

THE STILT-BUGS (*HETEROPTERA-NEIDIDAE*) OF THE AUSTRALIAN AND NEW ZEALAND REGIONS

BY GORDON FLINDERS GROSS, B.Sc., SOUTH AUSTRALIAN MUSEUM.

Fig. 1-4.

INTRODUCTION.

THE material described in this paper is in the collections of the South Australian Museum, Adelaide, the Australian Museum, Sydney, and the British Museum (Natural History), London.

I am especially indebted to Dr. W. E. China of the British Museum for arranging exchange of comparative material, and for observations and information on various aspects of synonymy, in particular for his opinion that *Metatropis tipularius* Dist. is synonymous with *Capyella lobulata* Bergroth.

FAMILY NEIDIDAE Kirkaldy 1902.

Species slender and delicate with very long legs and antennae. Apex of first segment of the antennae, and apices of the femora, clavate; terminal segment of antennae enlarged and fusiform; antennae four-segmented and tarsi three-segmented. Head usually equipped with a transverse dorsal sulcus immediately anterior to ocelli, and continued laterally to the hind margin of the eyes. Pronotum dorsally and laterally, and the subcoxae covered with a raised net-like reticulation enclosing polygonal pits or punctuations.

Of the six species which have been recorded from this area, the two Australian species are synonymous. Four species from Australia are herein described as new, while two others, originally described from India, are now shown to occur in the Australasian region, making the total number of species eleven.

These insects are rare, and appear to frequent vegetation near water, where the best method of capture is by sweeping. Most species are to be found in high rainfall areas, though *Protacanthus halei* sp. nov. seems capable of living under semiarid conditions.

KEY TO AUSTRALIAN AND NEW ZEALAND GENERA.

1. Scutellum unarmed, or provided with a simple keel or obtusely pointed nodule; head with a prominent "horn" located between the bases of the antennae and which may project forward horizontally to or past the tylus 2
- Scutellum armed with a long suberect spine, which curves backward somewhat; head unarmed 3

2. Anterior pronotal margin concave. Australian and New Zealand species dimorphic in both hemielytra and wings, brachypterous form commonest *Neides* Latreille 1804.
Anterior pronotal margin convex, dimorphism does not occur.
.. .. . *Capyella* Breddin 1907.
3. Odoriferous apertures provided with a process, which projects up above the level of the hemielytra; no anterior processes to the pronotum .. 4
Process of the odoriferous apertures not well developed or unduly produced; pronotum equipped with a spine near each antero-lateral angle
.. .. . *Protacanthus* Uhler 1893.
4. Pronotum equipped with three prominent tubercles posteriorly
.. .. . *Gampsocoris* Fuss 1852.
Pronotum equipped with three obsolete tumescences posteriorly .. 5
5. Corium and clavus impunctate *Metacanthus* Costa 1848.
Corium impunctate, clavus punctate *Pneustocerus* Horvath 1905.

Genus *NEIDES* Latreille 1802.

Neides Latreille 1802, Hist. Nat. Crust. Ins. III, p. 246. Logotype *N. tipularius* (Linn) designated by Westwood 1840. A palaeartic species.

In addition to the synonymy cited by Van Duzee, 1917, Cat. Hem. Am. Nth. of Mexico, pp. 143-144, there are the following references: Douglas and Scott 1865, Brit. Hem. I, p. 160; Saunders 1892, Hem. Heterop. Brit. Is., p. 61; Hedicke 1932, *Mitt. deuts. ent. Ges.* 3, p. 134.

Vertex of head equipped with a horn-like process; the basal segment of the rostrum does not reach the anterior ventral margin of the pronotum; second segment of antennae longer than the fourth. Anterior margin of the pronotum concave; posterior two-thirds of the pronotum convexly raised in the macrop-terous form, but flat and coplanar with anterior third in the brachypterous; both pronotum and abdomen unarmed. Scutellum furnished with an obtusely pointed nodule, and the process associated with the odoriferous apertures not well developed, or unduly prolonged.

In addition, the following tendent characters occur; the horn-like process of the vertex tends to project forward horizontally over the tylus, and in the European species to be equipped with a ventrally directed (and placed) semi-circular lamina, but in *Neides tasmaniensis*, the horn is very reduced, and inclined at an angle of 45° (fig. 1b); the eyes tend to lie midway between the anterior apex of the horn, and the anterior margin of the pronotum, but this is not so in *N. tasmaniensis* due to the reduction of the horn, or in *N. maiponga* due to an elongation of the postocellary portion of the head; the first segment of the rostrum tends to reach only to about the region of the antecellary

suleus, but reaches nearly to the anterior margin of the pronotum in *N. tasmaniensis*, and the rostrum itself tends to reach only to the mid-coxae, but in *N. tasmaniensis* surpasses the mid-coxae.

Pterygopolymorphism is common and of two distinct types; in the European species, the hemielytra are always longer than the abdomen, and never reduced in the brachypterous form; in the Australian and New Zealand species, the hemielytra and wings in the macropterous condition never reach much beyond the middle of the abdomen (fig. 2 a), while in the brachypterous form, both hemielytra and wings are considerably reduced (figs. 1 a, 2 c), and the membrane of the hemielytra is no more than a vestigial flap. Myers (1926) first recorded this second type of dimorphism for *N. wakefieldi* Buch. White, and I have specimens in both conditions of *N. maiponga*, among which the brachypterous condition predominates; the only three specimens of *N. tasmaniensis* I have seen are brachypterous, though doubtless the macropterous form does exist. This evidence supports Myer's statement that apparently brachyptery is the normal condition.

The genus is cosmopolitan and three species, two of them new, are shown to occur in the Australian and New Zealand regions.

KEY TO SPECIES OF *NEIDES*.

1. Hemielytra never shortened, always extending past the apex of the abdomen, wings may be shortened European species.
Hemielytra and wings commonly shortened, but when fully developed, not extending much beyond the middle of the abdomen Australian and New Zealand species.
2. Cephalic horn strongly developed, projecting forward horizontally over the tylus; rostrum reaching mid-coxae 3
Cephalic horn very reduced and set at an angle of 45°; rostrum reaching hind coxae *N. tasmaniensis* sp. nov.
3. Body thickly pilose above and below; eyes approximately midway between anterior margin of pronotum and apex of horn . . *N. wakefieldi* Buch. White.
Body weakly pilose above and below; eyes much nearer to apex of cephalic horn than to anterior margin of pronotum *N. maiponga* sp. nov.

NEIDES TASMANIENSIS sp. nov.

Fig. 1, a-b.

Colouration: testaceous; underside of head, last segment of antennae, distal half of last segment of rostrum, distal ends of tibiae, tarsi and ventral sulcus of thorax black; femora (except distal testaceous clubs), tibiae and first three

antennal segments (except distal clubs of first, which are concolourous with femoral clubs), transverse fascia on upper surface of the abdominal connexivia, and a central ventral abdominal fascia yellowish.

Structure: eyes somewhat nearer tylus than to fore margin of pronotum; spine of vertex very reduced, and set at an angle of 45° ; there is no process on the tylus; rostrum surpasses the mid-coxae, first segment not quite

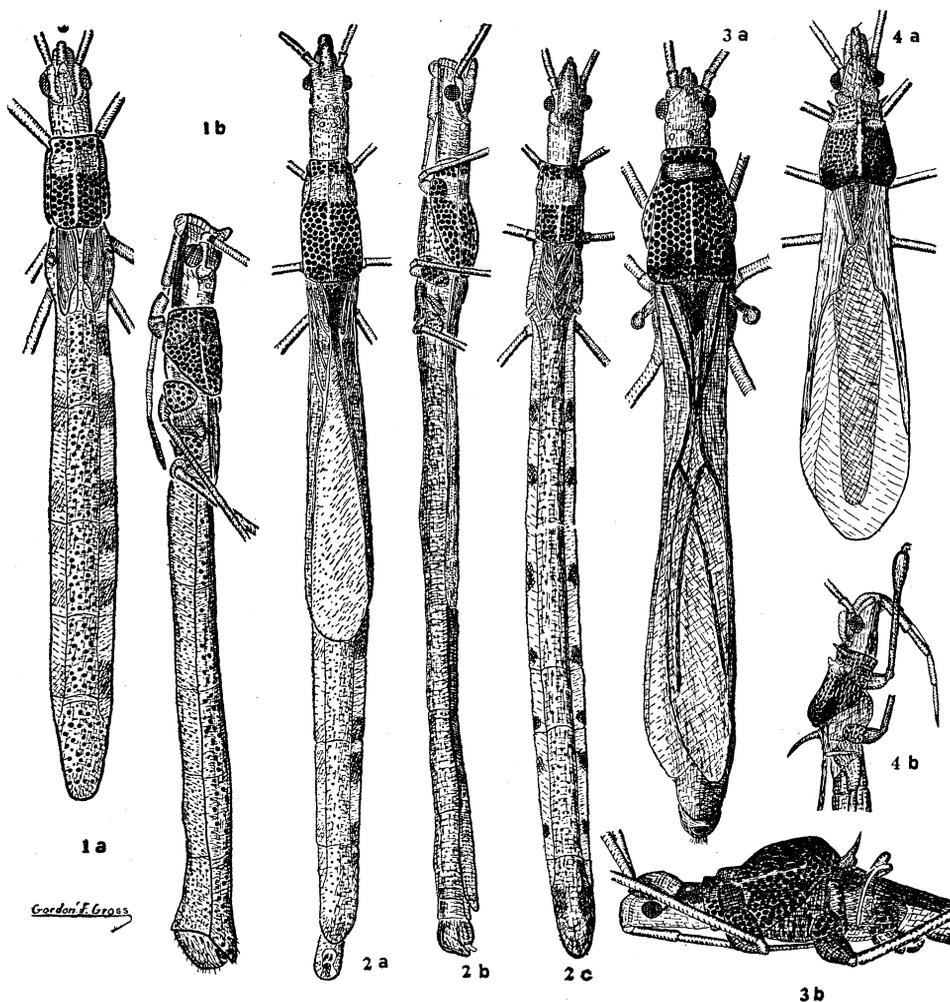


Fig. 1. *Neides tasmaniensis*; a-b, dorsal and lateral views of brachypterous male.

Fig. 2. *Neides maiponga*; a-b, dorsal and lateral views macropterous male, c dorsal view brachypterous male.

Fig. 3. *Metacanthus pluto*; a-b, dorsal and lateral views male.

Fig. 4. *Protacanthus halei*; a-b, dorsal and lateral views female.

reaching the anterior margin of prothorax, ratio of segments 9:9; 7.5:7.5. Abdomen above and below, coarsely punctate.

Length 6.5–7.5 mm. Width 0.5 mm.

Habitat. Tasmania: Hobart, 22.1.16, C. Cole; Launceston, 6 Sept., 1929, V. V. Hickman, "Under log". N. S. Wales: A. M. Lea.

Types: Holotype and paratype in collection of South Australian Museum (No. I.20025), allotype (No. K60373) in collection of Australian Museum.

NEIDES WAKEFIELDI Buch. White 1878.

Neides wakefieldi Buchanan White 1878, *Ent. Mon. Mag.* 15, p. 31; Hutton 1897, *Trans. N.Z. Inst.* xxx, p. 172; Myers 1926, *Trans. N.Z. Inst.* 56, p. 485–6; Tillyard 1926, *Ins. Aus. N.Z.*, pp. 147–8, fig. Q5.

Colouration: testaceous; the side of the head and of the prostethium with a longitudinal brown line.

Structure: the apical lamina (spine of vertex) of the head cylindrical, straight, gradually narrowed to an obtuse point, and reaching far beyond the apex of the head, anteocular part of the head subequal to the postocular.

In addition, the body is covered with a long whitish pubescence which readily distinguishes it from *N. tasmaniensis* and *N. maiponga*, in which only a very sparse pubescence is present.

Length 7–8 mm. Width 1 mm.

Habitat. New Zealand: "Wellington, Wanganui, Canterbury, rare in the North Island, taken in December and April" (Myers).

NEIDES MAIPONGA sp. nov.

Fig. 2, a, b, c.

Colouration: testaceous; pronotum, spine on vertex of head, femora (a broad brown band on the apical clubs excepted), tibiae (apices excepted), first three segments of antennae (a broad brown band on apical club of the first excepted) a basal and a distal band on the fourth segment, a dorsal longitudinal line on head from between ocelli to anterior margin of pronotum, tylus and some contiguous areas of jugae, insertions of antennae and some transverse fasciae on the upper surface of abdominal connexivia yellowish. Other transverse fasciae on connexivia, and a broad median band on last segment of antennae blackish brown. Eyes in life red.

Structure: Spine of vertex sparsely pilose and projecting forward to tylus; last segment of antennae elongately fusiform; rostrum reaching the intermediate coxae, first segment reaching to about anteocellary sulcus. Hemielytra

in macropterous form extending half-way down the length of the abdomen, but in the brachypterous form extending only one-ninth the length of the abdomen.

Length 10.8 mm. Width 0.5 mm.

Habitat. South Australia: Myponga, from small swamp, G. F. Gross; Adelaide, 10th March, 1949, F. J. Mitchell; Cape Jervis area, from *Acacia* in creek, 27th February, 1949, G. F. Gross. Tasmania: New Norfolk, in tussock, A. M. Lea.

Types. Holotype (macropterous), allotype (macropterous), 1 paratype (macropterous), and 3 paratypes, 2 ♂, 1 ♀ (brachypterous), in the collection of the South Australian Museum (No. I.20026), 2 paratypes (brachypterous) in the British Museum, and 1 paratype (brachypterous) in the Australian Museum.

Genus CAPYELLA Breddin 1907.

Capyella Breddin 1907, *Deuts. Ent. Zeit.*, p. 36 (Haplotype *malacaiopus* (Stal) an African and Indian species). Bergroth 1909, *Ann. Soc. Ent. Belg.* 53, p. 188-9.

Capys Stal 1865, *Hem. Afr.* 11, p. 119; Stal. 1874, *Enum Hem* IV, p. 128; Lethierry and Severin 1894, *Cat. Hem.* II, p. 131. Distant 1908, *Faun. Brit. Ind. Rhynch.* IV, p. 489 (pre-occupied by *Capys* Hewitson 1865, *Lepidoptera*).

Capytum Strand 1926, *Arch. Naturg.* 92, A8, p. 47.

Head armed with porrect spiniform process, pronotum posteriorly depressed and furnished with an obtuse conical tubercle near each lateral angle, mesosternum, metasternum and first abdominal segment sulcated, process of the odoriferous apertures apically emarginate (abbreviated from Stal).

In addition, the second segment of the antennae is longer than the fourth; the anterior margin of the pronotum is sinuately convex, and the pronotum and the abdomen are unarmed; the scutellum is furnished with a short obtusely pointed spine.

This genus is known from the African, Indian and Australian regions; there is one Australian species.

CAPYELLA LOBULATA Bergroth 1909.

Capyella lobulata Bergroth 1909, *Ann. Soc. Ent. Belg.*, 53, 188.

Metatropis tipularius Distant 1911, *Ann. Mag. Nat. Hist.* (18), 7, (42), 585.

Colouration: testaceous; abdomen beneath pale yellow, with a marginal series of ochraceous spots; fourth segment of the antennae black with a white subbasal annulation.

Structure: the rostrum reaches the intermediate coxae, first segment subequal to the second and third together, basal margin of the pronotum produced into a rounded lobe above the base of each corium.

Length 8–9 mm. Width 1 mm.

Differs from *C. malacaipus* (Stal) (= *horni* Breddin) and *C. gracilis* (Dist.), in the short rostrum which reaches only to the intermediate coxae, and in the light underside of the abdomen.

Habitat. Northern Territory, Australia.

Types. Unique types of *C. lobulata* and *Metatropis tipularius* in the collection of the British Museum; one damaged specimen (Melville Is., N.T., W. D. Dodd), in the collection of the South Australian Museum.

Genus METACANTHUS Costa 1838.

Metacanthus Costa 1838, Cim. Regni Neap. Cent., 1, 27, (Haplotype *M. meridionale* Costa, a European species). Bergroth 1914 *Wien Ent. Zeit.*, xxxiii, 182.

Megalomerium Fieber 1854, *Wien. Ent. Monats.*, 208; Fieber 1861, *Europ. Hem.* 54 and 231; Lethierry and Severin 1894, *Cat. Hem.* II, 131; Oshanin 1906–9, *Verz. Pal. Hem.* I, 242.

Apex of head moderately subacutely produced, second and third segments of antennae subequal, rostrum reaching hind coxae. Pronotum twice as long as broad, with a distinct anterior collar, posterior two-thirds convex, and with a low central keel. Hemelytra nearly reaching or surpassing the apex of abdomen, and the process of the odoriferous aperture is produced into an upwardly directed spine which surpasses the level of the hemelytra and is recurved backwards at the tip.

The genus is represented in Europe, Africa, Asia, Indonesia, New Guinea and Australia.

KEY TO AUSTRALIAN SPECIES OF *METACANTHUS*.

1. Species small (4–5 mm. long), yellowish 2
Species larger (7–8 mm. long), dark brown *M. pluto* sp. nov.
2. First segment of antennae, femora and tibiae with narrow brown or black annulations 3
First segment of antennae, femora and tibiae not annulated *M. pertenerus* (Bredd).
3. Species 5 mm. long; annulations brown *M. pertenerus vittatus* subsp. nov.
Species 4 mm. long; annulations black *M. tenellus* (Horvath)

METACANTHUS PERTENERUS (Breddin 1907).

Megalomerium pertenerum Breddin 1907, *Deuts. Ent. Zeit.*, 37; Distant 1918, *Faun. Brit. Ind. Rhynch.* VII, 176, fig. 82.

Colouration: very light yellow; the clavate distal ends of the first segment of the antennae and the femora, and the apices of the tibiae brownish; the two terminal segments of the tarsi, tip of the rostrum, and basal two-thirds of the last (fusiform) segment of the antennae black; terminal third of last antennal segment white; eyes and dorsal surface of abdomen red.

Structure: first antennal segment somewhat shorter than segments two and three together, segment two longer than segment three, ratio 60:35:30:10.

Length 5 mm. Width 0.5 mm.

Habitat. India and Ceylon.

METACANTHUS PERTENERUS VITTATUS subsp. nov.

This Australian variety differs from the typical Indian, in that the first segment of the antennae, the femora, and the tibiae, are banded with narrow brown annulations, except on the clubbed distal ends of the first antennal segment and the femora, where there is a broad annulation.

Habitat. Australia, Northern Territory (nine specimens, Roper River, N. B. Tindale).

Types. Holotype, allotype, and four paratypes in the collection of the South Australian Museum (No. I.20027); three paratypes in the collection of the British Museum.

The underside of the abdomen in both subspecies, has a greenish tinge, indicating that it is probably grass green in life.

METACANTHUS TENELLUS (Horvath) 1905.

Megalomerium tenellum Horvath 1905, *Ann. Mus. Nat. Hung.*, III, (1), 57.

Whitish testaceous; head palely reddish testaceous, smooth, vertex seen from the side not very convex, almost subhorizontal, tylus produced; the first segment of the antennae remotely and narrowly annulated with black towards the base, apex lightly clubbed and somewhat infuscated, fourth segment black, apex white; pronotum densely and finely punctate on almost its entire surface, two small basal obsolete callosities on the anterior lobe however, are smooth, the lateral margins of the posterior lobe are parallel; the spine on the scutellum is subvertical, shorter than the posterior margin of the pronotum with an acute

apex; hemielytra just surpassing the apex of the abdomen; thorax ventrally punctate; legs narrowly and remotely annulated with black; femora lightly clavate and somewhat infuscated at the apex, tarsi apically black.—Horvath.

Length 4 mm.

This species differs from *M. pertenerus* in its smaller size and darker colouration; as however I have not seen this species, I am unable to say whether it is also a subspecies of the "*pertenerus*" group, in which case, as it is the prior species, *M. pertenerus* and *M. pertenerus vittatus* would fall under its synonymy as subspecies.

Habitat. New Guinea, Madang (Friedrich Wilhelmshafen).

METACANTHUS PLUTO sp. nov.

Fig. 3, a-b.

Colouration: reddish brown; fasciae behind the eyes, pronotum in the vicinity of anterior dorsal callosities, and regions above the anterior subcoxae laterally, scutellum and its spine, thoracic sternites, dorsal surface and portions of ventral surface of the abdomen, tips of tibiae and tarsi, darker brown to blackish brown; basal two-thirds of last segment of antennae black, apical third white.

Structure: Ratio of antennal segments 60:36:29:8, vertex of head fairly convex, ocelli nearer eyes than to each other; first segment of the rostrum reaching about to the anteocecellary sulcus.

Length 7-8 mm. Width 1 mm.

This large dark species contrasts sharply with the other small yellowish species in this genus, and in size and overall colouration, superficially resembles *Capyella malacaipus* and *C. lobulata*.

It appears to be closely related to *Pneustocerus nigricornis* Horvath and *P. brevispina* Horvath, in dimensions and colouration, but it only differs from Horvath's description of *Pneustocerus* in not having the punctate clavus. Structurally it also does not differ significantly from the other species of *Metacanthus*.

It appears that there is need for some clarification of the status of *Pneustocerus* Horvath.

Habitat. Queensland; Bunya Mts., 2,000-3,000 ft., 24.12.37, N. Geary; Magnetic Is., A. M. Lea. N. S. Wales: Upper Williams River, Oct., 1925, Lea and Wilson.

Types. Holotype and allotype in the collection of the Australian Museum, Sydney; two paratypes in the collection of the South Australian Museum (No. I.20028), and one paratype in the collection of the British Museum.

Genus PNEUSTOCERUS Horvath 1905.

Pneustocerus Horvath 1905, *Ann. Mus. Nat. Hung.*, III (1), 59.

(Haplotype *P. nigricornis* Horvath, a New Guinea species).

Body strongly elongated. Head unarmed; vertex tumidly elevated, marked off from tylus by a transverse impression. Ocelli more remote from each other than from eyes. Antennae slender, very long, longer than body, first segment subequal to the subsequent segments in length, apex clavate, second segment a little longer than third, fourth segment narrow, elongate, and fusiform. Rostrum reaching posterior coxae, basal segment half length of head. Pronotum anteriorly truncate, posteriorly lightly sinuate, constricted towards front, convex, angles not prominent, posterior margin attenuate and depressed, median keel obsolete and disappearing posteriorly, humeral angles hardly tumescent. Scutellum armed with a long erect spine. Hemielytra complete, clavus punctate, corium impunctate. Odoriferous orifices furnished with a long erect process, whose apex is sharply turned back. Legs very long; femora apically clavate, posterior femora surpassing the apex of the abdomen. Venter impunctate. (Horvath).

The genus has species in New Guinea and Borneo.

PNEUSTOCERUS NIGRICORNIS Horvath 1905.

Pneustocerus nigricornis Horvath 1905, *Ann. Nat. Mus. Hung.*, III (1), 59.

Reddish-testaceous; head smooth, impunctate, often a lateral obsolete postocular fuscus band is present, vertex strongly convex; antennae black, first segment becoming pale at base, apex lightly clavate, apical half of the fourth segment white; pronotum densely and distinctly punctate, provided with a smooth transverse subapical callosity, sides moderately rounded; spine on the scutellum straight, vertical, equal to half the posterior margin of the pronotum, apex acute; hemielytra a little shorter than abdomen, extending to apex of penultimate dorsal segment; process of odoriferous orifices becoming black at the apex; clubs of femora, tibiae, and tarsi black. (Horvath).

Length 8-9 mm.

Habitat. New Guinea.

I have not seen this species or any member of its genus.

Genus GAMPSOCORIS Fuss 1852.

Gampsocoris Fuss 1852, *Mitth. Ver. Hermanstadt* 7, (Haplotype *G. punctipes* (Germar), a European species). Bergroth 1914, *Wien Ent. Zeit.* xxxiii, 182.

Metacanthus Costa 1848, *Att. Ac. Nap.* VII, 258; Fieber 1859, *Wein Ent. Monats.* 209; Fieber 1811, *Europ. Hem.* 213; Douglas and Scott 1865, *Brit. Hem.* I, 115; Saunders 1892, *Hem. Het. Brit. Is.*, 15; Lethierry and Severin 1894, *Cat. Hem.* II, 132; Distant 1902, *Faun. Brit. India, Rhynch.* I, 422.

Armanus Mulsant and Rey 1870, *Pun. France, Cor.* 187.

Vertex of head raised and convex, second and third segments of antennae subequal, pronotum not twice as long as broad, convexly raised and trituberculate posteriorly, clavus very short, and apical margin of the corium very long. Scutellum equipped with a long curved spine, process of the odoriferous apertures neither strongly produced nor surpassing the level of the hemielytra in *G. punctipes*, but is strongly produced, and surpasses the level of the hemielytra in *G. pulchellus*.

The genus is cosmopolitan, there is only one species in this region.

GAMPSOCORIS PULCHELLUS (Dallas) 1852.

Metacanthus pulchellus Dallas 1852, *List. Hem.* II, 490; Distant 1902, *Faun. Brit. India, Rhynch.* I, 243, fig. 248.

Colouration: pale yellow, tending brownish in some specimens; first three segments of the antennae, femora, and tibiae with numerous brown or black annulations; clubs of femora tips of tibiae and two terminal tarsal segments brown.

Structure: Pronotum with anterior margin convex and without tubercles, but with three whitish tubercles forming a transverse line on the dorsal surface above the fore coxae (homologous with the callous area in this position in other species of Neidids). Process of the odoriferous apertures prolonged into an upwardly directed process, which surpasses the level of the hemielytra (as in species of *Metacanthus*—this is not shown in Distant's figure).

Length 3.5–4.5 mm. Width 0.75 mm.

Habitat. India, Java, New Guinea (Misima Is.), Australia (Darwin). The Darwin species are somewhat paler than the Indian and Misima Is. specimens.

There are eleven specimens (two Darwin, G. F. Hill, and nine Misima Is., Papua, Rev. H. K. Bartlett) in the collection of the South Australian Museum, and four specimens (two of the Darwin series and two of the Misima series) in the collection of the British Museum.

GENUS *PROTACANTHUS* Uhler 1893.

Protacanthus Uhler 1893, *Proc. Zool. Soc.* London, 707, (Haplotype *P. decorus* Uhler, a West Indian species). China 1930, *Ins. Samoa II*, fasc. 3, 111.

Auchenoplus Bergroth 1913, *Mem. Soc. Ent. Belgique*, 22, 179.

Rostrum reaching posterior coxae, basal segment not as long as head, second and third segments of antennae subequal. Pronotum anteriorly armed on each side with an obliquely directed spine and equipped with a prominent central keel and trituberculate posteriorly. Hemielytra longer than abdomen, which tapers from base to apex. Scutellum armed with a prominent spine, process of the odoriferous apertures not prolonged vertically above the level of the hemielytra.

Has species in the West Indies, Polynesia, Australia and India.

PROTACANTHUS PACIFICUS China 1930.

Protacanthus pacificus China 1930, *Ins. Samoa II*, fasc. 3 111, fig. 2.

Anterior lobe of head (in front of ocelli) and eyes intense shining black, remainder fulvous, flecked with brown. Pronotum fulvous anteriorly and shading through brown to black posteriorly, abdomen pale green.

Head with a few short hairs, especially at apex of rostrum, reaching almost to second abdominal segment, relative lengths of segments, 35:17:20:22. Humeral angles of pronotum sub-globosely swollen, the median longitudinal keel on disc very distinct posteriorly, strongly elevated between the tumescent humeral lobes and dilated to form an elongate lobe-like protusion. Spines of anterior collar robust, about as long as head is wide between eyes. Hemielytra extending well beyond the apex of the abdomen. (Abbreviated from China).

Length 4 mm. Width 0.72 mm.

Habitat. Samoa and Fiji.

PROTACANTHUS HALEI sp. nov.

Fig. 4, a-b.

Colouration: light yellowish brown; thoracic sternites brown; last segment of antennae, tip of rostrum, terminal two tarsal segments and a longitudinal line on inner prolongation of each corium black.

Structure: first segment of antennae slightly shorter than next two together, ratio of segments, 35:20:22:9; vertex tumescently carinate, head with scat-

tered hairs, especially on the crown of carina of vertex and tylus. Pronotum with a low upwardly and outwardly directed spine on each antero-lateral margin, (ratio of spine length to anterior width of pronotum is 1:6), and with three nodules, one on each lateral carina and the other (lamine and procurved in side view) on the central keel, all three directly above the fore coxae in position. Abdomen impunctate, hind femora surpassing apex of hemelytra.

Length 3.5–4.5 mm. Width 0.5 mm.

This species differs from *P. pacificus* China, in not having black on either the head or the pronotum, and in the shorter rostrum and pronotal spines, and from *P. bihamatus* Dist. in not having black on the head, and in the shorter pronotal spines.

Habitat. South Australia: (Moolooloo, 2,000 ft., Flinders Ranges, Northern South Australia 1921, H. M. Hale).

Types: Holotype and allotype in the collection of the South Australian Museum (No. I.20029).

REFERENCES.

- Bergroth, E. (1909): *Ann. Soc. Ent. Belg.*, 53, 188–189.
Bergroth, E. (1913): *Mem. Soc. Ent. Belg.*, 22, 179.
Bergroth (1914): *Wien. Ent. Zeit.*, 33, 182.
Blöte, H. C. (1945): *Zool. Meded.*, XXV, 72, 76.
Breddin, G. (1907): *Deuts. Ent. Zeit.*, 36–38.
Buchanan White, F. (1878): *Ent. Mon. Mag.*, 15, 31.
China, W. E. (1930): *Insects of Samoa*, II, fasc. 3, 111–112.
Costa, A. (1838): *Cim. Regni Neap.*, Cent. I, 27.
Costa, A. (1848): *Atti Ac. Nap.*, VII, 258.
Dallas, W. S. (1851): *List. Hem.*, II, 488–91.
Distant, W. L. (1901): *Faun. Brit. Ind. Rynch.*, I, 421–24.
Distant, W. L. (1908): *Faun. Brit. Ind. Rynch.*, IV, 487–490.
Distant, W. L. (1911): *Ann. Mag. Nat. Hist.*, (8), 7, (42), 585.
Distant, W. L. (1918): *Faun. Brit. Ind. Rynch.*, VII, 173–8.
Douglas, J. W. and Scott, J. (1865): *The British Hem.*, 145–162.
Fieber, F. X. (1854): *Wien. Ent. Monats.* 108.
Fieber, F. X. (1861): “*Europ. Hem.*” 54 and 213.
Fuss, C. A. (1852): *Mitth. Ver. Hermannstadt*, 7.
Horvath, G. (1905): *Ann. Mus. Nat. Hung.*, III (1), 57–9.
Hutton, F. W. (1897): *Trans. Proc. N.Z. Inst.*, XXX, 172.

- Lethierry, L. and Severin, G. (1894) : *Cat. Gen. Hem.*, II, 127-33.
- Myers, J. G. (1926) : *Trans. Proc. N.Z. Inst.*, 56, 85-6 and 454.
- Saunders, E. (1892) : *Hem. Het. Brit. Is.*, 61, 5.
- Stal, C. (1855) : *Ofvers, Vet. Ak. Forh.*, 30.
- Stal, C. (1865) : *Hem. Afr.*, 2, 119-20.
- Stal, C. (1874) : *Enum. Hem. IV in Kongl. Svenska. Vet. Ak. Handl. B 12*, (1), 127-8.
- Tillyard, R. J. (1926) : *Insects Aust. and N.Z.*, 147-8.
- Uhler, P. R. (1893) : *Proc. Zool. Soc.*, 707-708.
- Van Duzee, E. P. (1917) : *Cat. Hem. Am. North of Mex.*, 142-5.