

**A NEW GENUS OF DISCOCEPHALINE PENTATOMID FROM  
ECUADOR (HETEROPTERA, PENTATOMIDAE,  
DISCOCEPHALINAE)**

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(With 9 figures)

**RESUMO**

**Um novo gênero de Discocephalinae do Equador  
(Heteroptera, Pentatomidae)**

No presente trabalho é descrito um novo gênero de discocefalíneo para incluir *Alcippus dimidiatus* Ruckes, 1959. A genitália de ambos os sexos é descrita e ilustrada.

*Palavras-chave:* Taxonomia; pentatomídeos neotropicais; Discocephalinae; *Paralcippus* n. gen.; *P. dimidiatus* n. comb.; Equador.

**ABSTRACT**

A new genus of discocephaline is described for *Alcippus dimidiatus* Ruckes, 1959. Descriptions and illustrations are given for the genitalia of both sexes.

*Key-words:* Taxonomy, neotropical pentatomid, Discocephalinae, *Paralcippus* new genus, *P. dimidiatus* new combination, Ecuador.

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In 1959, Ruckes described a new species of  
discocephaline from Ecuador. The species was  
named *dimidiatus* and assigned to the genus  
*Alcippus* Stål, 1867, which so far was monotypic.  
Through the kind offices of Dr. P.

Wygodzinsky, of the American Museum of Natural History, the authors had the opportunity to study type specimens of *A. dimidiatus* and to consult unpublished manuscript notes by the late Dr. H. Ruckes, of the same institution. In his notes, Ruckes states that *dimidiatus* merits a new position since he considers this species much more closely allied to those of *Eurystethus* Mayr, 1864 than to *Alcippus reticulatus*.

Examination of the type series and the comparison of *dimidiatus* with other genera of discocephaline led the present authors to decide upon the erection of a new genus. Its relationship to *Alcippus* Stål is discussed as well as to other discocephaline genera that the authors believe to be more closely allied to the genus described herein.

In the descriptions of the genitalia, the morphological terms adopted are those proposed by Dupuis (1970) and Schaefer (1977). 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 measurements presented herein are given in millimeters and are the mean and extremes of measurements from the studied individuals of each sex.

All illustrations were made by the first author who wishes to thank Dr. L. Buckup for his assistance in shading the dorsal facies of the specimen figured.

#### *Paralcippus* n. gen.

Type species: *Alcippus dimidiatus* Ruckes, 1959.

Subovate, depressed; antennae and legs densely covered by short, erect setae; dorsal surface of pronotum, scutellum and connexivum uneven.

Head subquadrangular, as long as the median length of pronotum; width of jugae half as much as the width of head across the eyes. Eyes oval, sessile, somewhat protuberant. Antecular process prominent, ligulate, obliquely directed forwards, apex reaching halfway or beyond the middle of the jugae; jugae broadly spatulate and narrowly overlapping in front of the clypeus; margins narrowly reflexed. Antenniferous tubercles visible

from above. Antennae five-segmented; segment I not attaining apex of head, segment II longer than III. Bucculae low, more or less uniform in height, subparallel, feebly divergent and evanescent near base of head. Rostrum reaching the fourth abdominal sternite, segment I not attaining procoxae; segment II much longer than segments III and IV combined.

Pronotum transversely subtrapezoidal, the width across humeri slightly more than two and a half times the length along the midlongitudinal line. Anterior margin shallowly excavated centrally, then convex behind the eyes. Anterolateral margins foliaceous, explanate, notched. Posterolateral and posterior margins very broadly confluent, posterior angle absent. Disc of pronotum somewhat uneven, with a distinct, shallow, transverse furrow across the middle and faint vestiges of row of interhumeral tubercles. Scutellum almost as broad as long, the apex level with the middle of the fifth connexival segment; apex emarginate, its margins reflexed; a basal triangular area elevated and provided with a pair of low, obtuse, broad tubercles with a shallow saddle between them; a faint, median, posteriorly evanescent ridge continuing onto the postfrenal lobe; parafrenal lobe two and a half times as long as the postfrenal lobe; margins of postfrenal lobe parallel. Hemelytra reaching the apex of abdomen; corium much longer than scutellum, veins simple, few in number. Connexivum well exposed; posterolateral angles rectilinear but not produced; abdominal margin nearly entire.

Mesosternum mildly tumid bilaterally, with distinct saddle between halves; xyphus very short and broad. Metasternum flat, transversely hexagonal, wider than long, metacoxae much further apart from each other than distant from respective mesocoxae. Mesopleural evaporatorium extending over the posterior third of the sclerite. Metapleural evaporatorium extensive, occupying most of the sclerite. Ostiole opening halfway across the sclerite; ostiole continued in a narrow, long sulcus bordering a spatulate ridge. Legs densely setose; setae longer on tibiae. Abdomen with median furrow long and shallow, reaching 6th sternite.

Male genitalia: Pygophore cuplike, each lateral apical angle extended into a stout projection (Figs. 2 & 3, PLAA). Proctiger subcylindrical so that anal tube opens posteriorly (figs. 2, 3 & 4,

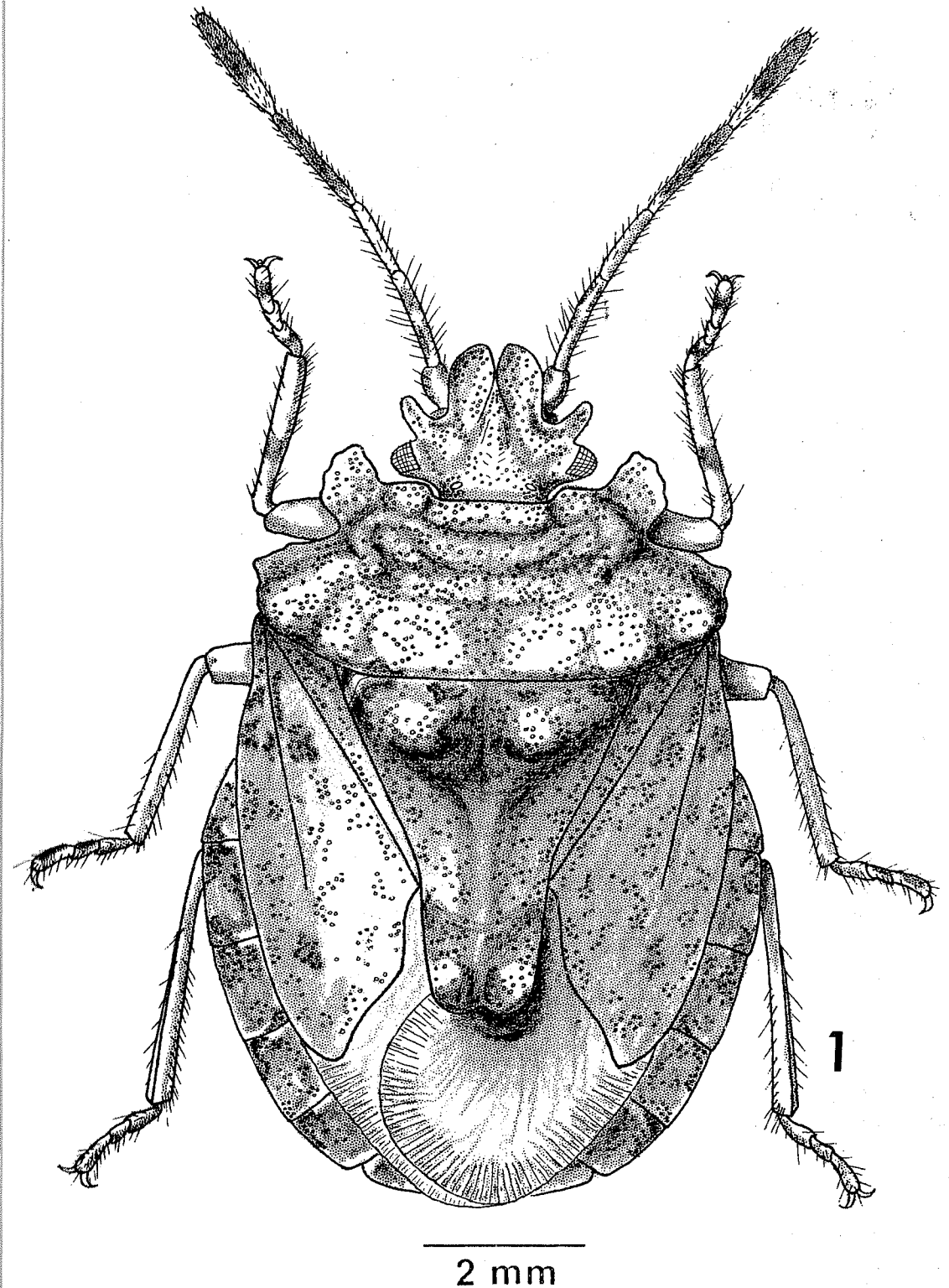


Fig. 1 — *Paralcippus dimidiatus* (Ruckes, 1959), female paratype, dorsal view.

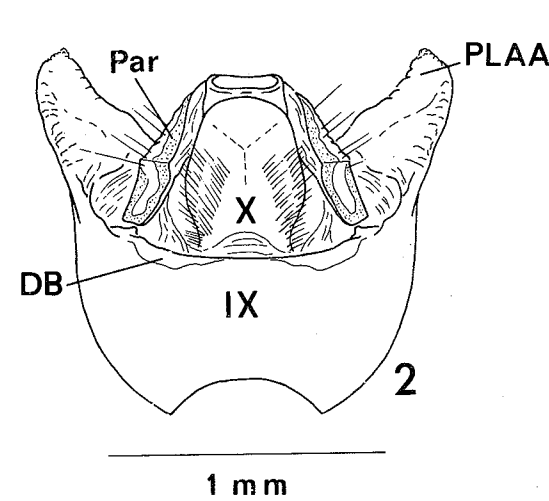


Fig. 2 - *P. dimidiatus*, male. Pygophore, dorsal aspect.

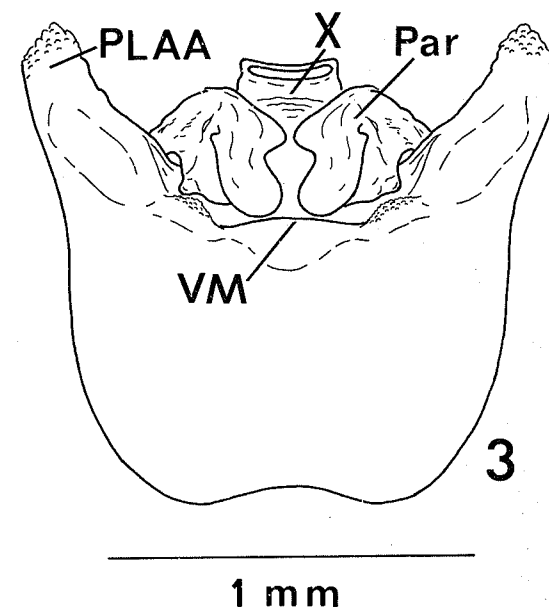


Fig. 3 - *P. dimidiatus*. Pygophore, ventral aspect.

X). Infolded portion of ventral rim of pygophore forming a cuplike sclerite and a median projection *sensu* Schaefer (1977). Dorsal connectives of the articular apparatus not developed distally into conspicuous *processus capitati*.

Female genitalia: Gonocoxites 8 and laterotergites 8 and 9 present as individualized plates (fig. 8, Gc8, La8, La9). Pseudosternite (gonocoxites 9) present as a distinct piece (figs. 8 & 9, Gc9). Thickening of the vaginal intima and *Chitinellipsen* present on the dorsal wall of the *pars communis*

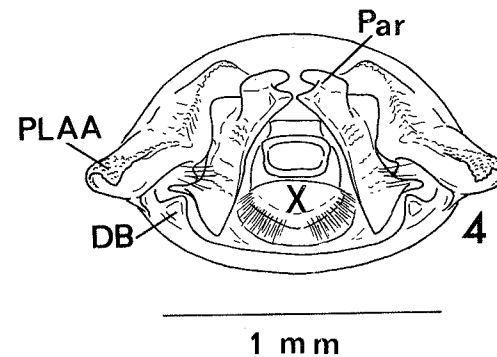


Fig. 4 - *P. dimidiatus*. Pygophore, posterior view (DB, dorsal border of pygophore; Par, paramere; PLAA, projection of the lateral apical angle of pygophore; VM, ventral margin of pygophore; IX, ninth abdominal segment = anal tube).

(fig. 9, TVI, Ch). *Capsula seminalis* bearing protuberances (fig. 9, CS).

Distribution: Ecuador.

Remarks: This is a monotypic genus and is known only from Baños, Ecuador.

This genus is allied to the genera *Coriplatus* White, 1842, *Abascantus* Stål, 1864, *Pelidnocoris* Stål, 1867, *Alcippus* and *Eurystethus*. The characters shared by *Coriplatus*, *Abascantus* and *Pelidnocoris* have already been pointed out by Ruckes & Becker (1970) and Becker (1977) (Ruckes, 1966b does not relate *Pelidnocoris* to other genera). *Paralclippus* differs from this group of genera especially by the presence of laterotergites 9 and by its short scutellum, that does not attain the apex of the abdomen (as in *Eurystethus*); it also differs by the connexival margins which are not serrate and by the comparatively small not serrate and by the connexival margins which are not serrate and by the comparatively small *processus capitati* (not considered by Ruckes, 1966a and by Becker, 1966). It has in common with these three genera (also with *Eurystethus*) the form and proportions of the metasternum, the spatial relationships of the mesocoxae and metacoxae, the widely exposed connexivum (not in *Eurystethus*) and the acute antehumeral projections (absent in *Eurystethus*). *Paralclippus* shares with *Eurystethus* and *Alcippus* the presence of the laterotergites 9 and the shorter scutellum.

Though the general facies of *Alcippus* is somewhat similar to that of *Paralclippus* it is less dorso-ventrally depressed. In *Alcippus* the meso and metacoxae are mutually equidistant, the

transhumeral tubercles are distinct, the connexivum is not widely exposed, the base of scutellum bears a large central tubercle and a subtuberculate protuberance at each basal angle, the hemelytral veins are reticulate and the ostiole opens before midway across metapleura.

*Paralclippus dimidiatus* (Ruckes, 1959)

*Alcippus dimidiatus* Ruckes, 1959: 97-100

Type: Holotype male deposited in the California Academy of Sciences, San Francisco, California.

Morphological characters as described by Ruckes (1959). Male: Measurements: length of head 1.26 (1.25-1.28); width across median portion of eyes 1.7 (1.68-1.71); length of anteocular part of head 0.83 (0.76-0.89); interocular width 1.12 (1.10-1.16); length of antennal segments I, 0.38 (0.36-0.39), II, 0.86 (0.79-0.89), III, 0.71 (0.67-0.73), IV, 1.02 (0.98-1.04), V, 1.14 (1.10-1.19); length of pronotum 1.45

(1.38-1.50); width of pronotum across antehumeral spines 2.87 (2.82-2.91); width of pronotum across humeri 3.65 (3.59-3.74); length of scutellum 2.43 (2.39-2.45); basal width of scutellum 2.71 (2.67-2.76); length of corium 3.36 (3.25-3.43); abdominal width 4.33 (4.23-4.45); total body length 6.43 (6.32-6.60).

Genitalia: Apex of the projections of the lateral apical angles of pygophore with small tubercles (fig. 4, PLAA). Dorsal border of pygophore inwardly projected into a small triangular lobe each side of the anal tube (figs. 2 & 4, DB). *Proctiger* in dorsal aspect bearing a shield-like plate with tufts of setae (figs. 2 & 4, X). Tip of the *phallus* resting on top of the saddle-like median projection of the ventral rim of the pygophore which is partially obscured by the head of the parameres when the pygophore is examined in ventral aspect. Parameres T-shaped; the head in a transverse piece that curves itself each side of the *proctiger* (fig. 4, Par). *Phallus*: *Phallotheca* ventrally inflated (figs. 5 & 7, Ph).

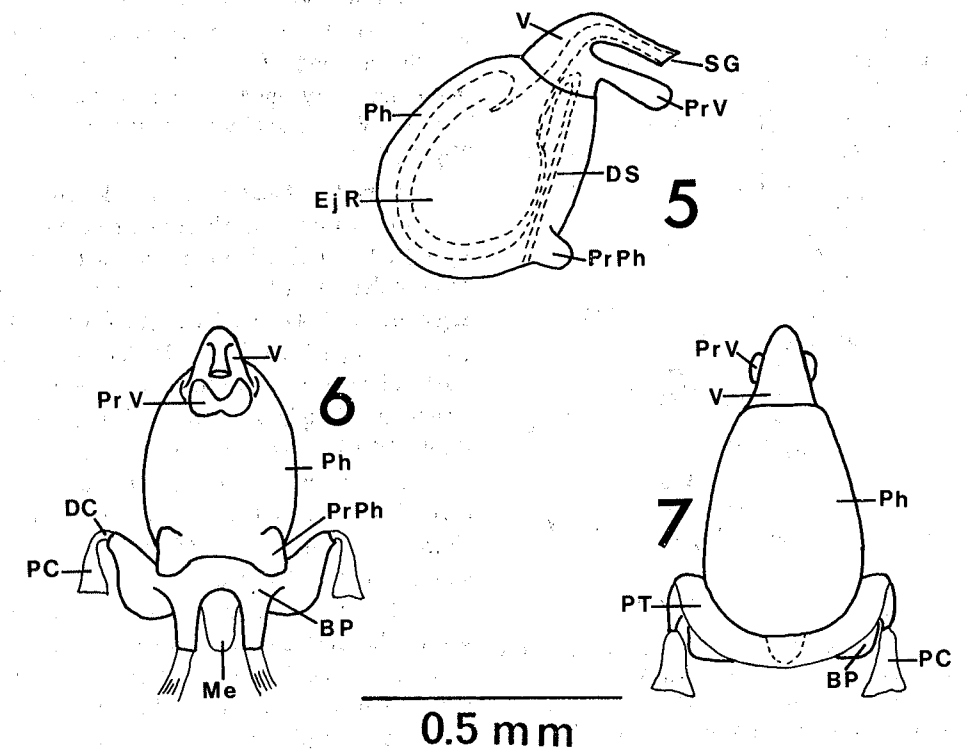


Fig. 5 - *P. dimidiatus*, male. *Ductus seminis* and *Aussenwand*, lateral aspect. Fig. 6 - *Phallus*, dorsal view. Fig. 7 - *Phallus* ventral view (BP, basal plates; DC, dorsal connective; DS, *ductus seminis*; EjR, ejaculatory reservoir; Me, *Membranblase*; PC, *Processus capitati*; Ph, *phallotheca*; PrPh, *processus phallothecae*; PT, *ponticulus transversalis*; PrV, *processus vesicae*; SG secondary gonopore; V, *vesica*).

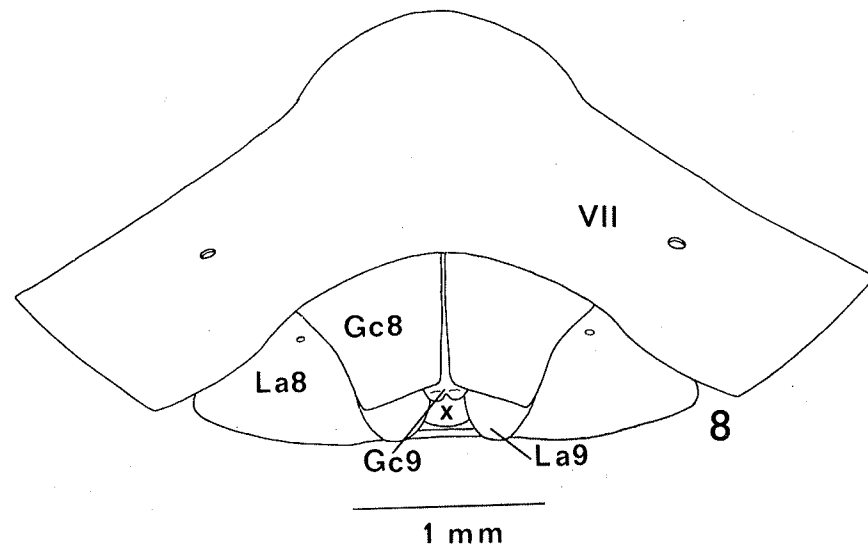


Fig. 8 - *P. dimidiatus*. female. External genitalia.

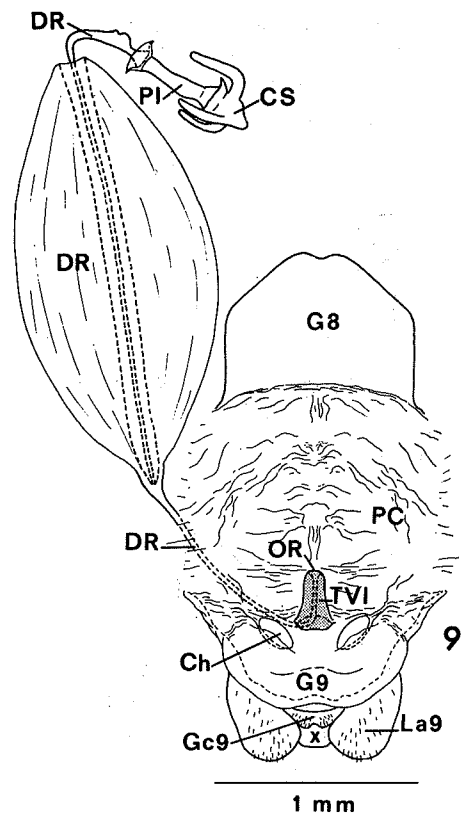


Fig. 9 - *P. dimidiatus*. Ectodermal genital ducts (Ch, *Chitinellipsen*; CS, *capsula seminalis*; DR, *ductus receptaculi*; G8, gonapophyses 8; G9, gonapophyses 9; Gc8, gonocoxites 8; Gc9, gonocoxites 9; La8 laterotergites 8; La9, laterotergites 9; OR *orificium receptaculi*; PC, *pars communis*; PI, *pars intermedialis*; TVI, thickening of the vaginal intima; VII, seventh sternite; X, tenth abdominal segment = anal tube).

*Vesica* tubular, tapering toward secondary gonopore (fig. 5, V, SG). A single *processus vesicae* underlying the distal half of the *vesica* (fig. 5, PrV). The process is scoop-shaped and distally bilobed (fig. 6, PrV). Basal plates of the articulatory apparatus wider than *phallosheca* (fig. 6, BP); *ponticulus transversalis* extensive (Fig. 7, PT).

**Female:** Measurements: length of head 1.39 (1.38-1.41); width across median portion of eyes 1.84; length of antecular part of head 0.92; interocular width 1.25; length of antennal segments I, 0.42, II, 1.02, (0.98-1.07), III, 0.75 (0.73-0.76), IV, 1.07, V, 1.10; length of pronotum 1.65 (1.56-1.71); width of pronotum across antehumeral spines 3.16; width across humeri 4.29 (4.14-4.45); length of scutellum 2.96 (2.85-3.07); basal width of scutellum 2.33 (2.17-2.42); length of corium 4.14 (4.05-4.23); abdominal width 5.17 (5.06-5.28); total body length 7.52 (7.33-7.70).

**Genitalia:** Gonocoxites 8 subtrapezoidal; sutural borders adjacent to each other, posterior borders obliquely truncate; lateral external borders mildly concave (fig. 8, Gc8). Distal border of female genital plates entire (fig. 8). Gonapophyses 8 subtriangular in outline (fig. 9, G8). Gonocoxites 9 in a small transverse piece, sinuate posterior portion visible between laterotergites 9 (figs.

8 & 9, Gc9). Gonapophyses 9 poorly defined, continuous with *pars communis* (fig. 9, G9, PC). Ectodermal genital ducts: *Orificium receptaculi* opening at the tip of a sclerotized finger-like thickening of the vaginal intima (fig. 9, OR, TVI). *Chitinellipsen* present on either side of the thickening of the vaginal intima (fig. 9, Ch). *Capsula seminalis* subconical, bearing three long finger-like projections (fig. 9, CS). Portion of *ductus receptaculi* posterior to the vesicular area of *ductus* irregular, as long as *pars intermedialis* (fig. 9, DR, PI).

**Specimens studied:** 2 males and female - Banos, Ecuador, IV. 29.1939, 1900m, Wm Clarke MacIntyre Collector; *Alcippus dimidiatus* H Ruckes PARATYPE, deposited in the R. L. Usinger Collection, American Museum of Natural History; female - ibidem, V. 03.1939, 1800m, ibidem; 2 males - ibidem, IV.22.1939, 1900m, ibidem.

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