NMV); 1 ex., Mt. Tambourine, Q., A. M. Lea (SAM).

South Australia: 2 exx., L. Torrens nr Beda Hill, 31°51' 137°37', Pitfall 4-5 Dec. 1989, J.A. Forrest (SAM); 2 exx., Underdale, S.A. 12-13 Feb. 1966, G. F. Gross (SAM); 1 ex., S. Aust., Lake Eyre N., Sulphur Pen., Maoigan, Gulf, 8 Nov. 1966, G. F. Gross (SAM); 1 ex., S. Aust. Mt. Lofty Rgs., Brown Hill Ck., litter, 27 July. 1978, P. J. M. Greenslade (SAM); 1 ex., S. Aust., Windy Crk., just below Aroona Dam, 10km SW Copley, at light, 24 Nov. 1975, G.F Gross (SAM); 1 ex., S. Aust., Eyre N. Madigan Gulf, dead on salt surface, 29 Oct. 1966, G.F. Gross (SAM); 1 ex., Morgan, S. Australia, A. M. Lea (SAM); 1 ex., Mt. Lofty Rgs., S. Australia, N. B. Tindale, in tussocks (SAM); 1 ex., S. Aust., Bridgewater Engelbrook, Res. Pitfall horth west slope, 8 Feb 1984, Euc. G. Baker (SAM); 1 ex., Coorong Shore, 2ml., NW Wood's well, S.A., under bushes, 13 Jan. 1971 (SAM); 1 ex., Owieandana, N Flinders Ra., Hale & Tindale (SAM); 1 ex., Darlington, S. A., 30 Jan. 1964, D. Burt (SAM); 4 exx., S. Aust., Cullyamurra WH, Coopers Creek, 140°50'E 27°42'S, pitfalls, 21-24 Sept. 1990, J. Shaw, ANZSES survey (SAM); 1 ex., S. Aust., Marion Gay, Yorke Pen., pit traps, 5 Nov. 1981, E. Matthews (SAM); 1 ex., S. Aust., SE 13km NW Frances pitfall, Euc. leucoxydon woodland, 7-10 Dec. 1993,

T. Croft, G. Carpenter (SAM); 1 ex., S. Aust. bet. L. Torrens (nr Beda Hill) and Bookaloo Siding, 4 & 6 Dec. 1989, vehicle net, J.A. Forrest (SAM); 1 ex., S. Aust., Callana, 26. May 1933, Tindale & Hackett (SAM).

Victoria: 1 ex., Grampians, Vic., 16. Dec. 1966, A. Meboiss (NMV).

Western Australia: 1 ex., Greenwood (Perth), 26 Jan. 1977, P.G. Kendrick (WAM); 4 exx., Capel, WA., Forrest Beach, 29 September '89, R. Patterson (WAM); 1 ex., W.A., Clover Dale Hasd, 32.15 S 116.41 E, 30-IV-1979, J.R. Hanley (NTM); 1 ex., Darlington (Perth), June 1976, G. H. Lowe (WAM); 2 exx., Bunbury, Big Swamp, 20 November 1985, among graminea, R. Patterson 144 (WAM); 1 ex., W. A., Lake Gwelup, 1-XII-1979, Hanley K. (NTM); 1 ex., Australien, WA 93, Stirling Rge, Toolbrunup, Pk. 1000m, 27.11.1987, M. Baehr (ZSMC); 1 ex., Bunbury, WA, Big Swamp, 20 November 1985, among graminea, R. Patteron T143 (WAM); 1 ex., Parmelia, near Kwinana, 2 Nov. 1987, A. E. De Jong (WAM); 1 ex., Capal, WA, Forrest Beach, 29 September '89, R. Patterson L99 (WAM); 1 ex., Rottnest Is., 22-24. XII. 1965, J. A. Grant, B. M. / CSIRO Expedition, B. M. 1973-346 (BMNH); 1 ex., Joondana (Perth), Western Australia, 19. Jan. 1984, C. Pergoloni (WAM); 1 ex., Applecross, W. Australia, G. H. Riley, 27.III.1965 (WAM); 1 ex., SW Australia, Tammin, 23-24.II.1952, T. Gislen (WAM).

Norfolk Island: 1 ex., Norfolk I. (SAM).

Distribution

Till now, from Australia recorded in New South Wales, Queensland, South Australia, Tasmania, and Victoria. Known also from Lord Howe Island, New Britain, New Caledonia, New Zealand, and Java (in Indonesia). **New to Norfolk Island, Australian Northern Territory and Western Australia.**

Macroscytus australoides J. A. Lis, 1999

Material examined

Queensland: SEQ: 25°25' S x 149°58' E, Taroom District, BS24, Vine Thicket on hill, 3 exx., 12 Nov 96 - Jan 1997, P. Lawless, pitfall 125, QM Reg. Nos. T35911, T35908, T35909, (QM), 3 exx., 10 Sep - 12 Nov 1996, P. Lawless, pitfall 124, QM Reg. Nos. T35883; T35885, T35882 (QM); 2 exx., SEQ: 25°27' S x 150°02' E, Taroom District, Boggomoss No. 8, 11 Nov 96- Jan 1997, OF, P. Lawless, Pitfall 103, QM Reg. No. T35877,

T35875 (QM); 1 ex., Aust: Qld: SE: Taroom District, Boggomoss 8, 12 Nov 1996, G. B. Monteith, QM Berlesate No. 914, 25°27' S x 150°02' E, open forest 180m, sieved leaf litter, QM Reg. No. T31360 (QM); Lake Broadwater via Dalby, S. E. QLD, 1 ex., 3 Jan- 25 Feb 1986, 2 exx., 19 Feb- 26 Mar 1985, 3 exx., 17 May- 24 Nov 1985, Qld Museum & M. Bennie, Pitfall traps (Site 1, Site 3, Site 5) (QM); 2 exx., SEQ: 25°27' S x 150°02' E, Boggomoss No. 8., via Taroom, 12-13 Nov 1996, G. B. Monteith, Dung Trap 076 (QM); 1 ex., Brisbane, 2. 4. 47, C. Hoey (UQIC); 1 ex., Australia: Qld, Rockhampton, 26-27. XI. 1967, J. & M. Sedlacek Collectors, Bishop (BPBM); 1 ex., Ellis Beach, N. Qld., 15. VIII. 1966, D. Smith (UQIC).

New South Wales: 1 ex., Macleay R[iver], Australia Helms Collection (BPBM); 1 ex., Sydney, N.S.W., 1910-1913, J. J. Walker, 1910-384, British Museum London (BMNH); 1 ex., Rozelle, N. S. W. 5. 2. 61, P. Reavell, British Museum, London 5468 (BMNH); 1 ex., N.S.W., Broken Hill, at light, 10 Nov 1976, G. F. Gross, S. Aust. Museum specimen (SAM); 1 ex., Narara NSW, 29- II-'73, ENT- 764, Museum of Victoria, Melbourne (NMV); 1 ex., Upper Williams R., N. S. W., Oct. 1926, Lea & Wilson, ENT- 764, Museum of Victoria, Melbourne (NMV); 1 ex., Calclavell, N. S. W., 15.10. 51. V. Robb, ENT- 764, Museum of Victoria, Melbourne (NMV).

Northern Territory: 1 ex., 12. 23S 132. 56E, 7km NW by N of Cahills Crossing, (East Alligator R.), N. T., 27 v. 1973, T. Weir & N. Forrester, 9201, Northern Territory Museum Specimen (NTM); 1 ex., 24. 04S 132. 44E, Palm Valley, Finke Gorge Nat. Pk., 10-12. VIII. 1974. NT, T. Weir & T. Angeles (NTM).

South Australia: 1 ex., S. Australia: York Town, 27. II. 1966, J. A. Grant, B. M./CSIRO Expedition, B. M. 1973-346 (BMNH); 1 ex., Sth Aust., 10km. S. W. of Strathalbyn, Mid Dec. 1974, P. B. McQuillan, S. Aust. Museum Specimen (SAM); 1 ex., Whyalla, S. A., 23. 8. U. J. D. S., ENT- 764, Museum of Victoria, Melbourne (NMV); 1 ex., S. Aust., Nr Agnes Creek Stn., 11 Oct. 1977, G. F. Gross, J. A. Forrest, S. Aust. Museum specimen (SAM); 2 exx., Sth. Aust., Normanville, 28 Jan 1973, C. A. Versteeg, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., 3.3km S Beachport, 37°28' 140°03', pitfall, 10 Nov. 1980, L. Queale, S. Aust. Museum specimen (SAM); 1 ex., Pittochery Stn., S. A., 10 Nov 1968, A. W. Forbes, S. Aust. Museum specimen (SAM); 1 ex., Murray Bridge, S. Aus., S. Aust. Museum specimen (SAM); 1 ex., S. Aust., Lake just E Coolarlow Bore, 21 Nov. 1975, GF Gross, S. Aust. Museum specimen

(SAM); 1 ex., S. Aust., Blackwood, 10 Sep 68, Noel McFarland, under weeds, S. Aust. Museum specimen (SAM); 1 ex., Yurgo, S. A., May 1956, M. H. Hopgood, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., K. I. Flinders Chase, Ravine des Casoars, nr ford, pitfall, 2-7 Nov 1990, E. G. Matthews & J. A. Forrest (SAM). **Victoria:** 1 ex., Upper Macalister, Rv above Howitt Plain, 22/Feb/1978, N. M. V. Survey Dept., G.R.E.S. Mc1 no., M. V. Light (NTM); 1ex., St. Albens, Victoria, J. E. Dixon, J. E. Dixon Collection, Don. Jan. 1940, ENT- 764, Museum of Victoria, Melbourne (NMV); 1 ex., Braybrook, Aug 1923, J. E. Dixon Collection, Don. Jan. 1940, ENT- 764, Museum of Victoria, Melbourne (NMV).

Western Australia: 1 ex., Applecross (Perth), 4 Feb. 1989, F. H. Uther Baker, Western Australian Museum Collection (WAM); 1 ex., Kings Park (Perth), Western Australia, 25 March 1992, R. Dixon & K. Keys, ex pitfall trap, lovekin burnt/logged area, Western Australian Museum Collection, 95/1103 (WAM).

Distribution

Endemic to Australia (South Australia, New South Wales, Queensland, Western Australia). However, the Australian Faunal Directory (Cassis et al. 2012) listed only South Australia for this species (basing on the species type material – see: Lis 1999), but subsequent data (Lis 2000) were not considered. **New to Northern Territory and Victoria.**

***Macroscytus piceus* (Westwood, 1837)**

Material examined

Western Australia: 1 ex., Eneabba (29°49' S, 115°16' E), W. Aust., 26. 12. 83, At light, R. P. McMillan (WAM).

Distribution

Known from Australia (Northern Territory, Queensland, South Australia, Tasmania, Western Australia), and Indonesia (Sumba Island).

***Macroscytus pseudaustralis* J. A. Lis, 1999**

Material examined

Western Australia: 1 ex., Walkaway, near Greenjugh, Western Australia, 28 Aug. 1979, R. P. McMillan, Western Australian Museum Col-

lection (WAM); 1 ex., WAM, Goldfields Surv., 9/1981, Yuinmery, pitfall, W.F. Humphreys et al., YJR 4 E. striatocalyx woodland, 28°33'25"S, 119°05'30"E, Western Australian Museum Collection (WAM); 1 ex., W. Australia, Emu Field, 300 ml. N. W. of Woomera, IX-X. 1953, F. L. Hill, Pres. by A. W. R. E., B. M. 1954- 173, British Museum, London 5468 (BMNH).

South Australia: 1 ex., S. Aust., 20km S Wirramima, at light, 2 Nov 1975, J. A. Herridge, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., 82.5 km NW Cook, pitfalls, 8 April 1984, 29°55'0" 130°2'0", Museum survey party, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., 1.4 km NW Walson bore, 33°43'50"S 139°32'50"E, October 1992, South Olary Plains Survey, S. Aust. Museum specimen (SAM); 1 ex., N. Mernamerna Ruins (N. G. Hawke), Birdsville Track, South Australia, 31. VIII. 1971, M. Archer, Western Australian Museum Collection (WAM); 1 ex., S. Aust., Great Vict. Desert, 8am, 60km S Vokes Hill Cnr., on ground, 29°10' 130°38', 28 Aug. 1980, P. Greenslade, S. Aust. Museum specimen (SAM); 1 ex., Sandhills, Normanville beach, 3rd Feb. 1965, G. F. Gross, S. Aust. Museum Specimen (SAM); 1 ex., S. Aust., Venus Bay, by hand, 21-30 Sept 1993, SEG Survey, S. Aust. Museum specimen (SAM); 1 ex., Flinders I., S. Australia, F. Wood Jones, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., W of Carappee, Eyre Pen., 20 Oct. 1964, G. F. Gross, S. Aust. Museum specimen (SAM); 1 ex., S. Aust., 7.6 km NNE Bullock dam, 33°21'20"S 139°43'40"E, 23rd October, 1992, South Olary Plains Survey, S. Aust. Museum specimen (SAM).

Northern Territory: 1 ex., N. T., Daly River, 13.45 S 130.42 E, M. V. Light, 9-10 Aug 1980, M. B. Malipatil, Northern Territory Museum Specimen (NTM); 1 ex., N. T., Alice Springs, 35D-65G, 20-24. XI. 1968, N. L. H. Krauss Coll., Bishop Museum (BPBM).

Victoria: 1 ex., Mallee District, Victoria, D. by F. P. Spry, 5.10.22, ENT-764, Museum of Victoria, Melbourne (NMV).

Distribution

Endemic to Australia; recorded only from Western Australia, so far. The species is listed under the wrong name (*pseudoaustralis*) in the Australian Faunal Directory (Cassis et al. 2012). **New to South Australia, Northern Territory and Victoria.**

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References

- C a s s i s G., N a m y a t o v a A., T a t a r n i c N., S y m o n d s C. (2012) Heteroptera. *Australian Faunal Directory*. Australian Biological Resources Study, Canberra. Viewed 20 December 2012. <http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/taxa/HETEROPTERA>
- L i s J. A. (1999) A revision of Australian species of the genus *Macroscytus* Fieber (Hemiptera: Heteroptera: Cydnidae). *Entomologica Scandinavica* **29** [1998]: 459-479.
- L i s J. A. (2000) A revision of the burrower-bug genus *Macroscytus* Fieber, 1860 (Hemiptera: Heteroptera: Cydnidae). *Genus (Wroclaw)* **11**: 359-509.
- L i s J. A. (2003) *Macroscytus affinis* sp. n. from Mindanao Island in the Philippines (Hemiptera: Heteroptera: Cydnidae). *Polish Journal of Entomology* **72**: 215-218.
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