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PLATYSCYTISCA BERGMANNAE, A NEW GENUS AND SPECIES OF NEOTROPICAL PLANT BUG RESEMBLING SPECIES OF *PLATYSCYTUS* REUTER (HETEROPTERA: MIRIDAE: PHYLINAE)

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Abstract.—The new genus ***Platyscytisca*** is described to accommodate the new species ***P. bergmannae,*** collected in São Paulo, Brazil, on *Ficus* sp. A dorsal and ventral habitus, male genitalia, male genital capsule, and male and female antennae are illustrated to help with recognition. *Amazonophilus* Carvalho and Costa is resurrected from synonymy under *Platyscytus* Reuter, and its relationship to *Platyscytisca* is discussed.

Key Words: Insecta, Heteroptera, Miridae, Phylinae, *Platyscytisca,* new genus, *bergmannae,* new species, Brazil

During cooperative work on New World Miridae, we discovered a peculiar new phyline that was taken on *Ficus* sp. in São Paulo, Brazil. Externally, this new species resembles some taxa now included in the Neotropical genus *Platyscytus* Reuter (Carvalho 1958, Carvalho and Costa 1994, Schuh 1995) or *Amazonophilus* (Carvalho and Costa 1993), a genus recently synonymized by Kerzhner and Schuh (1995).

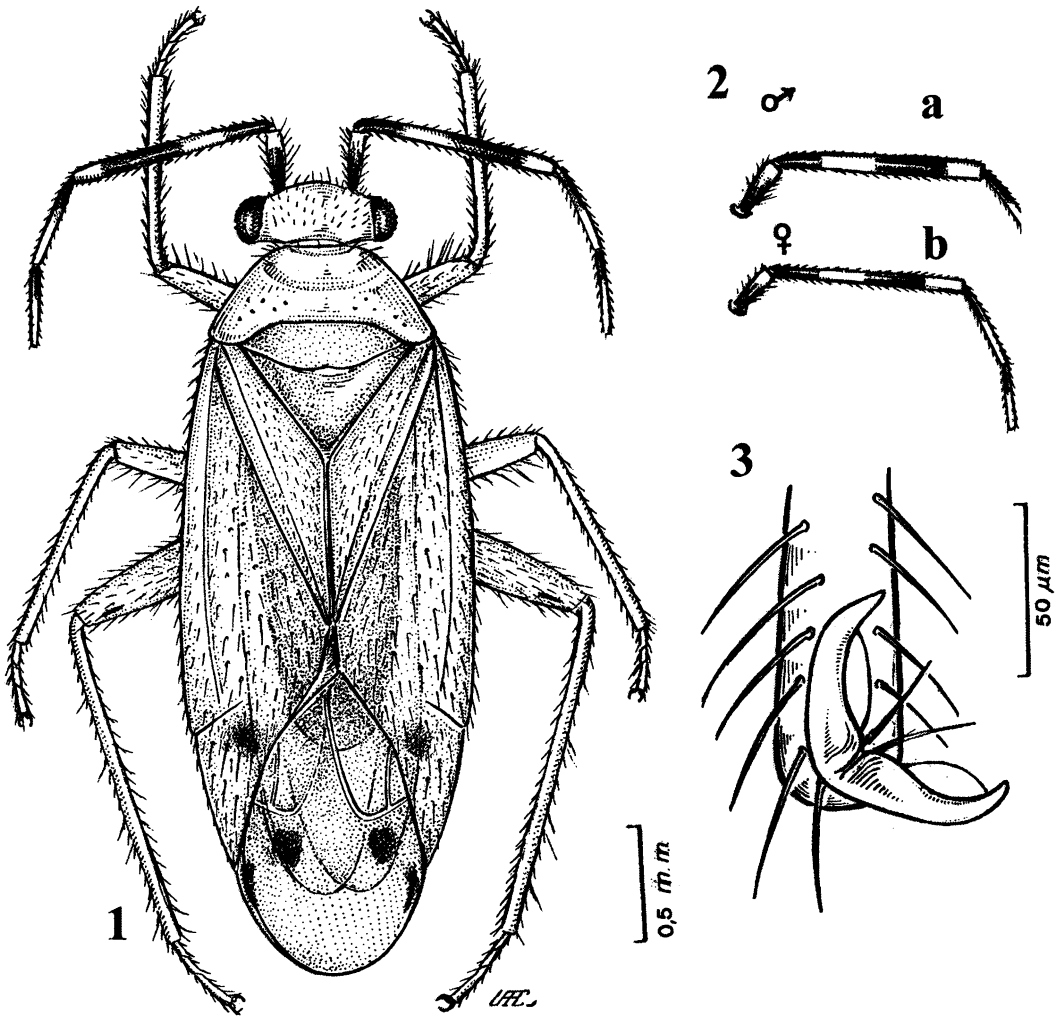
Herein, we describe the new genus *Platyscytisca* to accommodate the new species *Platyscytisca bergmannae* and provide a dorsal and ventral habitus and illustrations of the pretarsus, male genitalia, male genital capsule, and male and female antennae. *Amazonophilus* is resurrected from synonymy under *Platyscytus,* and the relationship to *Platyscytisca* is discussed.

Platyscytisca Costa and Henry, new genus

Type species.—*Platyscytisca bergmannae,* new species.

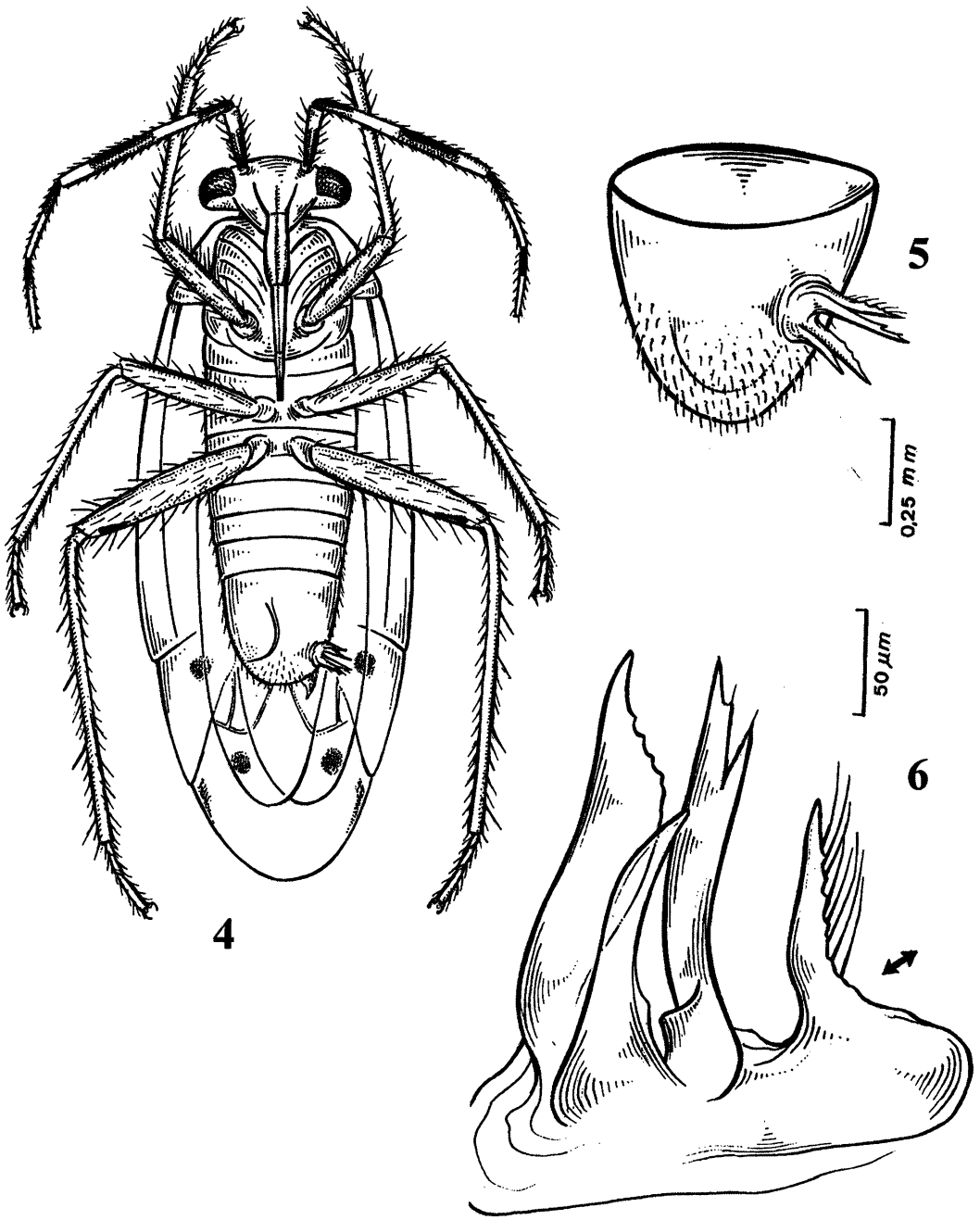
Diagnosis.—This new genus is distinguished from other phyline mirids by the combination of the overall pale coloration, banded second antennal segment, broad head with the concave vertex, pale hemelytra with a small, round, dark spot on the cuneus and another on the membrane just distal to the large areole, cluster of four spines on the male genital capsule, and by the long, slender vesica, with a very slender, sharply bent, apical process.

Description.—Small, delicate phyline, overall coloration pale or whitish. Head impunctate, much broader than long, convex anteriorly in dorsal aspect, strongly produced ventrally below eyes a distance slightly greater than the lateral height of an eye, vertex wide, concave, wider than combined dorsal widths of eyes. Rostrum slender, extending to metacoxae or beyond. Antenna relatively slender; segments I and II subequal in diameter; segments III and IV more slender; segment II longest, with two



Figs. 1–3. *Playtscytisca bergmannae.* 1, Dorsal adult habitus. 2, Antenna (a, male; b, female). 3, Pretarsal claw.

dark bands. Pronotum impunctate, much wider than long, posterior width wider than anterior width, lateral margins rounded, basal margin distinctly emarginate; calli weakly delimited laterally and posteriorly by a shallow impressed line. Mesoscutum distinctly swollen transversely and raised well above surface of pronotum; scutellum subequilateral, slightly wider than long, middle of base raised to level of mesoscutum, then gradually sloping to level of hemelytra. Hemelytron impunctate, translucent; cuneus longer than wide with a small dark spot on basal half; membrane translucent, with two areoles and a small dark spot just beyond large areole and a slender fuscous streak near apex of cuneus. Ventral surface pallid. Legs slender, unmarked; tibial spines slender, pale; claws typically phyline, arolia large, fleshy, extending nearly to apex of each claw. Genital capsule typically rounded, with a cluster or field of four spines (Figs. 4–6) ventrolaterally on left side, two lateral spines shorter and two, sometimes branched, inner ones longer. Vesica (Fig. 7a) long and slender, apical third more slen-



Figs. 4–6. *Platyscytisca bergmannae*. 4, Ventral adult habitus. 5, Male genital capsule showing position of spine cluster. 6, Cluster of spines on male genital capsule enlarged.

der, sharply bent, apex with an even more slender, sharply bent, weakly serrated process (Fig. 7b); left paramere (Figs. 8a, b) with a distinct crescent-shaped lateral process having ventral arm of crescent bifid; right paramere simple, rounded (Fig. 9); phallotheca (Fig. 10).

Etymology.—*Platyscytisca* is a noun de-

rived from the generic name *Platyscytus* and the suffix "isca," taken from the Anglo Saxon "isc," denoting "origin or pertaining to," to draw attention to the overall similarity of it to *Platyscytus.* The gender is feminine.

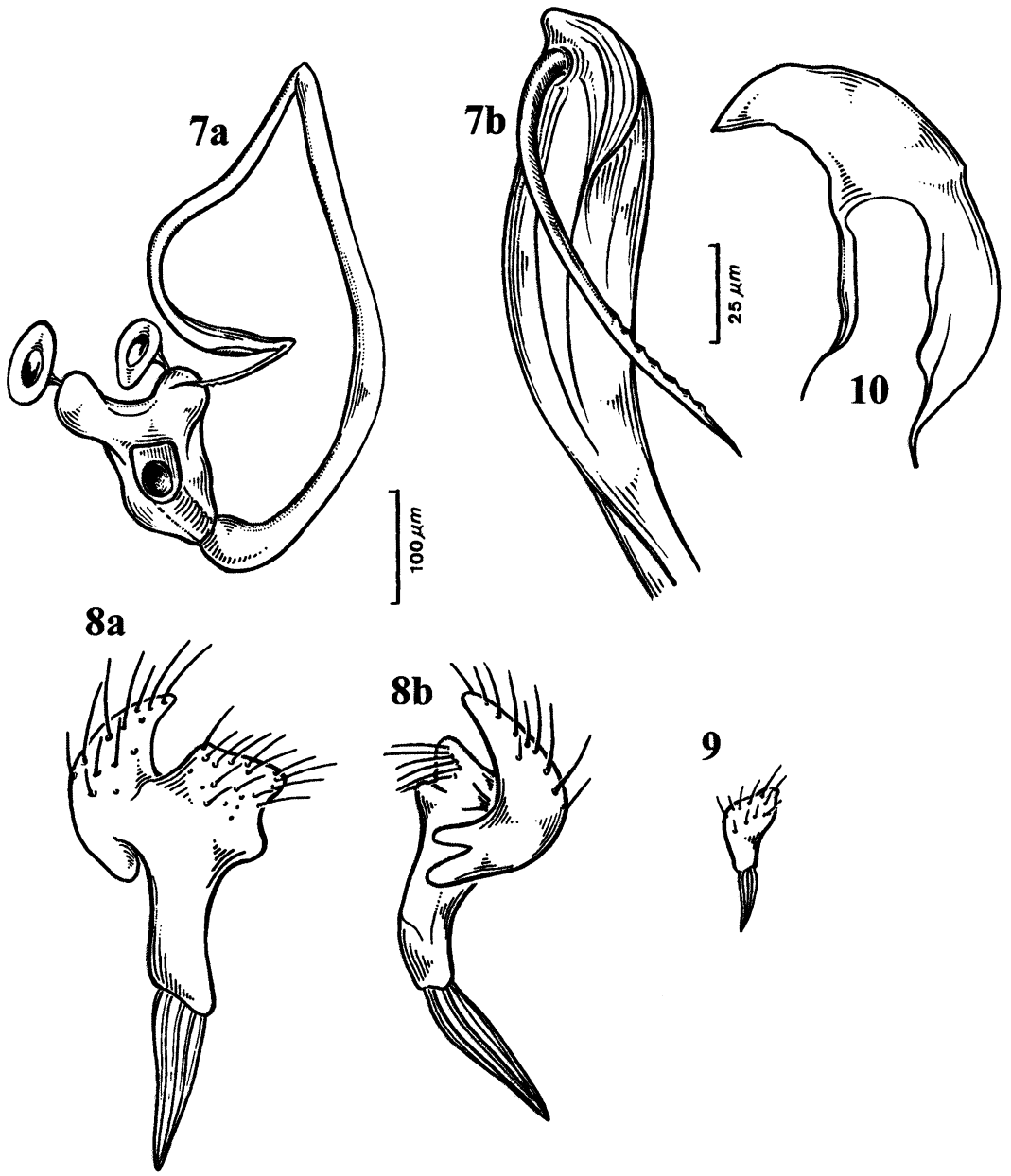
Remarks.—*Platyscytisca* appears similar to *Amazonophilus* Carvalho and Costa and some species of *Platyscytus* Reuter based on the structure of the head, overall pale coloration, banded antennae, and dark spots on the cuneus and membrane, but very different genitalia suggest that this resemblance simply reflects convergence. The peculiar vesica having a slender, abruptly narrowed apical process, the cluster of four distinct, apically acute spines on the left lateroventral area of the male genital capsule, and the crescent-shaped lateral process on the left paramere appear quite unique in the Neotropical mirid fauna.

We note that Kerzhner and Schuh (1995) synonymized *Amazonophilus* under *Playtscytus* by stating "Judging from the habitus figure and illustrations of male genitalia, *bipunctatus* is a species of *Playtscytus,* and we are so treating it." Although we have not studied the genitalia of the type of the genus, *P. binotatus* Reuter (nor have the genitalia been illustrated in the literature), we have examined the similar *P. blantoni* Carvalho (1955), and find that the extremely long, nearly filamentous vesica of *Amazonophilus bipunctatus* Carvalho and Costa, having multiple coils, is quite unlike the relatively short, stout vesica of *P. blantoni,* having only a single coil. In addition, Carvalho (1955) considered the short, singly coiled vesica of *P. tucumanus* (Carvalho 1953) of the same generic type as *P. binotatus.* Our observations also indicate that *Platyscytus* is likely not monophyletic and seems to be made up of at least three species groups, each of which probably represents a separate genus. Based on this information, we feel it is premature to consider *Amazonophilus* a junior synonym of *Platyscytus* and, therefore, resurrect *Amazonophilus,* **revised status,** recognizing that much more work on these seemingly similar taxa is needed.

Platyscytisca bergmannae Costa and Henry, new species
(Figs. 1–10)

Diagnosis.—*Platyscytisca bergmannae* is best distinguished by the generic characters, particularly by the cluster of four spines on the male genital capsule and the structure of the left paramere and vesica. The combination of a dark first antennal segment, two bands on the second antennal segment, and the small round dark spot on each cuneus and one on the membrane just beyond the large areole (and a narrow fuscous streak just beyond apex of cuneus) will distinguish this species from similar appearing species of *Platyscytus.*

Description.—*Male* (n = 5): Length 2.80–3.04 mm, width 0.98–1.16 mm. *Head:* Dorsal length 0.30–0.32 mm, width 0.62–0.66 mm, vertex 0.32–0.34 mm; uniformly pale or whitish. *Rostrum:* Length 0.80–0.84 mm, extending to about metacoxae. *Antenna* (Figs. 2a, b): Segment I, length 0.24 mm, dark brown to fuscous, paler at apex; II, 0.88–1.00 mm, pale or whitish, with basal ¼ and a broad band on apical ½ fuscous; III, 0.30–0.34 mm, pale or white, with basal ½ fuscous; IV, 0.30–0.32 mm, pale or white, with basal ⅓ fuscous. *Pronotum:* Length 0.34–0.36 mm; basal width 0.86–0.92 mm; uniformly pale or whitish. *Hemelytron:* Uniformly pale or whitish, large portion of clavus, corium, and membrane translucent; a small fuscous spot on basal ½ of cuneus, and on membrane a round fuscous spot just distal to large areole and a fuscous streak just beyond apex of cuneus. *Ventral surface:* Uniformly pale or whitish. *Legs:* Uniformly pale or whitish; tibial spines small, pale; claws with large fleshy arolia (Fig. 3). *Male genitalia:* Genital capsule evenly rounded, with field of four prominent spines (Figs. 5, 6); vesica (Figs. 7a, b); left paramere (Figs. 8a, b); right paramere (Fig. 9); phallotheca (Fig.10).



Figs. 7–10. *Platyscytisca bergmannae.* 7, Vesica (a, entire structure, including phallobase; b, Apex showing slender apical process). 8, Left paramere (a, lateral aspect; b, lateral aspect, rotated 180° from Fig. 8a). 9, Right paramere. 10, Phallotheca.

Female (n = 7): Length 2.72–0.288 mm, width 1.12–1.14 mm. *Head:* Length 0.32–0.34 mm, width 0.64–0.66 mm, vertex 0.32–0.34 mm. *Rostrum:* Length 0.82–0.86 mm. *Antenna:* Segment I, length 0.22–0.24 mm; II, 0.78–0.84 mm; III, 0.34–0.36 mm; IV, 0.26–0.30 mm. *Pronotum:* Length 0.34–0.36 mm, basal width 0.84–0.92 mm.

Etymology.—This species is named in honor of its collector, Dr. Eliana Cherubini

Bergmann (Instituto Biológico, São Paulo, Brazil).

Type specimens.—Holotype ♂, Brasil, S. P., São Paulo, Instituto Biológico, May 1997, E. C. Bergmann coll., taken on *Ficus* sp. (Museu Nacional, Rio de Janeiro, Brasil). Paratypes: 16 ♂, 32 ♀, May 1997 & 19 March 1998, same locality and collector as for holotype (Museu Nacional; National Museum of Natural History, Smithsonian Institution, Washington, DC, USA).

Remarks.—All specimens have been in alcohol, so the quality of many is poor.

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