

**Studies on Cydnidae (Heteroptera) of the Australian Region VI. Material collected
by I. Lansbury in Papua New Guinea in 1990 and 1992**

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**Taxonomy, *Macroscytus lansburyi* sp. n., new records, check-list, Papua New Guinea, Heteroptera,
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Abstract. New localities for 6 species of Cydnidae collected by I. Lansbury in Papua New Guinea (Nagada harbour, Madang Province) are presented. Additionally, one new species, *Macroscytus lansburyi*, is described, illustrated, and compared with related species. A check-list of burrower bugs recorded hitherto from New Guinea is also provided.

INTRODUCTION

The fauna of burrower bugs (Cydnidae) of Papua New Guinea (PNG) is known inadequately. *Macroscytus transversus* (Burmeister) and *Adrisa similis* Signoret were the first two and, for many years, the only species of the family recorded from this island (Signoret, 1881a, 1881b, 1883). In the early part of this century, Horváth (1919) described 8 new Cydnidae species from PNG. Since this paper more than seventy years have elapsed since studies were made on Papuan New Guinean (hereinafter referred to as New Guinean) representatives of the family, and it is only recently (Lis, 1992, 1993a,b,c) some further contributions have been made to our knowledge of the Cydnidae of this island. Thus, 21 species representing 7 genera have been recorded from the territory of Papua New Guinea.

MATERIAL

Through the kindness of Dr I. Lansbury (Hope Entomological Collections, the University Museum, Oxford) 658 specimens of Cydnidae collected by him in Papua New Guinea, Madang Province, Nagada harbour were studied. All the material was collected at light, within 25–50 metres of the sea shore. The habitat can be best described as an old coconut plantation interspersed with breadfruit and other trees. The soil in this area is coral rubble-sand with a light covering of fine vegetable detritus; some areas are sandy yet bare, others are covered with short grasses. The soil is extremely porous, drying out very rapidly after heavy rain. Most of the material was collected between 6–8 pm, only occasionally was the trap operated between 6–10 pm.

RESULTS

Chilocoris barbarae Lis, 1991

MATERIAL EXAMINED: 18.iii.1990 – 1♂, 6♀; 3–20.v.1992 – 2♂♂, 10♀♀.

The species was described from Sulawesi (Lis, 1991) and recorded recently from New Guinea (Lis, 1993a) and Australia (Lis, in press). It is easily distinguished from all other

New Guinean species of the genus by the presence of a postmedial transverse impressed line on the pronotal disc.

Chilocoris biroi Horváth, 1919

MATERIAL EXAMINED: 16.v.1992 – 1 ♀; 3–20.v.1992 – 1 ♀.

Described from New Guinea (Horváth, 1919) and recorded recently from the Australian continent (Lis, in press). It is distinguished from other New Guinean members of the genus by the pronotum with a distinct transverse, medially interrupted row of punctures behind the middle, a densely and evenly punctured posterior lobe, and the yellow-brown posterolateral parts, and by its mesocorium with indistinct punctures (cf. Lis, 1993a).

Chilocoris crassimargo Horváth, 1919

MATERIAL EXAMINED: 1–2.v.1992 – 1 ♂; 3–20.v.1992 – 1 ♂.

The species was known from the lectotype male (Horváth, 1919) from Friedrich-Wilhelmshafen (now Madang) only, and the female remains unknown. It differs from all its New Guinean relatives, except *Ch. crassimargoides* Lis, in having the anterior carina of its pronotum separated from the lateral carinae, which are broad particularly in the anterior part. It differs from *Ch. crassimargoides* Lis in the presence of large calli and transverse rugae in the middle of the pronotum, and its entirely yellow-brown femora (cf. Lis, 1993a).

Geotomus pygmaeus (Dallas, 1851)

MATERIAL EXAMINED: 14.iii.1990 – 16 ♂♂, 22 ♀♀; 16.iii.1990 – 10 ♂♂, 13 ♀♀; 18.iii.1990 – 38 ♂♂, 56 ♀♀; 30.iv.1990 – 22 ♂♂, 37 ♀♀; 1–2.v.1992 – 1 ♂, 6 ♀♀; 4.v.1992 – 1 ♀; 5.v.1992 – 1 ♂, 1 ♀; 6.v.1992 – 1 ♀; 16.v.1992 – 2 ♀♀; 3–20.v.1992 – 158 ♂♂, 186 ♀♀.

One of the best known and most common cydnid species in both the Oriental and Australian Regions. It has been recorded also from Iraq and Saudi Arabia. A detailed redescription was made by Linnavuori (1993).

Macroscytus astrolabicus Horváth, 1919

MATERIAL EXAMINED: 18.v.1992 – 1 ♀; 3–20.v.1992 – 5 ♂♂, 4 ♀♀.

The species was described by Horváth (1919) from the Astrolabe Bay (north-eastern coast of PNG). It is closely allied to *M. lansburyi* sp. n. in its head vestiture (see diagnosis under the latter species).

Macroscytus cheesmani Lis, 1993

MATERIAL EXAMINED: 30.iv.1990 – 1 ♀; 1–2.v.1992 – 1 ♂; 16.v.1992 – 4 ♂♂, 5 ♀♀; 18.v.1992 – 1 ♀; 3–20.v.1992 – 15 ♂♂, 24 ♀♀.

The species was described recently from Papua New Guinea (Lis, 1993b) and belongs to a group of species with a single preocular submarginal setigerous puncture on each paraclypeus, without a transverse postmedian impression on the pronotum, and with one

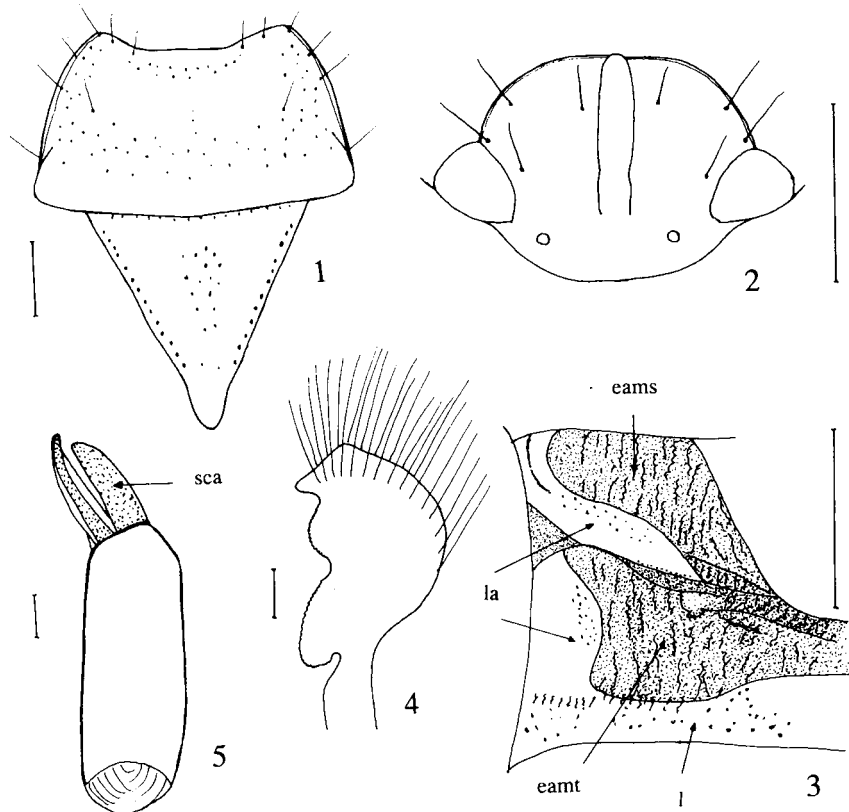
setigerous puncture on each costal margin. A detailed comparison with its related species was presented in a previous paper (Lis, 1993b).

Macroscytus lansburyi sp. n.

TYPE MATERIAL: Holotype ♂: Papua New Guinea, Madang Prov., Nagada Harbour, mvlt water trap, 3–20.v.1992, I. Lansbury. Paratype ♀: Papua New Guinea, Madang Prov., Nagada Harbour, 30.iv.1990, I. Lansbury. Both type specimens are housed in the collection of the Hope Entomological Collections, the University Museum, Oxford.

DIAGNOSIS

The new species is closely allied to *M. astrolabicus* Horváth in coloration of the body and head vestiture. These species are the only two representatives of the genus bearing two submarginal setigerous punctures on each paraclypeus (Fig. 2) since all other New Guinean species have only one preocular submarginal setigerous puncture. *M. lansburyi* sp. n. can be easily separated from *M. astrolabicus*, because the former has no setigerous puncture on the costa, while *M. astrolabicus* bears a single setigerous puncture.



Figs 1–5. *Macroscytus lansburyi* sp. n. 1 – pronotum and scutellum; 2 – head; 3 – evaporatoria (eams – evaporative area on mesopleuron, eamt – evaporative area on metapleuron, l – lamella, la – lateral area); 4 – paramere; 5 – penis (sca – second conjunctival appendage) (1, 2, 3 – scale 1.0 mm; 3, 4 – scale 0.1 mm).

DESCRIPTION

Head polished, black-brown, lateral parts more brownish in shade; dorsal surface with very small, almost invisible punctures and several rugae; clypeus parallel-sided, as long as paraclypei, subapically without submarginal setigerous punctures; each paraclypeus with two submarginal setigerous punctures (Fig. 2); eyes large, reddish brown or blackish brown, ocular index 2.55 (male) or 2.51 (female); ocelli reddish brown, distance between ocelli 3–5 times longer than the distance between an ocellus and the eye; antennae brown or ochraceous; rostrum brown, reaching middle coxae.

Pronotum polished, undivided into lobes, black-brown with umbones and the extreme posterior margin yellow-brown; calli and the posterior quarter impunctate, the remaining surface sparsely punctured with quite visible punctures; each lateral margin (Fig. 1) with 4 submarginal setigerous punctures bearing long hair-like setae (3 on the anterior half, 1 on the posterior).

Scutellum polished, slightly darker than pronotum; basal and lateral rows of punctures well developed; disc weakly punctured with a median patch of punctures of the same size as or slightly larger than punctures of pronotum (Fig. 1).

Corium brown, decidedly paler than both pronotum and scutellum; clavus with two rows of punctures (one complete, one partial); mesocorium with two rows parallel to clavo-corial suture, mesocorial disc evenly moderately punctured; exocorium with very dense punctation; costa without setigerous punctures, its margin with numerous small punctures; membranal suture bisinuate, membrane slightly browned, surpassing tip of abdomen.

Propleuron black-brown, apical part of anterior convexity dulled by numerous small punctures; depression and basal part of posterior convexity with large coarse punctures; general outline of evaporatoria typical of the genus, evaporative areas on meso- and metapleuron with numerous visible grooves, lamella of metapleuron distinctly punctured, lateral areas of meso- and metapleuron with small punctures, close to the lateral margins of evaporative areas (Fig. 3).

Abdominal sternites polished, black-brown, medially smooth, lateral parts of each segment with a triangular patch of small punctures posterior to spiracle. Legs yellowish brown or pale brown, femora with broad median darker band, apical half of anterior tibiae also darker; posterior margins of femora with long spines, these of hind femora additionally with several small dorsal teeth.

Paramere and penis as in Figs 4 and 5, respectively.

Measurements (in mm) (male and female respectively): Body length 8.02, 7.98; body width 4.67, 4.52; head length 1.32, 1.39; head width 2.01, 1.93; pronotum length 2.65, 2.55; pronotum width 4.52, 4.15; scutellum length 2.95, 2.85; scutellum width 2.85, 2.63; antennal segments 0.35 : 0.52 : 0.53 : 0.74 : 0.92, 0.42 : 0.49 : 0.50 : 0.63 : 0.84.

Check-list of species of the family Cydnidae recorded from New Guinea

Subfamily Garsauriinae

1. *Garsauria araloides* (Walker, 1868) [Lis, 1992].

Subfamily Cydninae

Tribe Cydnini

2. *Chilocoris barbarae* Lis, 1991 [Lis, 1993a; present paper].
3. *Ch. biroi* Horváth, 1919 [Horváth, 1919; Lis, present paper].

4. *Ch. crassimargo* Horváth, 1919 [Horváth, 1919; Lis, present paper].
5. *Ch. crassimargoides* Lis, 1993 [Lis, 1993a; present paper].
6. *Ch. entzii* Horváth, 1919 [Horváth, 1919].
7. *Ch. impressicollis* Horváth, 1919 [Horváth, 1919].
8. *Ch. madangicus* Lis, 1993 [Lis, 1993a].
9. *Ch. peterseni* Froeschner, 1967 [Froeschner, 1967; Lis, 1993a].
10. *Ch. rolandi* Lis, 1993 [Lis, 1993a].
11. *Ch. vagauensis* Lis, 1993 [Lis, 1993a].
12. *Centrostephus tumidicollis* Horváth, 1919 [Horváth, 1919].

Tribe Geotomini

13. *Adrisa similis* Signoret, 1881 [Signoret, 1881a,b].
14. *Aethus philippinensis* Dallas, 1851 [Lis, 1993c].
15. *Geotomus pygmaeus* (Dallas, 1851) [Lis, present paper].
16. *Macroscytus abditus* Lis, 1993 [Lis, 1993b].
17. *M. annulipes* Horváth, 1919 [Horváth, 1919].
18. *M. astrolabicus* Horváth, 1919 [Horváth, 1919; Lis, present paper].
19. *M. cheesmani* Lis, 1993 [Lis, 1993b; present paper].
20. *M. lansburyi* sp. n. [Lis, present paper].
21. *M. papuanus* Horváth, 1919 [Horváth, 1919].
22. *M. transversus* (Burmeister, 1834) [Signoret, 1881a, 1883].

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