

THE DISCOCEPHALINE GENUS *ALCIPPUS* STAL, 1867
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ABSTRACT

The genus Alcippus Stal, 1867 and A. reticulatus are redescribed, with a detailed study of the male genitalia.

INTRODUCTION

The genus *Alcippus* was erected by STAL (1867) to include the species *Coriplatus reticulatus* Stal, 1864. The next species assigned to *Alcippus* was *A. dimidiatus*, from Ecuador, by RUCKES (1959). BECKER & GRAZIA (1986) proposed a new genus *Paralcippus* for *A. dimidiatus* so that *Alcippus* was again a monotypic genus.

STAL (1864) described *C. reticulatus* based on a single female specimen, from "Amazon". The diagnostic characters for *Alcippus* were given in the STAL's key (1867) to the genera of the Discocephalidae; it was placed close to *Coriplatus* White, 1842. STAL (1872) gave an appendix to his previous key and related *Alcippus* to both *Coriplatus* and *Eurystethus* Mayr, 1864.

In the present paper *Alcippus* and *A. reticulatus* are redescribed and a detailed study of the male genitalia is included.

The terminology adapted in the descriptions of the genitalia follows DUPUIS (1970). The material was studied after being treated with boiling 10% KOH, cleared in phenol and stained in Congo Red. The pygophore and the female genital plates were illustrated in the dry condition. The female ectodermal genital ducts were not examined since the only female in good condition for the study of the internal genitalia was Stal's type specimen.

The measurements presented herein are given in mm and are the mean and extremes of measurements from the studied individuals of each sex.

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Alcippus Stal, 1867

Alcippus Stal, 1867: 500; 1872: 10.

Type species. *Coriplatus reticulatus* Stal, 1864 (monotypy).

Head broadly oval, as long as wide between the eyes, with a conspicuous anteocular process; anterolateral pronotal margins mildly explanate, sinuate; pronotum with a transverse row of low, blunt, interhumeral tubercles. Scutellum with a large, central tubercle at the base and a subtuberculate protuberance at each basal angle; apex level with apex of fifth connexival segment. Hemelytral veins reticulate.

Obovate, subdepressed. Distinct pubescence restricted to the antennae, legs and genitalia. Anteocular process prominent, ligulate, obliquely directed forwards. Margins of jugae feebly ampliate and weakly reflexed, apex broadly rounded and narrowly overlapping. Eyes oval, subpetiolate, protruding; ocelli somewhat farther apart than distant from the eyes. Antennae five-segmented, segment I not attaining apex of head, segment II subequal to III or slightly longer; antenniferous tubercles visible from above. Bucculae low, subparallel, nearly uniform in height, very slightly elevated posteriorly, and somewhat evanescent near the base of head. Rostrum reaching base of abdomen; segment I attaining the procoxae, segment II weakly arcuate and longer than segments III and IV combined.

Pronotum transversely subrectangular, about two-and-a-half times as wide across the humeri as long medially. Posterior angles essentially obsolete. Anterior margin of pronotum truncately excavated centrally. Anterolateral margins mildly explanate and bisinuate. Disc uneven with a shallow but distinct transverse furrow across the middle, the cicatrices irregularly tumid. A row of six low, blunt tubercles between the humeri, the latter obtuse and not at all produced.

Scutellum subtriangular, almost one and a half times as long as wide at base, the frena surpassing the middle, parafrenal lobe twice as long as the postfrenal lobe. Apex of scutellum truncate, its margins reflexed. Surface of scutellum somewhat uneven, the base with a central, large, low, blunt tubercle, the basal angles tumid, subtuberculate; midline somewhat elevated from base of basal tubercle till basal half of postfrenal lobe, the latter slightly undulant.

Hemelytra attaining apex of abdomen, veins reticulate. Corium much longer than scutellum.

Connexivum moderately exposed, segmental angles rectilinear and barely produced.

Mesosternum bilaterally feebly tumid, with a faint, shallow median sulcus, the xyphus obscurely carinate. Metasternum narrowly hexagonal, not elevated, provided with a percurrent, low, thin carina. Mesocoxae and metacoxae mutually equidistant. Mesopleural evaporatorium extending over the posterior third of the sclerite. Metapleural evaporatorium extensive, occupying most of the sclerite. Ostiolar peritreme digitiform to sublanceolate, weakly elevated, and ending abruptly a little beyond the middle of the plate; ostiole opening before midway across metapleura.

Abdominal furrow shallow, extending to seventh sternite. Anterior margin of seventh sternite in the male produced forward into an acute angle that reaches an imaginary transverse line through the spiracles of the fifth abdominal sternite.

Male genitalia. Pygophore subcylindrical, postero-lateral angles produced. Anal aperture in proctiger opening ventrally. Proctiger not simple, provided with a distinct process. *Phallotheca* with a pair of protuberant basal processes on dorsal side (PrPhl). *Processus capitati* (PC) moderate in size.

Female genitalia: Gonocoxites 8 and laterotergites 8 and 9 present as individualized plates.

Distribution. Guyana, French Guiana and northern Brazil.

The genus *Alcippus* is related to other five genera of Discocephalinae: *Paralcippus*, *Coriplatus*, *Eurysthetus*, *Abascantus* Stal, 1864 and *Pelidnocoris* Stal, 1867. The relationships among these genera are discussed in BECKER & GRAZIA (1986).

Alcippus reticulatus (Stal, 1864)

(Figs. 1-9)

Coriplatus reticulatus Stal, 1864: 48.

Alcippus reticulatus; Stal, 1867: 500; 1872: 10; Lethierry & Severin, 1893: 88; Kirkaldy, 1909: 219.

Type. Holotype ♀ deposited in NHRS (examined).

♂. Sordid yellow overlain with fine, dense but irregularly distributed fuscous punctures, finer on scutellum and corium, some arranged in clusters mostly on pronotum, corium and ventral surface of thorax. Abundant ferrugineous dots on ventral surface of abdomen, except for the lateral margins where the punctures are finer and denser. Antennal segments, tibiae and tarsus blotched with sanguineous markings. (fig.1).

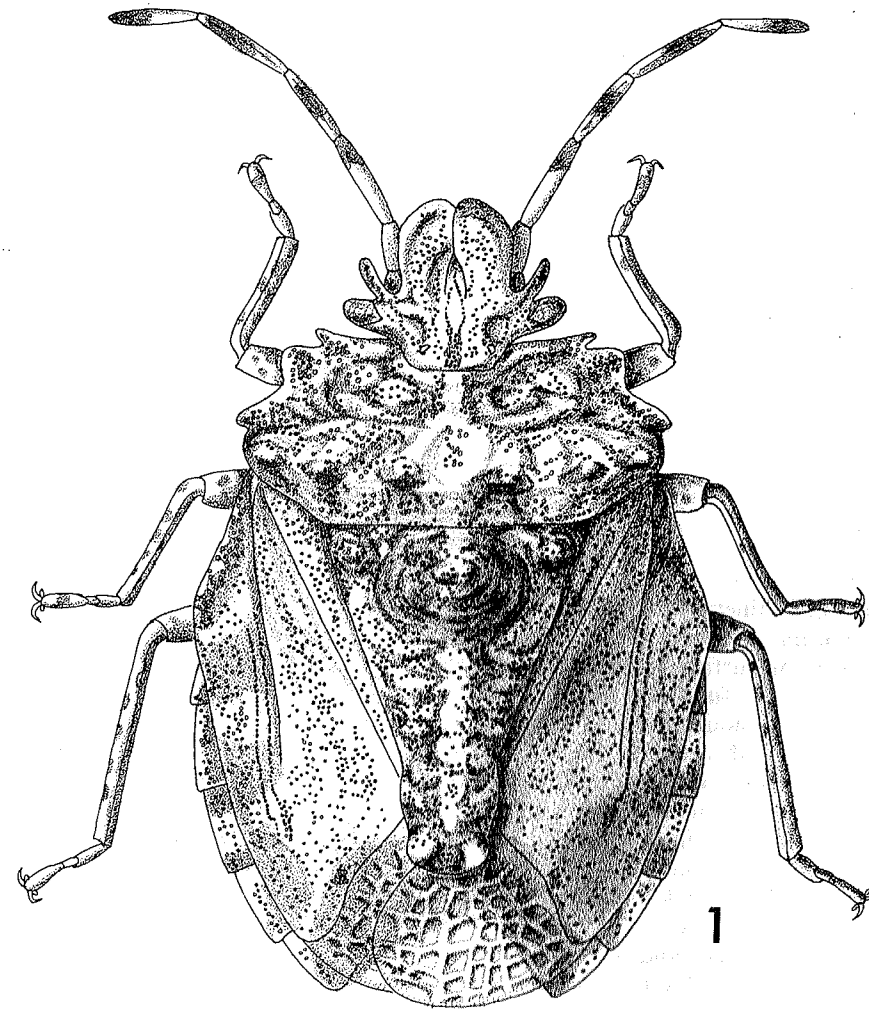
Head length equal to median length of pronotum; width of jugae half as much as the width of head across the eyes. Apex of anteocular process reaching the middle of jugae. Base of head with a cluster of punctures along midlongitudinal line.

Antennal segments covered with short bristles. Segments II to V with an apical fuscous band that occupies a variable extent of segment II, two thirds of III, most of IV except for an yellow basal ring, and nearly half of V. Specially on segments III and IV this fuscous band is blotched with sanguineous markings. Dorsal surface of segments III and IV shallowly sulcate; bristles absent inside sulcus.

Anterior margin of pronotum feebly sigmoid behind the eyes and ending laterally in an acute, triangular, flat cusp. Anterolateral margins of pronotum with two obtuse flat lobes with a wide sinus between them. Fuscous punctures irregularly distributed, forming clusters specially at base of the anterior cusp of pronotum, over both lobes of anterolateral margins, at the internal angles and over the cicatrices. Base of pronotum impunctate along midlongitudinal line.

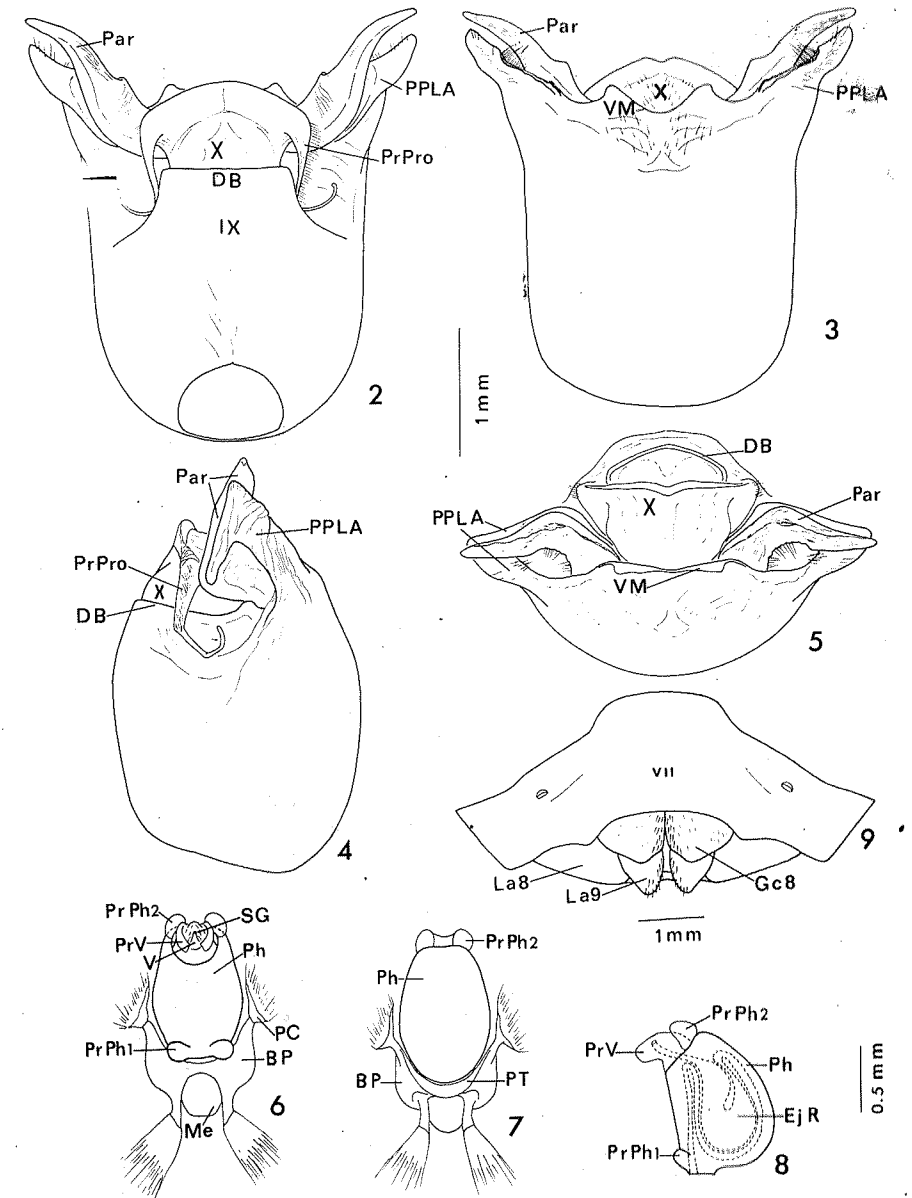
Scutellum with closely set puncture, except over basal central tubercle where the punctures are coarser and widely set.

Corium of hemelytra reaching middle of sternite 7, the external apical angle obtusely rounded; basal half of costa somewhat ampliate, its margins not reflexed. Two parallel lines of punctures lie just ectad the radial vein of corium.



5 mm

Atcippus reticulatus (Stal, 1864). 1, dorsal facies, female. 2-5, pygophore: 2, dorsal aspect; 3, ventral aspect; 4, lateral view; 5, posterior view. 6-8, phallus: 6, dorsal aspect; 7, ventral view; 8, *ductus seminis* and *Aussenwand*, lateral aspect. 9, female external genitalia, ventral view. (BP = basal plates, DB = dorsal border, EjR = ejaculatory reservoir, Gc8 = gonocoxites 8, La8 = laterotergites 8, La9 = laterotergites 9, Me = membranblase, Par = paramere, PC = *processus capitati*, Ph = *phallotheca*, PPLA = projection of the posterolateral angles of pygophore, PrPh1 = *processus phallothecae* 1, PrPh2 = *processus phallothecae* 2, PrPro = process of protiger, PT = *ponticulus transversalis*, PrV = *processus vesicae*, SG = secondary gonopore, V = vesica, VM = ventral margin, VII = seventh sternite, IX = ninth abdominal segment, X = tenth abdominal segment or proctiger.



Apical margin of seventh abdominal tergite in the male truncate, with a minute, median, retrorse cusp. Connexival segments slightly concave and irregularly punctured.

Femora and tibiae with fuscous and ferruginous dots. Dorsal surface of tibiae subsulcate with a sanguineous line on each side of sulcus. Third tarsal segment sometimes with a fuscous band.

Measurements. Length of head 3.60 (3.52-3.69); width across median portion of eyes 4.78 (4.70-4.87); width across jugae 2.43 (2.35-2.52); length of anteocular part of head 2.01; interocular width 3.02 (2.85-3.19); interocelar width 1.38 (1.34-1.42); width between eyes and ocelli 0.71 (0.67-0.75); length of antennal segments I 0.84, II 2.01 (1.84-2.18), III 1.59 (1.51-1.68), IV 2.35, V missing; length of pronotum 3.02 (2.85-3.19); anterior width of pronotum at cusps level 5.83 (5.71-5.96); width of pronotum across antehumeral lobes 9.23 (8.90-9.57); width of pronotum across humeri 8.94 (8.56-9.32); length of scutellum 7.64 (7.39-7.89); basal width of scutellum 5.79 (5.37-6.21); postfrenal length 2.43 (2.01-2.85); postfrenal width 2.43 (2.35-2.52); total body length 17.47.

Genitalia. Postero-lateral angles of pygophore forming a conspicuous projection which curves itself ventrally in a tapered finger pointing towards the base of the paramere (figs. 2-5, PPLA). Ventral margin (VM) bisinuate (fig. 3); dorsal border (DB) elevated and truncated in front of proctiger (X) (fig. 2). Parameres (Par) long, lanceolate, the apex pointed and surpassing the posterolateral angles of pygophore (fig. 2). The axes of the parameres are divergent and parallel to those of the fingerlike projection of the posterolateral angles of pygophore which they partially obscure in posterior view (fig. 5, Par, PPLA). Proctiger provided with an horizontal semicircular ledge, each side prolonged in a remarkable process. These processes consist of a long, thin, tapering projection provided with a brush of hairs, the apical third curved backwards, the whole structure resembling a fishhook (figs. 2, 4, PrPro). Phallus: basal plates (BP) of the articulatory apparatus wider than *phallotheca* (Ph). *Phallotheca* semicircular; distal aperture postero-dorsal, bearing a ventral pair of auricular processes (figs. 6, 7, PrPh2). *Vesica* surrounded by a thick collar-like structure (*processus vesicae*) which is incomplete on dorsal side (figs. 6, 7, PrV).

♀. Measurements. Length of head 3.52; width across median portion of eyes 4.87; width across jugae 2.68 (2.52-2.85); length of anteocular part of head 2.09 (2.01-2.18); interocular width 3.27 (3.19-3.36); interocelar width 1.51; width between eyes and ocelli 0.75 (0.67-0.84); length of antennal segments I 0.92 (0.84-1.0), II 2.01, III 1.84 (1.68-2.01), IV 2.35 (2.18-2.52), V 2.01 (1.84-2.18); length of pronotum 3.52; anterior width of pronotum at cusps level 5.88; width of pronotum across antehumeral lobes 9.90 (9.57-10.24); width of pronotum across humeri 9.49 (9.24-9.74); length of scutellum 8.23; basal width of scutellum 6.55; postfrenal length 2.85; postfrenal width 2.52; total body length 17.72 (17.30-18.14).

Genitalia. Posterior border of sternite 7 truncately concave over gonocoxites 8, then sinuate over laterotergites 8, the convexity ectad gonocoxites 8 obscuring the spiracles of the laterotergites 8. Gonocoxites 8 (Gc8) wider than long; sutural borders adjacent to each other along basal two thirds, apical third divergent; posterior border oblique, forming an obtuse angle with sutural border. Laterotergites 9 (La9) narrowly triangular, their apices well surpassing

posterior border of laterotergites 8 (La8) which form a continuous and feebly convex outline. A rather dense row of strong setae arranged along the sutural borders of gonocoxites 8 and internal borders of laterotergites 9 (fig. 9, Gc8, La8, La9, VII).

Specimens studied. Holotype ♀, with the following labels: (a) Amazon (b) Stevens (c) Typus (d) 154 87 (e) Riksmuseum Stokholm. ♀, Kartabo, British Guiana, 1/IX/1925, So. Am., CASC; ♂ French Guiana, 10/IX/1909, AMNH ♂ French Guiana, 1909, *Alcippus reticulatus* Stal, compared with the type by Ruckes, AMNH.

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