

AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

Musgrave, Anthony, 1930. Contribution to the knowledge of Australian Hemiptera. No. II. A revision of the subfamily Graphosomatinae (family Pentatomidae). *Records of the Australian Museum* 17(7): 317–342, plates lii–liv. [20 February 1930].

doi:10.3853/j.0067-1975.17.1930.769

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture **discover**

Australian Museum science is freely accessible online at
<http://publications.australianmuseum.net.au>
6 College Street, Sydney NSW 2010, Australia



CONTRIBUTIONS TO THE KNOWLEDGE OF AUSTRALIAN HEMIPTERA.

No. II.

A REVISION OF THE SUBFAMILY GRAPHOSOMATINÆ (FAMILY PENTATOMIDÆ).

By

ANTHONY MUSGRAVE, F.E.S.,
Entomologist, Australian Museum.

(Plates lii-liv, and one Figure.)

The members of the subfamily Graphosomatinae are characterized by the scutellum being frequently as long as the abdomen and so broad as to leave only the basal and outer margins of the corium exposed. Kirkaldy¹ did not regard the group as worthy of subfamily status, and placed it as a tenth tribe of the subfamily Pentatominae, the Graphosomini, and pointed out that it is "Principally characterized by the absent or very short frena, but this does not appear to be restrictive. The large scutellum is no more a character for subfamily separation than it is in *Eysarcoris* or *Discocera*." Schouteden and Distant regarded the group as worthy of subfamily rank, and in this contribution I intend to regard it as such.

I have been permitted to examine the Graphosomatid bugs in the collections of the Queensland, West Australian, and South Australian Museums, the National Museum, Melbourne, and the Macleay Museum, Sydney, through the courtesy of their directors.

Dr. Yngve Sjöstedt of the Naturhistoriska Riksmuseum, Stockholm, has very kindly permitted illustrations to be prepared from three species identified by Stål and from four of that author's types. These drawings have been very skilfully executed by Frau Thérèse Ekblom, while to Miss Joyce K. Allan, of this Museum, I am indebted for the remainder of the illustrations. All the species of Australian Graphosomatid bugs have now been figured, with the exception of *Bolbocoris mimicus* Walker 1867, the type of which is missing from the collection of the National Museum, Melbourne, and in the future the identification of these insects should present but little difficulty to Australian entomologists.

Tribe GRAPHOSOMATARIA *Schouteden*, 1905.

Lateral angles of the pronotum not emarginate or, if they are, the antenniferous tubercles are not or hardly prominent (the head

¹ Kirkaldy.—Catalogue of the Hemiptera (Heteroptera) I. Cimicidæ, p. 34.

being viewed from above). Eyes usually not projecting, not pedunculated. Frena, when present, short, save in rare exceptions (after Schouteden).

Key to the Australian Genera.

1. Lateral angles of pronotum prolonged into a long and broad horn 2
Lateral angles of pronotum not prolonged into a long and broad horn . . . 3
2. Pronotal horns with 2-3 teeth; jugæ of different form in sexes
..... *Deroploopsis* Schouteden.
Pronotal horns with only 1 backwardly-projecting tooth; jugæ identical
in sexes *Deroploa* Westwood.
3. Pronotum with tubercle at base *Eufroggattia* Goding.
Pronotum without tubercle 4
4. Head triangular gradually narrowed *Numilia* Stål.
Head not triangular 5
5. Scutellum shorter than abdomen *Dandinus* Distant.
Scutellum as long as abdomen 6
6. Head flat; pronotal angles strongly acuminate *Testricea* Walker.
Head convex 7
7. Pronotal angles truncate *Protetricea* Schouteden.
Pronotal angles not truncated *Propetricea* gen. nov.

The genus *Ippatha* Distant "with no immediate ally," as its author points out, is excluded from the above key.

Genus *DEROPLOOPSIS* Schouteden, 1905.

1905. *Deroploopsis* Schouteden, Genera Insectorum, fasc. 30, p. 27.
Orthotype *Deroploa curvicornis* Stål.

Distribution.—Australia.

The genus *Deroploopsis* was proposed by Schouteden in his Monograph for *Deroploa curvicornis* Stål, the structure of the head being very distinct from that of the other members of the genus *Deroploa*.

The original generic diagnosis of Schouteden is given here: "Caractères.—Tête de longueur subégale à celle du pronotum, graduellement rétrécie, les juga graduellement acuminés et divariqués, bien plus longs que le tylus, un peu recourbés et concaves légèrement en dessus, convexes en dessous; bords latéraux non sinues en avant des yeux. Pronotum à angles latéraux prolongés en une corne recourbée vers le bas et non droite comme chez *Deroploa*."

Hitherto the female has been unknown, the type being a male. The structure of the head is quite dissimilar in the two sexes, which indicates that the suggestion of Stål, quoted by Schouteden, viz., "capite sexuum difformi?" though not applicable to the genus *Deroploa* to which it was originally applied, may now be employed for the genus *Deroploopsis* and the query omitted.

Generic diagnosis of the head of the female is as follows:

Similar to male, but jugæ not produced into acuminate processes but extend in front of tylus as flat, broad, angular lobes, the lateral margins being directed inwards towards middle line, the inner margins directed towards tylus (the angle of direction varying in the species); antennæ 5-jointed.

Key to the species of the genus *Deroploopsis* Schouteden.

1. Pronotal horns almost straight; ending in two spines 2
 Pronotal horns curved downwards; ending in three spines 3
2. Species thick set; posterior margin of pronotal horns rounded
 *Deroploopsis bidentatus* sp. nov.
 Species slender; posterior margin of pronotal horns with slight indication
 of third spine *Deroploopsis recticornis* sp. nov.
3. Species not exceeding 5 mm. in length .. *Deroploopsis curvicornis* (Stål).
 Species exceeding 5 mm. in length 4
4. Pronotal horns short *Deroploopsis brevicornutus* sp. nov.
 Pronotal horns not short *Deroploopsis trispinosus* sp. nov.

DEROPLOOPSIS CURVICORNIS (Stål).

(Pl. liii, fig. 7; Pl. lii, figs. 3, 4.)

1876. *Deroploa curvicornis* Stål, Svensk. Vet. Handl., xiv, n. 4, p. 32. ♂ Rockhampton, Queensland.

1905. *Deroploopsis curvicornis* Schouteden, Genera Insectorum, fasc. 30, p. 27, pl. ii, figs. 14-15.

♂. Length 4.9 mm., width across pronotal horns 3.6 mm., width at base of pronotum 2.6 mm. (Description based on specimen from Dalby, Queensland.)

Reddish-black, rugosely punctate, thickly covered with white crystal-like scales which occupy the punctures. The median longitudinal line, base of pronotum, jugæ, hemelytra, ochraceous-tawny. Colouration on under-surface variable reddish-black or flavescent.

Head 1.6 mm. across eyes, reddish-black; eyes and ocelli reddish-black; rostrum extending to middle coxæ; reddish-brown; jugæ 1.2 mm. long, the lateral margins and apices brown, not contiguous in front of tylus; tylus slightly raised.

Pronotum reddish-black in front of pronotal horns; two areas on either side of raised median line, black; area bordering posterior margin ochraceous-tawny. Pronotal horns relatively short, tridentate.

Scutellum reddish-brown; the white scales deposited in 4 rows one on each side of the curved glabrous fasciæ. (This character is depicted well in the drawing of the holotype.) Tip of scutellum black, lateral margins and glabrous ridges brownish-ochraceous. Frena very short, not extending below level of depression in anterior lateral angles of scutellum.

Hemelytra punctate, thickly covered with scales, dark brown except clavus which is black, and outer margins which are ochraceous-tawny.

Sternum reddish-brown, coarsely punctate. White crystalline scales thickly covering lateral margins of prosternum, and mesosternum and extending up the underside of pronotal horns.

Venter reddish-brown, punctate, and encrusted with white crystalline scales and with a fine pubescence.

Legs with coxæ and trochanters yellowish; acetabula, femora, tibiæ, and tarsi dark brown.

♀. Length 3.6 mm., width across pronotal horns 3.6 mm., width at base of pronotum 2.8 mm. (Description of allotype based on specimen from Dalby, Queensland. Dorsal aspect Pl. liii, fig. 7.)

Similar in colour to male. Jugæ with lateral margins widely sinuate, apices rounded; inner margins descending gradually towards tylus and contiguous before it, reddish-brown anteriorly, otherwise reddish-black.

Hab.—Queensland: Dalby, 2 ♂, 1 ♀, collected by Mrs. F. H. Hobler (South Australian Museum).

Types.—The drawings of Stål's type *Deroploa curvicornis* figured on Plate lii, figs. 3, 4, agree with the males before me. The allotype female will be preserved in the collection of the South Australian Museum.

DEROPLOOPSIS BREVICORNUTUS *sp. nov.*

(Figure 1.)

♀. Length 5.4 mm.; width across pronotal horns 5.3 mm.; width at base of pronotum 3.7 mm.

Reddish-black, rugosely punctate, with flat scales in each punctation, somewhat resembling *Deroploopsis curvicornis* (Stål) but larger, the pronotal horns more erect; median raised longitudinal line, a transverse ridge connecting light-ochraceous ridges on anterior part of pronotal horns, glabrous, ochraceous.

Head 1.8 mm. across eyes, reddish-black; eyes and ocelli black; rostrum extending to middle coxæ, reddish-brown; jugæ with lateral margins sinuate, apices rounded; inner margins rounded towards tylus and contiguous before it.

Pronotum very rugosely-punctate between pronotal horns; the raised median fascia and an irregular transverse fascia connecting the light-ochraceous ridges on the inner anterior surface of the pronotal horns, ochraceous; pronotal horns relatively short, broad,

and terminating in three teeth, two produced forwards and one backwards and outwards.

Scutellum reddish-black, rugose; the base raised in the form of a triangle due to the presence of the oblique grooves on either side running to the anterior angles; running from anterior to posterior border is a median glabrous fascia, ochraceous for two-thirds of its length, the remainder black; on either side of median

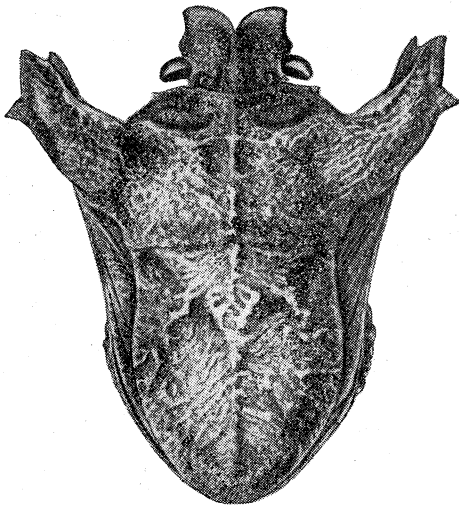


Figure 1.

fascia, but barely distinguishable from the rugose surface, are two outwardly-curved glabrous ridges ochraceous in their anterior half, and which anteriorly bridge the grooves to meet the median ridge about the apex of the raised triangular base; posteriorly they meet with the median ridge near the end of the scutellum; end of scutellum black.

Hemelytra black, punctate, thickly clothed with scales, outer margin of corium light-ochraceous.

Sternum reddish-black, punctate, clothed with crystalline scales.

Venter reddish-black and covered with crystalline scales and fine hairs; flat medially, convex laterally, the anterior segments over-hanging the lateral margins.

Legs with coxæ, trochanters, and bases of femora, posterior extremities of tibiæ, and joints, yellowish, remainder reddish-black.

Hab.—S. Australia: Ooldea, 1 ♀ holotype, collected by Mr. A. M. Lea (South Australian Museum).

New South Wales: Tamworth, November, 1892, 1 ♀ paratype, collected by Mr. A. M. Lea (W. W. Froggatt collection).

DEROPLOOPSIS TRISPINOSUS sp. nov.

(Pl. liv, figs. 6, 7.)

♂. Length 5.5 mm.; width across pronotal horns 4.8 mm.; width at base of pronotum 2.8 mm.

Testaceous tinged with black, rugosely punctate with white crystal-like scales occupying the punctures.

Head 1.7 mm. across the eyes, reddish-black; eyes and ocelli reddish-black; rostrum extending to median coxæ reddish-brown; jugæ 1.2 mm. long, not contiguous before tylus; tylus slightly raised.

Pronotum ochraceous-black in front of pronotal horns; an area on either side of median raised line, black; area bordering posterior margin, testaceous, glabrous. Pronotal horns tri-dentate.

Scutellum testaceous, rugose; raised triangular area at base reddish-black; median line and curved glabrous fasciæ on either side of it ochraceous-tawny. Tip of scutellum black. Frena very short.

Hemelytra punctate, covered with scales, ochraceous-tawny.

Sternum reddish-brown punctate with white crystalline scales in punctures; submarginally the scales thickly encrust the sternum as far as the eyes.

Venter reddish-brown, punctate, thickly encrusted at the sides with scales.

Legs for the most part reddish-black, tibiæ testaceous.

♀. Length 5.5 mm., width across pronotal horns 5.5 mm., width at base of pronotum 3.5 mm. (Description based on specimen from S. Australia. Dorsal aspect Pl. liv, fig. 7.)

Similar in colour to male. Jugæ reddish-brown, with lateral margins sinuate, apices rounded; inner margins descending gradually towards tylus and contiguous before it.

Hab.—S. Australia: Port Lincoln, 1 ♂ holotype, collected by Mr. A. M. Lea (South Australian Museum); no locality, 1 ♂, 1 ♀ allotype; no locality, 1 ♂, 1 ♀ (Macleay Museum, Sydney). ? S. Australia, 1 ♂, 2 ♀.

Queensland: Dalby, 1 ♂, collected by Mrs. F. H. Hobler (South Australian Museum).

No data: 4 ♂, 7 ♀ (Macleay Museum, Sydney).

Note.—I have associated a female from another series as allotype to the male holotype from Port Lincoln, S. Australia, but I have no doubt that it represents the other sex of this species. The males vary somewhat in size, the Dalby, Queensland, specimen being 6.5 mm. from the end of the scutellum to the tips of the jugæ, and some of the old specimens in the collection of the Macleay Museum are darker in colour than the localized specimens in the South Australian Museum. The females, on the other hand, show but slight variation in size, but a female in the Macleay Museum Collection has the area between the pronotal horns which is normally rugose and glabrous, raised into a broad glabrous area, in which are large punctures, owing to the ridges becoming fused into an irregular plate. The median line and the transverse ridge bordering the anterior margin of the pronotum are distinctly swollen.

Types.—The holotype ♂ and paratype ♂ are preserved in the S. Australian Museum collection, the allotype ♀ in the Macleay Museum, Sydney, together with a series of 4 ♂ and 8 ♀ paratypes, while a series of 3 ♂, 3 ♀ are retained in this Museum.

DEROPLOOPSIS RECTICORNIS sp. nov.

(Pl. liii, figs. 1-4.)

♂. Length 6.3 mm.; width across the pronotal horns 5.3 mm.; width at base of pronotum 3 mm. (Dorsal aspect, Pl. liii, fig. 1; ventral aspect, Pl. liii, fig. 2; head and pronotum, lateral aspect, Pl. liii, fig. 3.)

Black, rugosely punctate, each puncture containing a white crystalline scale. A median longitudinal line running from the fore-border of the pronotum to the end of the scutellum, and four spots in the centre of pronotum, ochraceous-tawny. Other ochraceous-tawny marks present along the margins of scutellum and pronotum. Legs for the most part ochraceous-tawny.

Head 1.7 mm. across the eyes, black; eyes reddish-black and projecting for about two-thirds of their width beyond the lateral margins, ocelli black; rostrum extending to anterior coxæ, reddish-brown; finely pubescent; antennæ ochraceous-tawny with fine white pubescence; jugæ ochraceous-tawny, their lateral margins and apices brown; tylus slightly raised with a reddish-black spot in the centre.

Pronotum black, rugosely punctate; four glabrous areas near bases of pronotal horns, ochraceous-tawny; pronotal horns 2.5 mm. long; each horn bi-dentate, and with a suggestion of a third on the posterior margin.

Scutellum with a concavity at each anterior lateral angle. Lateral margins, median longitudinal line extending the length of

the scutellum, the two curved fasciæ on either side, but which do not reach to the anterior or posterior borders, ochraceous-tawny and glabrous. Apex black.

Hemelytra punctate, black near scutellum and pronotal borders, otherwise ochraceous.

Sternum shining black, not as coarsely punctate as upper surface.

Venter shining black, reddish-black at the lateral margins, with very fine pubescence. Last abdominal segment rounded, rugose, bearing fine hairs and crystal-like bodies.

Legs with the coxæ, trochanters, apices of femora, distal two-thirds of tibiae, tarsi and proximal end of tarsal claws ochraceous-tawny, otherwise black; fine white pubescence is present chiefly towards apices of tibiae and first joint of tarsus.

♀. Length 5.4 mm.; width across pronotal horns 5.3 mm.; width at base of pronotum 3.1 mm. (Head and pronotum, Pl. liii, fig. 4.)

Similar in colour to male. Lateral margins of jugæ almost straight, inner margins descending sharply towards tylus but not contiguous. Jugæ ochraceous-tawny anteriorly, darker posteriorly. Genital plates rugose, covered with flat-scale or crystal-like structures.

Hab.—W. Australia: ? Geraldton, September, 1926, 1 ♂, holotype, collected by Mr. H. J. Carter (Australian Museum); Cunderdin, Sept.-Oct., 1913, 1 ♀, allotype (West Australian Museum).

DEROPLOOPSIS BIDENTATUS *sp. nov.*

(Pl. liii, figs. 5, 6.)

♂. Length 6.2 mm.; width across pronotal horns 5.6 mm.; width at base of pronotum 3.7 mm. (Dorsal aspect, Pl. liii, fig. 5.)

Similar in general appearance to *D. recticornis* mihi, but lighter in colour and more robust. Head, pronotal horns, anterior and posterior margins of scutellum black-punctate, each puncture containing a white flattened crystal-like structure. A raised median longitudinal line extending from fore-border of pronotum to end of scutellum, light yellow. A mark extending between the bases of the pronotal horns, and three areas further back near the posterior margin of pronotum, light yellow. Jugæ yellow. Ridges on underside of pronotal horns, light yellow. Legs brownish-yellow. Ventral surface of abdomen brownish-black.

Head 1.8 mm. across the eyes, black; eyes and ocelli reddish-black; rostrum extending to middle coxæ, reddish-brown, finely

pubescent; antennæ ochraceous with fine white pubescence; each jуга shaped like an isosceles triangle, the outer margin slightly concave; jugæ baso-dorsally concave, lateral margins and apices brown, sparsely covered with white scales, otherwise yellow; tylus slightly raised.

Pronotum with greater part of pronotal horns and pronotal callosities black; four irregular bands extending to anterior margin of scutellum, two from the bases of pronotal horns and two from blotches behind pronotal callosities, reddish-black; otherwise light-yellow; pronotal horns bi-dentate, posterior margin curving gently to apex.

Scutellum with fore-margin, except in centre, and hind margin, black; lateral margins, median longitudinal line, two broad irregular fasciæ on either side of it but not reaching anterior or posterior margins, light-yellow and glabrous; otherwise reddish-black.

Hemelytra strongly punctate, clavus reddish-black, corium reddish-black near scutellum; otherwise light yellow.

Sternum black.

Venter brownish-yellow towards lateral margins, otherwise brownish-black. Last abdominal segment black, rugose.

Legs coxæ and trochanters light yellow; acetabula, femora, tibiæ, and tarsi brownish-yellow.

♀. Length 5.6 mm.; width across pronotal horns 5.5 mm.; width at base of pronotum 3.7 mm. (Dorsal aspect of head and pronotum, Pl. liii, fig. 6.)

Similar in colour to male. Jugæ with lateral margins widely sinuate; apices rounded; inner margins descending gently towards the tylus and contiguous before it, anteriorly ochraceous-tawny, otherwise as in male. Under-surface of body thickly covered with white scale-like structures.

Hab.—S. Australia: Parachilna, Flinders Range, 3 ♂, 6 ♀, collected by Mr. E. L. Savage (South Australian Museum).

Victoria: Kewell, 28th October, 1889, 2 ♀, collected by Mr. J. Hill.

Types.—Holotype ♂ and allotype ♀, and 1 ♂, 4 ♀ paratypes, in South Australian Museum collection; 1 ♂, 3 ♀ paratypes in collection of Australian Museum.

Genus DEROPLOA Westwood, 1835.

1835. *Deroploa* Westwood, Zool. Journ., v, p. 445. Haplotype *Deroploa parva* Westwood.

1905. *Deroploa* Schouteden, Genera Insectorum, fasc. 30, p. 27.

Distribution.—Australia.

DEROPLOA PARVA *Westwood*.

1835. *Deroploa parva* Westwood, Zool. Journ., v, p. 445, pl. xxii, fig. 6. New Holland.
1839. *Deroploa parva* Germar, Zeitschr. Ent., i, p. 68.
1843. *Deroploa parva* Amyot and Serville, Hist. Nat. Insectes Hemipt., p. 58. Tasmania; New Holland.
1851. *Deroploa parva* Dallas, List. Hemipt. B.M., i, p. 54. New Holland.
1867. *Deroploa parva* Walker, Cat. Hemipt. Heter. B.M., i, p. 74. New Holland.
1876. *Deroploa parva* Stal, Kongl. Sv. Vet. Akad. Hand., xiv, n. 14, p. 32. N. Australia.
1905. *Deroploa affinis* Schouteden, Ann. Soc. Ent. Belg., xlix, p. 143. Victoria.
1905. *Deroploa affinis* Schouteden, Genera Insectorum, fasc. 30, p. 27, pl. 2, fig. 5.

Hab.—Queensland: National Park, 23rd and 24th October, 1923, 2 ♀, collected by Mr. H. Hacker (Queensland Museum).

New South Wales: Tooloom, January, 1926, 2 ♀, collected by Mr. H. Hacker; Armidale, October, 1892, 1 ♀, collected by Mr. A. M. Lea (Froggatt Collection); Rope's Creek, 1 ♀ (Macleay Museum); Gosford, 2 ♀, collected by Mr. H. J. Carter (Macleay Museum); Bodalla, November, 1925, 1 ♀, collected by Mr. H. J. Carter (Australian Museum); Hornsby, 1 ♀, collected by Mr. C. Gibbons.

Victoria: Caulfield, 1 ♀; Woori-Yallock, 2nd March, 1924, 2 ♂, collected by Mr. J. E. Dixon; Fern Tree Gully, 14th April, 1912, 1 ♀; Healesville, 8th May, 1915, 1 ♀; Wandong, 7th November, 1905, 1 ♀, collected by Mr. F. Spry. (All Victorian specimens from the National Museum, Melbourne).

Note.—China² has stated that a specimen from the National Museum, Melbourne, examined by him, and labelled "Eufroggattia, Goding," proves to be *Deroploa affinis* Schouteden. The fifteen specimens of *Deroploa* before me agree with Schouteden's figure in the Genera Insectorum, except that in some the yellow callosity running transversely across the pronotum is barely visible. Specimens labelled *Eufroggattia tuberculata* from Wandong, Fern Tree Gully, and Healesville, Victoria, have been sent to me from the National Museum, Melbourne, and they agree in every respect with a single specimen correctly labelled *Deroploa parva*, from Caulfield, forwarded from the same institution. As Westwood's name is the

² China.—Ann. Mag. Nat. Hist., (9) xx, p. 279, 1927.

earlier one, and as there do not appear to be sufficient grounds to warrant the separation of the two species, I here place *D. affinis* Schouteden as a synonym of *D. parva* Westwood.

The species appears to be common in eastern Australia.

Genus EUFROGGATTIA Goding, 1903.

1903. *Eufroggattia* Goding, Proc. Linn. Soc. N. S. Wales, xxviii, p. 37. Orthotype: *Eufroggattia tuberculata* Goding (Family Membracidæ).
 1912. *Paraderoploa* Schouteden, Ann. Soc. Ent. Belg., lvi, p. 354. Orthotype: *Deroploa* (*Paraderoploa*) *perkinsi* Schouteden.
 1927. *Eufroggattia* China, Ann. Mag. Nat. Hist., (9) xx, p. 279. (Transferred from Membracidæ to Pentatomidæ.)
Distribution.—Australia.

EUFROGGATTIA TUBERCVLATA Goding.

(Pl. liii, figs. 8, 9.)

1903. *Eufroggattia tuberculata* Goding, Proc. Linn. Soc. N. S. Wales, xxviii, p. 38, pl. i, figs. 17-19. Wingham, N. S. Wales.
 1912. *Deroploa* (*Paraderoploa*) *perkinsi* Schouteden, Ann. Soc. Ent. Belg., lvi, p. 354. C. Queensland.
 1927. *Eufroggattia tuberculata* China, Ann. Mag. Nat. Hist., (9) xx, p. 280.

Hab.—Queensland: Brisbane, 18th and 24th July, 1926, 2 ♂, 2 ♀, on *Acacia* flowers, collected by Mr. H. Hacker (Queensland and Australian Museums); Brisbane, 8th April, and 20th May, 1906, 2 ♀ (W. W. Froggatt collection).

Note.—This species was placed by Dr. Goding in the Membracidæ, but China (*supra*) has shown that it is a Graphosomatid bug, and that *Deroploa* (*Paraderoploa*) *perkinsi* Schouteden is a synonym of it. There appears to be some confusion in Australian museums as to the identity of this species, for from both the Queensland and National Museums I received specimens of *Deroploa parva* Westwood labelled as *Eufroggattia tuberculata* Goding, though the former institution also contained specimens of the latter species correctly identified. The fact that this insect was not a Membracid has been overlooked by Australian entomologists, though Froggatt in his "Australian Insects," p. 358, says in his description of the Membracidæ, "*Eufroggattia tuberculata* is a rare insect usually found resting on a twig of a eucalyptus sapling, and is shaped very much like some of the small plant bugs belonging to the Genus *Tetrica*; it is short and broad in form, with the head exposed; the thorax has short blunt horns; and the abdomen is broadly rounded at the apex."

The species is easily identified by the presence of the tubercle at the base of the scutellum and the very short pronotal horns.

The figure given by Goding is very poor, so that dorsal and lateral views of the insect are here given and are taken from a specimen collected by Mr. H. Hacker at Brisbane.

Genus DANDINUS Distant, 1904.

1904. *Dandinus* Distant, Ann. Mag. Nat. Hist., (7) xiii, p. 264.
Orthotype: *Dandinus crassus* Distant.
1905. *Testricoides* Schouteden, Ann. Soc. Ent. Belg., xlix, p. 144.
Orthotype: *Testricoides pulcherrimus* Schouteden.
1905. *Testricoides* Schouteden, Genera Insectorum, fasc. 30, p. 26.
1910. *Dandinus* Distant, Ann. Mag. Nat. Hist., (8) vi, p. 371.

Some difference of opinion has existed as to the correct status of this genus and the subfamily in which it should be placed, though Distant in his description states that the genus "may be placed near the Ethiopian genus *Æschrus* Spin." which is included in the subfamily Pentatominae by Kirkaldy. Schouteden, on the other hand, places his *Testricoides*, which Distant has shown to be a synonym of *Dandinus*, in the Graphosomatinae.

Distribution.—Australia.

DANDINUS CRASSUS Distant.

1904. *Dandinus crassus* Distant, Ann. Mag. Nat. Hist., (7) xiii, p. 264. Townsville, N. Queensland.
1905. *Testricoides pulcherrimus* Schouteden, Ann. Soc. Ent. Belg., xlix, p. 144. Victoria.
1905. *Testricoides pulcherrimus* Schouteden, Genera Insectorum, fasc. 30, p. 26, pl. 2, f. 8.
1910. *Dandinus crassus* Distant, Ann. Mag. Nat. Hist., (8) vi, p. 372.

Hab.—Victoria: Mallee, 1915, 1 ♂, 1 ♀, collected by Mr. J. E. Dixon and which bear a label "det. B. Uvarov" (National Museum).

Queensland: Dalby, 1 ♀, collected by Mrs. F. H. Hobler (S. Australian Museum).

New South Wales: Dorrigo, 1 ♀, collected by Mr. W. Heron (S. Australian Museum).

Genus NUMILIA Stål, 1867.

1867. *Numilia* Stål, Öfv. Vet.-Akad. Förh., p. 503. (No species.)
1869. *Numilia* Stål, Berl. Ent. Zeitschr., xiii, p. 225. Logotype: *Numilia subquadrata* Stål.

1876. *Numilia* Stål, Svensk. Vet. Handl., xiv, 4, p. 33.
 1905. *Numilia* Schouteden, Genera Insectorum, fasc. 30, p. 24.
Distribution.—Australia.

NUMILIA SUBQUADRATA Stål.

1869. *Numilia subquadrata* Stål, Berl. Ent. Zeitschr., xiii, p. 225.
 ♀, N. Australia.
 1905. *Numilia subquadrata* Schouteden, Genera Insectorum, fasc.
 30, p. 24, pl. 2, f. 7.
Note.—This species is autoptically unknown to me.

Genus *TESTRICA* Walker, 1867.

1867. *Testrica* Walker, Cat. Hemipt. Heter. B.M., 1, p. 69. Haplo-
 type: *Testrica antica* Walker.
 1876. *Testrica* Stål, Svensk. Vet. Handl., xiv, 4, p. 29 and p. 32.
 1905. *Testrica* Schouteden, Genera Insectorum, fasc. 30, p. 244.

Head nearly flat above or even lightly concave in front; jugæ contiguous before the tylus. *Pronotum* with lateral angles strongly acuminate, produced outwards; without clear transverse impression. *Scutellum* without clear impressions. *Venter* with sides slightly convex. Body not strongly punctate.

Distribution.—Australia.

Key to the species of the genus *Testrica* Walker.

1. Lateral angles of pronotum short, not produced forwards
 *T. antica* Walker.
2. Lateral angles of pronotum long, produced forwards 2
2. Lateral angles slender; spines at anterior lateral angles of pronotum,
 short *T. bubala* Stål.
- Lateral angles broader and turned inwards; spines at anterior lateral
 angles of pronotum, long *T. hœdulea* Stål.

TESTRICA ANTICA Walker.

(Pl. liii, fig. 12; Pl. lii, figs. 5, 6.)

1867. *Testrica antica* Walker, Cat. Hemipt. Heter. B.M., i, p. 70.
 Adelaide, S. Australia.
 1876. *Testrica antica* Stål, Svensk. Vet. Handl., xiv, 4, p. 32.
 Adelaide, S. Australia.

Hab.—S. Australia: Mt. Lofty, 4 ♂, 5 ♀; Murray Bridge, 1 ♂; Magill, 19th Oct., 1883, 2 ♂, 3 ♀ on Hibbertia shrubs, *Eucalyptus obliqua*, and blooming shrubs, all collected by Mr. J. G. O. Tepper; Ooldea, 4 ♂, 6 ♀ collected by Mr. A. M. Lea (S. Australian Museum).

Victoria: Marysville, 2 ♀ (National Museum).

N. S. Wales: Pillaga, 3 ♀ (W. W. Froggatt collection); 1 ♀, ? locality (Dept. Agriculture, N. S. Wales); 1 ♀, ? locality (Macleay Museum).

Note.—The specimen identified as *Testrica antica* by Stål in 1876 is figured here by Frau Thérèse Ekblom, and a drawing of a female specimen from Mt. Lofty, S. Australia, in the collection of the South Australian Museum, prepared for me by Miss Joyce K. Allan before the drawings of Stål's species came to hand, is also included.

TESTRICA HÆDULEA Stål.

(Pl. lii, figs. 9, 10.)

1876. *Testrica hædulea* Stål, Svensk. Vet. Handl., xiv, 4, p. 32. ♀, W. Australia.

1905. *Testrica hædulea* Schouteden, Genera Insectorum, fasc. 30, p. 26, pl. 2, f. 6.

Hab.—W. Australia: King George's Sound, 1 ♀ (Macleay Museum).

Note.—The jugæ in the specimen from King George's Sound are not contiguous before the tylus.

The figures I give here have been drawn from Stål's type.

TESTRICA BUBALA Stål.

(Pl. lii, figs. 13, 14.)

1876. *Testrica bubala* Stål, Svensk. Vet. Handl., xiv, 4, p. 32. ♀, N. Australia.

Hab.—S. Australia: 2 ♀ (Macleay Museum); Belair, 24th Nov., 1883, 1 ♂ on Eucalypts; Murray Bridge, 16th Jan., 1886, 1 ♀; same loc., 14th Jan., 1889, 1 ♀; Mt. Lofty, 1 ♀, all collected by Mr. J. G. O. Tepper; Murray Bridge, 4 ♀; Murray River, 1 ♀, collected by M. H. S. Cope (S. Australian Museum).

Victoria: Glenrowan, 1 ♀ bearing a label "*Testrica hædulea* Stål, det. B. Uvarov" (National Museum); Bendigo, 2 ♂, 2 ♀ (F. E. Wilson collection).

N. S. Wales: Hornsby, 1 ♀, collected by Mr. C. Gibbons (Australian Museum).

W. Australia: King George's Sound, 1 ♀ (Macleay Museum).

? locality, 1 ♀ identified by Francis Walker as *Testrica antica* (National Museum); ? locality, 4 ♀ (Macleay Museum).

Note.—The figures given here have been prepared from Stål's type.

TESTRICA MIMICA (*Walker*).

1867. *Bolbocoris mimicus* Walker, Cat. Hemipt. Heter. B.M., i, p. 63. Queensland: Type in National Museum, Melbourne.

1905. ? *Testrica mimica* Schouteden, Genera Insectorum, fasc. 30, p. 26.

Note.—Type missing.

Genus *PROTESTRICA* Schouteden, 1905.

1905. *Protestrica* Schouteden, Genera Insectorum, fasc. 30, p. 24. Logotype: *Testrica rudis* Germar 1839, selected by Kirkaldy, 1909.

1909. *Protestrica* Kirkaldy, Cat. Hemipt. Heteropt., p. xxxiii and p. 227.

Head, including jugæ and tylus, moderately (but clearly) convex; jugæ not contiguous before tylus, gaping. *Pronotum* with lateral angles not, or hardly, prominent, truncated, and sinuated; a weak transverse impression about middle of pronotum. *Scutellum* with clear impressions on each side near its base. *Venter* with sides convex. Body strongly punctate.

Distribution.—Australia.

Key to the species of the genus *Protestrica* Schouteden.

1. Scutellum not reaching the end of the abdomen. Lateral angles of pronotum not furrowed. Anterior angles of pronotum armed with prominent spines *T. subpunctatus* Walker.
- Scutellum reaching the end of the abdomen. Lateral angles of pronotum deeply furrowed at base. Anterior angles of pronotum armed with short spines 2
2. Lateral angles of pronotum rounded; head emarginate .. *T. rudis* Germar.
- Lateral angles of pronotum not rounded; head not emarginate *T. stali* Schouteden.

PROTESTRICA RUDIS (*Germar*).

(Pl. lii, figs. 1, 2.)

1839. *Podops rudis* Germar, Zeitschr. Ent., i, p. 66, 7. S. Australia.

1851. *Id.* Dallas, List Hemipt. Ins. B.M., p. 54, 9. New Holland.

1867. *Id.* Walker, Cat. Hemipt. Heteropt. B.M., i, p. 73. Australia.

1868. *Bolbocoris emarginatus* Vollenhoven, Versl. Ak. Nat. Amsterd., (2) ii, p. 177. New Holland.

1876. *Testrica rudis* Stål, Kongl. Sv. Vet. Akad. Handl., xiv, n. 4, p. 32. Adelaide, S. Australia.

1905. *Testrica rudis* van Duzee, Bull. Am. Mus. Nat. Hist., xxi, p. 190. N. S. Wales.

1906. *Testrica rudis* Kirkaldy, Proc. Linn. Soc. N. S. Wales, xxxii, p. 769. Sydney, N. S. Wales.

Hab.—S. Australia: Mt. Lofty, 8 ♂, 4 ♀, and Burnside, 5th July, 1884, 1 ♀ collected by Mr. J. G. O. Tepper; Adelaide, 1 ♂, 3 ♀, collected by Mr. A. M. Lea (S. Australian Museum).

Victoria: Lake Hattah, 2nd Sept., 1924, 3 ♂, 4 ♀, collected by Mr. J. E. Dixon; Glenrowan, 2 ♀ (National Museum).

Note.—The specimen identified as *Testrica rudis* by Stål in 1876 is figured here.

PROTESTRICA STALI (*Schouteden*).

(Pl. lii, figs. 11, 12.)

1876. *Testrica emarginata* Stål, Kongl. Sv. Vet. Akad. Handl., xiv, n. 4, p. 32. ♂, ♀. N. Australia. Name preoccupied by *Testrica* (*Protestrica*) *emarginata* (Vollenhoven) 1868 [*Bolbocoris*].

1905. *Testrica stali* Schouteden, Genera Insectorum, fasc. 30, p. 26. New name.

Hab.—N. S. Wales: Sydney, 1 ♀, and Hornsby, 4 ♂, all collected by Mr. C. Gibbons (Australian Museum).

Victoria: Quantong, 3rd April, 1928, 3 ♂, collected by Mr. A. D. Selby (F. E. Wilson collection); ? Warburton, 14th Jan., 1918, 2 ♀ collected by Mr. R. J. Kelly (National Museum); Gunbower, 2 ♀ (National Museum); Geelong, 1 ♂, collected by Mr. H. W. Davey (S. Australian Museum).

Tasmania: Launceston, 1 ♂, collected by Mr. F. M. Littler; ? locality, 1 ♀, collected by Mr. A. Simson (S. Australian Museum).

Note.—The figures given here are based on Stål's type, *Testrica emarginata*.

PROTESTRICA SUBPUNCTATA (*Walker*).

(Pl. liii, fig. 11.)

1867. *Bolbocoris subpunctatus* Walker, Cat. Hemipt. Heter. B.M., i, p. 63. Queensland: Type in National Museum, Melbourne.

1906. *Testrica distincta* Schouteden, Ann. Soc. Ent. Belg., 1, p. 138. No locality given.

Hab.—Queensland: ? sex, holotype (National Museum).

New South Wales: Clarence River, 1 ♀, collected by A. and F. R. Zeitz (S. Australian Museum); Upper Williams River, Oct., 1926, 1 ♂, collected by Messrs. A. M. Lea and F. E. Wilson; Brook-

iana, E. Dorrigo, 7 ♂, 9 ♀, collected by Mr. W. Heron (Australian Museum).

Note.—The specimen in the National Museum, Melbourne, labelled *Bolbocoris subpunctatus* in Walker's handwriting, agrees with his description and may be regarded therefore as the type. The specimen, however, is badly damaged, and lacks the abdomen and the greater part of the scutellum. In Walker's description the locality is given as Queensland, but no locality label is attached to the type. A female specimen, however, in the South Australian Museum from the Clarence River, New South Wales, agrees in structure with the type, except that "the longitudinal abbreviated and interrupted pale yellow line" on the thorax, and the "three pale yellow points on the fore border" of the scutellum, are duller. Walker gives the length of the body as 2 lines, but the length of the type from the front of the head to the tips of the wings measures 6.5 mm. or $3\frac{1}{2}$ lines. The Clarence River specimen measures 6.4 mm. from the front of the head to the end of the abdomen or 6.5 mm. to the tips of the wings. The figure given has been drawn from the holotype.

Genus PROPETESTRICA *nov.*

Head including jugæ and tylus convex; jugæ contiguous before tylus. *Pronotum* with lateral angles but slightly prominent; weak transverse impression about the middle. *Scutellum* with impressions near base clearly defined (as in *P. angulata* mihi) or barely recognizable (as in *P. trimaculata* mihi). *Venter* with sides convex. Body strongly convex. *Sternum* sulcated.

The genus appears to constitute a link between *Testrica* Walker and *Protestrica* Schouteden, with strong affinities towards the latter.

Genotype.—*P. trimaculata*, sp. nov.

PROPETESTRICA TRIMACULATA *sp. nov.*

(Pl. liv, figs. 1, 2.)

♀. Length 6.2 mm.; width across pronotal angles 4 mm.

Brownish-ochraceous, darkly punctate, posterior part of pronotum, apical two-thirds of scutellum, and three spots at base of scutellum, ochraceous.

Head rugosely punctate, black; width across eyes 2 mm., eyes and ocelli reddish-brown; jugæ and a spot at base of tylus reddish; rostrum extending to posterior coxæ, brownish-black; antennæ with the three basal segments ochraceous, two terminal segments black.

Pronotum rugosely and darkly punctate, anterior half much darker than posterior half which is ochraceous; a raised glabrous fascia extending from middle of anterior border to beyond centre of

pronotum and ending in a glabrous spot, ochraceous; a glabrous spot situated at the posterior lateral extremity of each pronotal fovea, ochraceous; anterior angles armed with short blunt spines, ochraceous; lateral margins straight and terminating posteriorly in a flange or slight prominence which overhangs the rounded angles, brownish-ochraceous; posterior margin black.

Scutellum convex, not reaching to the end of the abdomen, rugosely punctate, punctures black, the area between the punctures light-yellow or ochraceous; brownish-black on the raised basal part with three raised glabrous yellowish spots along basal margin, two overhanging basal depressions and one situated medially; frena short and extending slightly below level of basal depressions.

Hemelytra with clavus dark-brown, corium ochraceous with coarse black punctures, posterior margin brownish-black; membrane hyaline clouded with brown, nervures brown.

Sternum coarsely punctate, each puncture brownish and sometimes with a flattened crystal scale; area between punctures brownish-ochraceous.

Venter medially and along margin of segments, dark brown, glabrous, otherwise ochraceous suffused with brown.

Legs, coxæ, trochanters, light-ochraceous; femora, tibiæ, and tarsi brownish-black with spots near tibial end of femora, extremities of femora and tibiæ, and median annulations on tibiæ, reddish-ochraceous.

♂. Length 6.2 mm.; width across pronotal angles 4 mm.

Similar in coloration to female.

Hab.—Victoria: Lake Hattah, December, 1919, 3 ♂, 1 ♀, December 6, 1923, 2 ♀, collected by Mr. J. E. Dixon (National Museum, Melbourne).

S. Australia: Nuriootpa, 2 ♀, collected by Mr. J. G. O. Tepper (S. Australian Museum).

Types.—Holotype ♀, allotype ♂, and paratype ♀ in National Museum, Melbourne, and other paratype material in Australian and South Australian Museums.

PROPETESTRICA ANGULATA *sp. nov.*

(Pl. liv, figs. 9, 10.)

♂. Length 4.7 mm.; width across pronotal angles 3 mm.

Somewhat similar in general appearance to *Propetestricea trimaculata* mihi, but less convex and the pronotal angles are more pronounced, the median fascia extends from the anterior pronotal

margin to about the middle of the scutellum, but about the middle of the pronotum it expands into a glabrous arrowhead-shaped spot situated in a slight depression. The three spots at base of scutellum are less pronounced, and the two oblique depressions at the base of the scutellum are very clearly defined as in *Protetrica*.

Head rugosely punctate, reddish-black; width across eyes 1.5 mm., eyes and ocelli reddish-brown; raised parts of jugæ and tylus and margins of jugæ reddish-ochraceous; rostrum extending to middle coxæ, reddish-ochraceous; antennæ with first three segments ochraceous, two terminal segments reddish-black.

Pronotum reddish-black in front of pronotal angles, rugosely punctate, posterior half yellowish-ochraceous with coarse black punctures arranged in irregular transverse rows; median fascia and arrowhead-shaped spot glabrous, yellowish-ochraceous; anterior angles armed with pointed spines, ochraceous; lateral angles somewhat sinuate anteriorly, posteriorly they project outwards over the angles which are somewhat truncated, descending abruptly to the posterior margin.

Scutellum only slightly convex, reaching almost to the end of the abdomen, rugosely punctate, punctures black, otherwise yellowish-ochraceous; basal margin black, with three glabrous spots, yellowish-ochraceous, from the median there extends posteriorly to about the middle of the scutellum a fascia which extends along the ridge between the two oblique depressions; frena very short.

Hemelytra with corium and clavus yellowish-ochraceous and coarsely punctured with brownish-ochraceous; membrane hyaline.

Sternum black, punctate, hind margins of pro-, meso-, and metasternum, ochraceous.

Venter punctate, medially and along margins of segments and lateral margins, black; genital plate punctate, broadly black along anterior margin, otherwise reddish-ochraceous.

Legs very similar to those of *P. trimaculata* mihi, ochraceous annulated with black.

♀. Length 5 mm.; width across pronotal angles 3.5 mm.

The allotype is much darker than the holotype, but a paratype female from Cooper's Creek is even lighter in colour than the male.

Hab.—S. Australia: Ooldea, 1 ♂, collected by Mr. A. M. Lea; Karoonda to Peebinga, 1 ♀, collected by Mr. G. E. H. Wright; Cooper's Creek, Central Australia, 1916, 1 ♀, collected by S. Australian Museum Expedition (South Australian Museum).

Types.—Holotype ♂ and allotype ♀ in South Australian Museum, paratype ♀ in Australian Museum.

Genus IPPATHA *Distant*, 1910.

1910. *Ippatha* *Distant*, Ann. Mag. Nat. Hist., (8) vi, Oct., p. 370.
Ippatha australiensis *Distant*.

Distribution.—Australia.

Key to the species of the genus *Ippatha* *Distant*.

1. Species exceeding 7 mm. in length; ventral sublateral ochraceous fasciæ extending from head to end of abdomen *Ippatha australiensis* *Distant*.
Species rarely exceeding 7 mm. in length; ventral sublateral ochraceous fasciæ not extending from head to end of abdomen 2
2. Ochraceous fasciæ broad; ventral sublateral ochraceous fasciæ extending from prosternum to end of abdomen *Ippatha ornata* *Distant*.
Ochraceous fasciæ narrow; ventral sublateral fasciæ extending only the length of the abdomen *Ippatha angustilineata* sp. nov.

IPPATHA AUSTRALIENSIS *Distant*.

(Pl. liii, figs. 13, 14.)

1910. *Ippatha australiensis* *Distant*, Ann. Mag. Nat. Hist., (8) vi, Oct., p. 370. Alexandria and Hermannsberg, N. Australia.

Hab.—N. Territory, 1 ♀ (Australian Museum); N. W. Australia, 2 ♂ (Macleay Museum).

IPPATHA ORNATA *Distant*.

(Pl. liv, fig. 8.)

1910. *Ippatha ornata* *Distant*, Ann. Mag. Nat. Hist., (8) vi, Oct., p. 371. Peak Downs, Q.

Hab.—N. W. Australia: 1 ♀ (Macleay Museum).

IPPATHA ANGUSTILINEATA sp. nov.

(Pl. liv, figs. 4, 5.)

♀. Length 5.6 mm.; width across pronotum 2.9 mm.

Head 2.7 mm. across eyes, black, shining, rugosely punctate; eyes black, ocelli reddish; rostrum extending to middle coxæ, reddish-brown; jugæ contiguous before tylus; anterior margins of head pale ochraceous, glabrous.

Pronotum black, rugosely punctate, with a central transverse pale ochraceous fascia with a brick-red spot in the centre; anterior margin bordered with a glabrous, pale ochraceous fascia terminating just before lateral margins; lateral margins overhanging prosternum, glabrous, pale ochraceous, and with brick-red areas about the centre of each pale ochraceous mark; posterior margin slightly recurved with a concave, pale ochraceous fascia situated immediately in front of it.

Scutellum black, rugosely punctate, not reaching to end of abdomen, with three longitudinal glabrous, pale ochraceous fasciæ, two lateral, one central, extending from anterior margin almost to end of scutellum with brick-red areas towards their anterior extremities, the central fascia tinged with brick-red for the greater part of its length.

Hemelytra punctate, reddish-black; clavus with a pale ochraceous stripe, corium with outer and inner margins ochraceous.

Sternum black, shining; prosternum with two pale ochraceous fasciæ on the anterior margin, one on each side of the sternal sulcus.

Venter black, punctate laterally, glabrous and shining towards the middle; two glabrous, pale ochraceous fasciæ situated sublaterally extend longitudinally from the anterior margin to anal segment; lateral margins pale ochraceous with brick-red areas towards the posterior margins of each segment.

Legs black, anterior femora swollen, anterior tibiæ with an ochraceous band towards the outer angle; other legs missing.

Hab.—Ooldea, S. Australia, 1 ♀, collected by Mr. A. M. Lea. (Holotype in South Australian Museum.)

Tribe PODOPARIA Stål, 1872.

Lateral angles of pronotum emarginate terminating in front in a tooth more or less clear (in reality the angle is entire, but the antero-lateral border of the pronotum continues in a tooth before it, which gives the appearance in question); antenniferous tubercles visible wholly or to a great extent from above, acuminate more often outside. Eyes prominent, pedunculated. Frena present, occupying almost a third of the length of the scutellum (after Schouteden).

Key to the Australian genera.

- Jugæ longer than tylus; pronotum with a deep transverse impression *Coracanthella* gen. nov.
- Jugæ not longer than tylus; pronotum without a deep transverse impression. *Scotinophara* Stål.

Genus CORACANTHELLA nov.

Body ovate, coarsely punctate, pilose.

Head with tylus convex, and jugæ flattened and projecting beyond tylus, their apices separated; antennæ short, basal segment visible from above, antenniferous tubercles each forming a small inwardly-curved spine; rostrum reaching hind coxæ. *Pronotum* twice as broad as long, with a median deep transverse impression,

the area in front being slightly raised, the pronotal callosities forming rugose elevations; lateral margins each provided with a long broad spine near anterior angles, a sharp tooth near posterior angle, the border between the two convex. *Scutellum* long, almost reaching the tip of abdomen, narrowed behind base. Frena short about $\frac{1}{4}$ the length of scutellum. *Venter* convex, apical angles of segments prominent and tuberculated.

Apparently allied to the Indo-Malayan genus *Stortheconis* Horvath, 1883.

Genotype.—*Scutellera geophila* Montrouzier.

Distribution.—Australia and New Caledonia.

.CORACANTHELLA GEOPHILA (*Montrouzier*).

(Pl. lii, figs. 7, 8; Pl. liii, fig. 10.)

1858. *Scutellera geophila* Montrouzier, Ann. Soc. Linn. Lyon., v, p. 243 (*vide* Kirkaldy, Cat. Hemipt. (Heterop.) I. Cimicidæ, p. 235, 1909).
1861. *Podops geophila* Montrouzier, Ann. Soc. Ent. France, p. 61. New Caledonia and New Holland.
1867. *Podops teter* Walker, Cat. Hemipt. Heter. B.M., i, p. 74. Queensland. In the National Museum at Melbourne.
1876. *Scotinophara geophila* Stål, Kongl. Sv. Vet. Akad. Handl., xiv, n. 4, p. 33. N. Australia.
1914. *Scotinophara geophila* Distant, Nova Caledonia, i, livr. iv, n. 10, p. 371. Coné, New Caledonia.

Montrouzier's 1858 diagnosis is not available to me, but I have consulted his 1861 description and it applies to the material examined. The holotype male of *Podops teter* Walker is in the National Museum, Melbourne, in a bad state of preservation, and bearing only a label "Podops teter" in Walker's handwriting. There is no reference to locality. The type conforms to Walker's description and to that of Montrouzier 1861. A female specimen from Eccleston, New South Wales, compared with Walker's type is figured herewith (Pl. liii, fig. 10). Reference to the figure will show that Walker's statement in his description, "Thorax with an acute tooth on each side of the fore border and with another on each side near the hind border; a slight transverse ridge near the fore border," should prove a ready means of identifying the species.

Drawings of the specimen identified by Stål as *Scotinophara geophila* Montrouzier from North Australia, agree in all particulars with the type of *Podops teter* Walker, except that the acute tooth near the hind border is not represented as such in the drawings sent by Dr. Sjöstedt (Pl. lii, figs. 7, 8) but rather as an acute prominence.

Montrouzier in his 1861 description of the prothorax states: "Prothorax fortement tuberculeux sur le disque antérieur; celui-ci séparé du postérieur par un fort sillon. Côtés sineux, présentant à la terminaison du sillon transverse, une petite dent et une autre à l'angle antérieur au-dessous des yeux. Angles postérieurs arrondis." Apart from this discrepancy the drawings of *Scotinophara geophila* Stål 1876 and the specimens of *Podops teter* Walker agree in the following characters: the dark brown area at the base of the scutellum and the dark line extending medially from it to the end of the scutellum and a light-ochraceous impunctate stripe extending from the middle of the anterior margin of the pronotum to the summit of the transverse ridge.

The length of Stål's specimen is given as 6 mm., and Montrouzier 1861 gives the same length; some of the specimens I have measured range from 6 to 6.5 mm.

The ventral surface of the abdomen conforms to that in the figure of *Storthechoris nigriceps* Horvath, given by Distant in the Fauna Brit. India, Rhynchota, i, p. 78, f. 37, being piceous with the lateral areas brownish-ochraceous.

I have not included in the above synonymy Schouteden's reference for the Genera Insectorum, fasc. 30, p. 34, pl. 3, f. 3, as the figure he gives is quite unlike the species I regard as *geophila*.

I erect a new genus for *Scutellera geophila* Montrouzier since its characters unfit it for inclusion in *Podops* or *Scotinophara*.

Hab.—Queensland: ? locality, 1 ♂, holotype (National Museum, Melbourne); Cairns district, 1 ♀, collected by Mr. A. M. Lea (S. Australian Museum); Port Denison, 1 ♂ (Macleay Museum).

New South Wales: Eccleston, 1 ♀, collected by Mr. T. G. Sloane (S. Australian Museum); Clarence River, 1 ♀ (Macleay Museum).

S. Australia: Northern Territory, King Island, 24th Dec., 1915, 1 ♂ (National Museum, Melbourne).

Genus SCOTINOPHARA Stål, 1867.

1867. *Scotinophara* Stål, Öfvers. Kongl. Vetenskaps-Akad. Förh., xxiv, p. 502.

1875. *Scotinophara* Stål, Kongl. Sv. Vet. Akad. Handl., Bd. 14, n. 4, p. 33.

1905. *Scotinophara* Schouteden, Genera Insectorum, fasc. 30, p. 33. Genotype, *Scotinophara fibulata* (Germar, 1839, *Podops*).

Distribution.—Europe, Asia, Africa, Australia.

SCOTINOPHARA ALLANÆ³ *sp. nov.*

(Pl. liv, fig. 3.)

♀. Length 10 mm.; width across pronotal angles 5.5 mm.

Similar in general appearance to *Scotinophara coarctata* (Fabricius, 1798), larger, ochraceous-black, rugose.

Head 2.4 mm. across the eyes, black, clothed with brownish pubescence; eyes and ocelli brownish; rostrum extending to middle coxæ, ochraceous; antenniferous tubercles and basal segments of antennæ black, remainder brownish-black; tylus slightly raised, jugæ flat and broad.

Pronotum black, coarsely punctate posteriorly with the ridges between the punctures ochraceous; anterior margin broadly concave, behind it a deep transverse impression extends to the lateral angles; near each anterior lateral angle occurs an acute tooth; lateral margins nearly straight and spined before pronotal angles; a shallow impression extends transversely across the pronotum above the lateral spines; posterior margin straight.

Scutellum ochraceous-black, rugose, extending almost to the end of the abdomen; fine brownish-coloured pubescence in the black punctures; frena nearly a third of the length of the abdomen.

Hemelytra black punctate, ochraceous; membrane brownish on outer margin, otherwise hyaline.

Sternum dull-black, rugose.

Venter punctate, shining-black, with ochraceous marks near the lateral margins.

Legs with coxæ, trochanters, and femora black, tibiæ and tarsi brown; tarsi and distal extremities of tibiæ with fine hairs.

♂. Length 9.9 mm.; width across pronotal angles 5.3 mm.

Similar in structure and appearance to the female.

Hab.—Northern Territory, July and August, 1912, 3 ♂, 3 ♀, collected by the late Prof. W. Baldwin Spencer (National Museum, Melbourne).

Types.—Holotype ♀, allotype ♂, and paratype ♀ in National Museum, Melbourne; paratypes ♀ and ♂ ♂ in Australian Museum.

A list of the Graphosomatid bugs at present known to occur in Australia and which are dealt with in this paper is given below.

³ Named in honour of Miss Joyce K. Allan, who has contributed so many of the figures to this paper.

Tribe 1. GRAPHOSOMATARIA Schouteden.

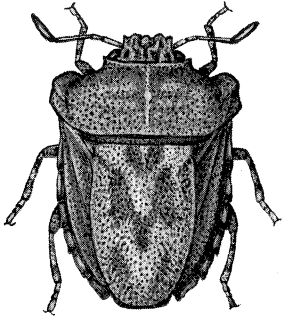
Deroploa parva Westwood, 1834.*Deroploopsis curvicornis* (Stål, 1876, *Deroploa*).*recticornis* sp. nov.*bidentatis* sp. nov.*brevicornutus* sp. nov.*trispinosus* sp. nov.*Eufroggattia tuberculata* Goding, 1903.*Numilia subquadrata* Stål, 1869.*Dandinus crassus* Distant, 1904.*Testrica antica* Walker, 1867.*bubala* Stål, 1876.*hædulea* Stål, 1876.*Protestrica rudis* (Germar, 1839, *Podops*).*stali* Schouteden, 1905.*subpunctatus* (Walker, 1867, *Bolbocoris*).*Propetestricea trimaculata* gen. et sp. nov.*angulata* sp. nov.*Ippatha australiensis* Distant, 1910.*ornata* Distant, 1910.*angustilineata* sp. nov.

Tribe 2. PODOPARIA Stål.

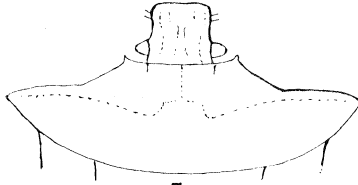
Coracanthella geophila (Montrouzier, 1858, *Scutellera*)
nov. gen.*Scotinophara allance* sp. nov.

EXPLANATION OF PLATE LII.

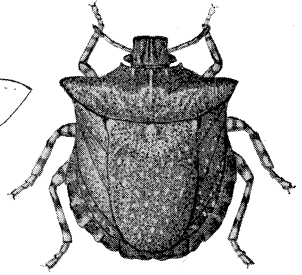
- Fig. 1. *Testrica rudis* Germar. (Identified by Stål.) =
Protestrica rudis (Germar). Dorsal surface.
- Fig. 2. *Testrica rudis* Germar. (Identified by Stål.) =
Protestrica rudis (Germar). Head and pronotum.
- Fig. 3. *Deroploa curvicornis* Stål. Type. = *Deroploopsis curvi-*
cornis (Stål). Head and pronotum.
- Fig. 4. *Deroploa curvicornis* Stål. Type. = *Deroploopsis curvi-*
cornis (Stål). Dorsal surface.
- Fig. 5. *Testrica antica* Walker. (Identified by Stål.) Head and
pronotum.
- Fig. 6. *Testrica antica* Walker. (Identified by Stål.) Dorsal
surface.
- Fig. 7. *Scotinophara geophila* Montrouzier. (Identified by Stål.)
= *Coracanthella geophila* (Montrouzier). Dorsal
surface.
- Fig. 8. *Scotinophara geophila* Montrouzier. (Identified by Stål.)
= *Coracanthella geophila* (Montrouzier). Head and
pronotum.
- Fig. 9. *Testrica hædulea* Stål. Type. Dorsal surface.
- Fig. 10. *Testrica hædulea* Stål. Type. Head and pronotum.
- Fig. 11. *Testrica emarginata* Stål. Type. = *Protestrica stali*
(Schouteden). Head and pronotum.
- Fig. 12. *Testrica emarginata* Stål. Type. = *Protestrica stali*
(Schouteden). Dorsal surface.
- Fig. 13. *Testrica bubala* Stål. Type. Head and pronotum.
- Fig. 14. *Testrica bubala* Stål. Type. Dorsal surface.



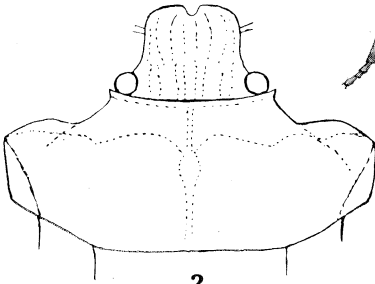
1



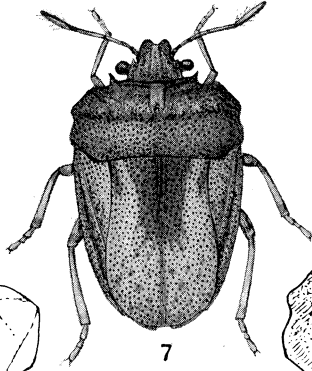
5



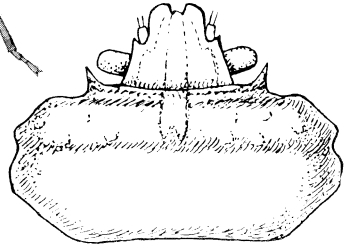
6



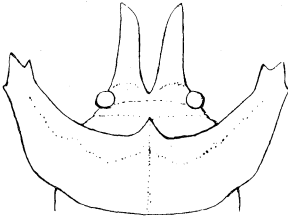
2



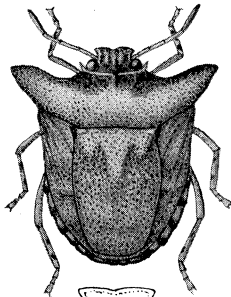
7



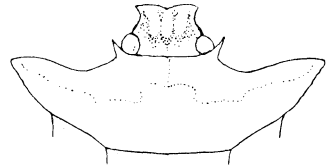
8



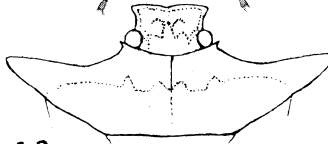
3



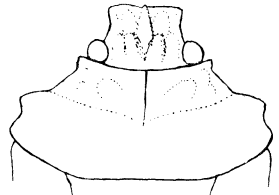
9



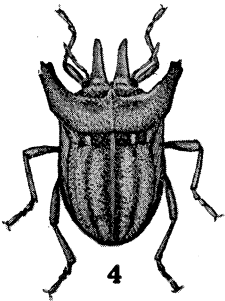
10



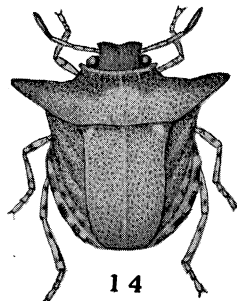
13



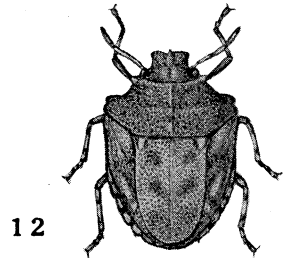
11



4



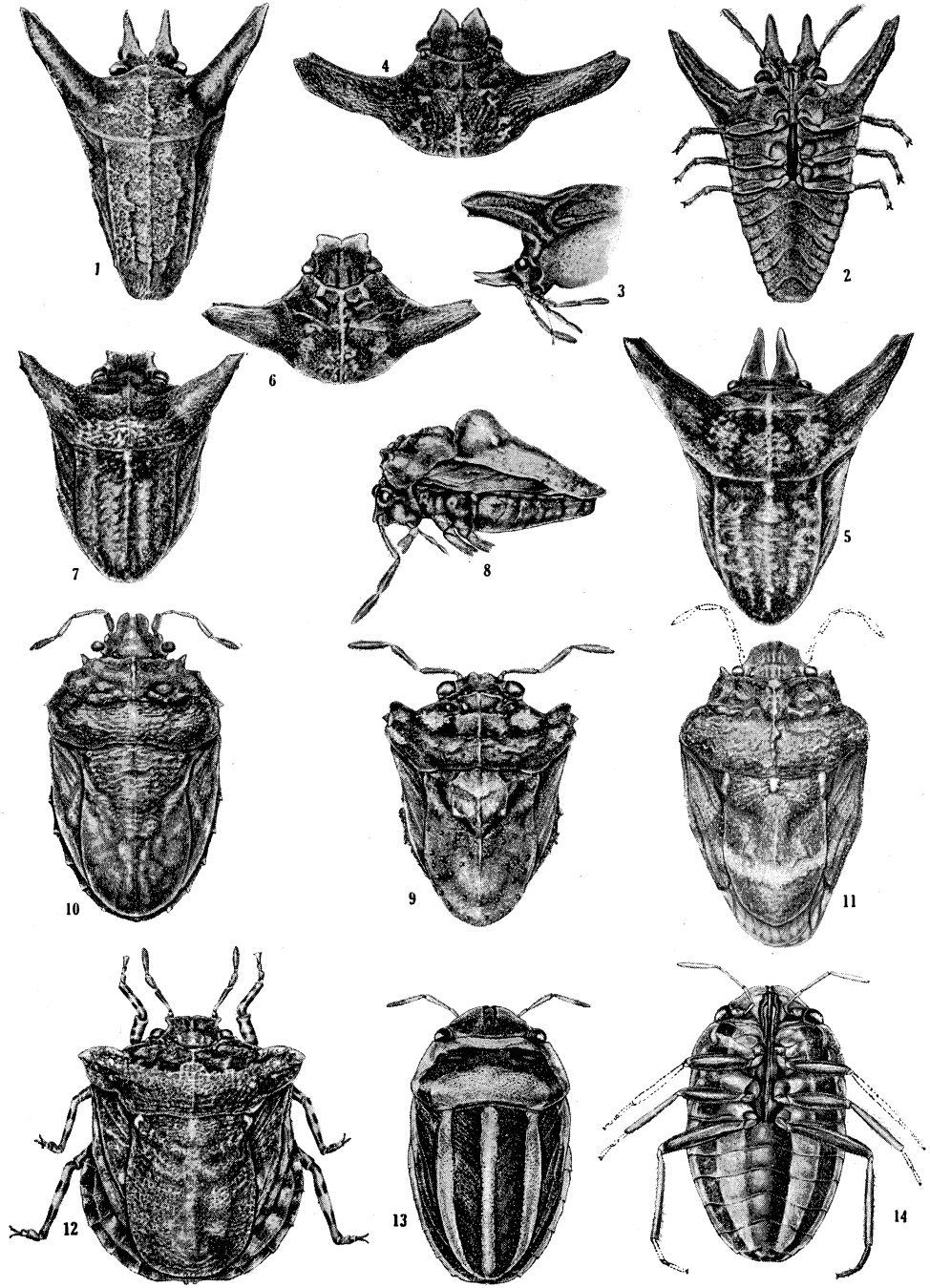
14



12

EXPLANATION OF PLATE LIII.

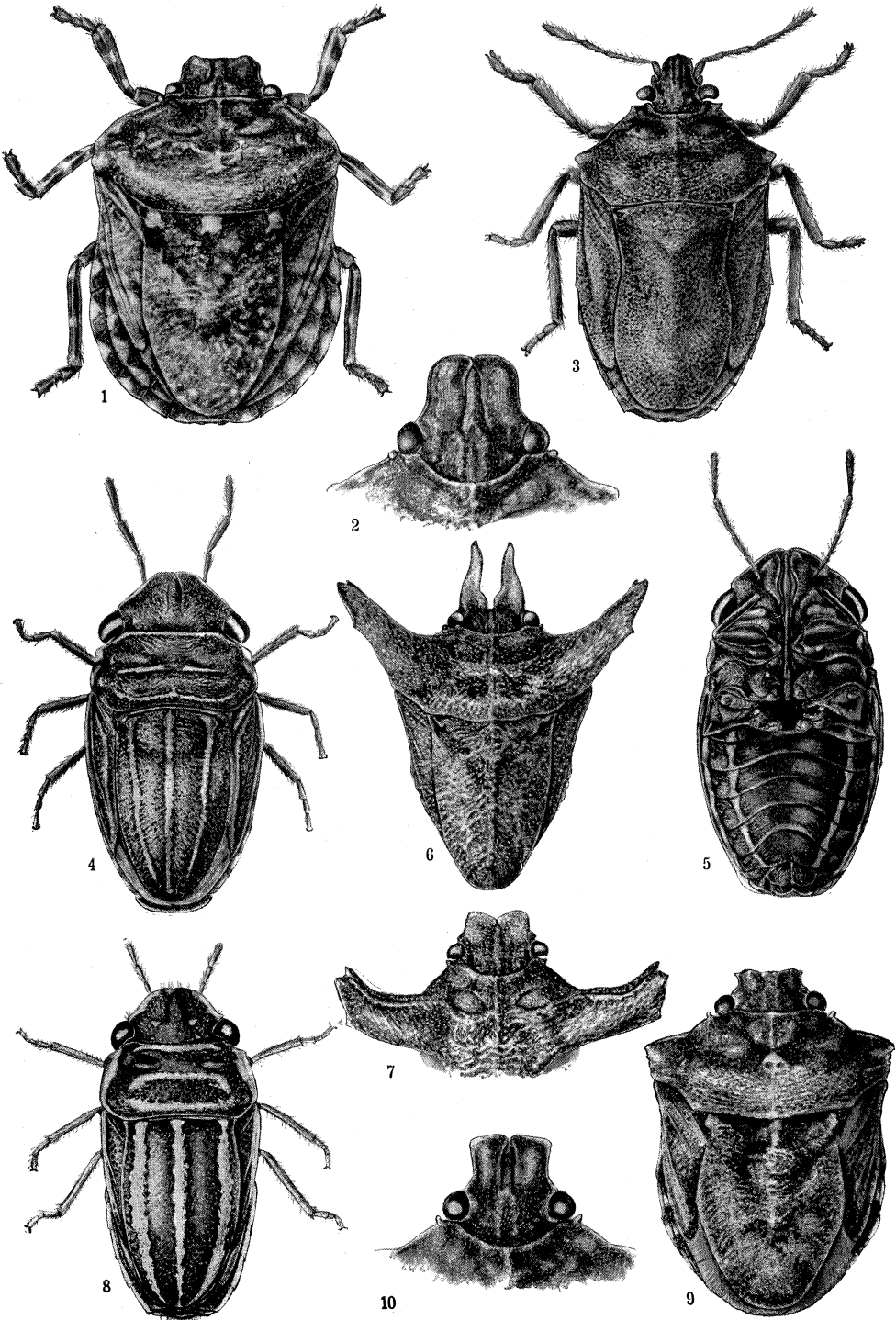
- Fig. 1. *Deroploopsis recticornis* sp. nov. Holotype. Male.
Dorsal surface.
- Fig. 2. *Deroploopsis recticornis* sp. nov. Holotype. Male.
Ventral surface.
- Fig. 3. *Deroploopsis recticornis* sp. nov. Holotype. Male.
Head and pronotum.
- Fig. 4. *Deroploopsis recticornis* sp. nov. Allotype. Female.
Head and pronotum.
- Fig. 5. *Deroploopsis bidentatus* sp. nov. Holotype. Male.
Dorsal surface.
- Fig. 6. *Deroploopsis bidentatus* sp. nov. Allotype. Female.
Dorsal surface.
- Fig. 7. *Deroploopsis curvicornis* Stål. Allotype. Female.
Dorsal surface.
- Fig. 8. *Eufroggattia tuberculata* Goding. Male. Lateral view.
- Fig. 9. *Eufroggattia tuberculata* Goding. Male. Dorsal surface.
- Fig. 10. *Podops teter* Walker. (Specimen compared with type.) =
Coracanthella geophila (Montrouzier). Female.
Dorsal surface.
- Fig. 11. *Bolbocoris subpunctatus* Walker. Type. = *Protestrica*
subpunctata (Walker).
- Fig. 12. *Testrica antica* Walker. Female. Dorsal surface.
- Fig. 13. *Ippatha australiensis* Distant. Female. Dorsal surface.
- Fig. 14. *Ippatha australiensis* Distant. Female. Ventral surface.



JOYCE K. ALLAN, del.

EXPLANATION OF PLATE LIV.

- Fig. 1. *Propetestricea trimaculata* sp. nov. Holotype. Female.
- Fig. 2. *Propetestricea trimaculata* sp. nov. Holotype. Female.
Head.
- Fig. 3. *Scotinophara allanae* sp. nov. Holotype. Female.
- Fig. 4. *Ippatha angustilineata* sp. nov. Holotype. Female.
Dorsal surface.
- Fig. 5. *Ippatha angustilineata* sp. nov. Holotype. Female.
Ventral surface.
- Fig. 6. *Deroploopsis trispinosus* sp. nov. Holotype. Male.
Dorsal surface.
- Fig. 7. *Deroploopsis trispinosus* sp. nov. Allotype. Female.
Head and pronotum.
- Fig. 8. *Ippatha ornata* Distant. Female.
- Fig. 9. *Propetestricea angulata* sp. nov. Holotype. Male.
- Fig. 10. *Propetestricea angulata* sp. nov. Holotype. Male. Head.



JOYCE K. ALLAN, del.