

TWO NEW SPECIES OF *AMBLYCERUS* THUNBERG FROM BRAZIL (COLEOPTERA, BRUCHIDAE)¹

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ABSTRACT. *Amblycerus kingsolveri*, sp. n. from Amazonas, Brazil and *A. marionii*, sp. n. from Goiás, Brazil, are described and illustrated.

Key words. Taxonomy, seed beetles, *Amblycerus* spp. n., Brazil

The following two new species of *Amblycerus* Thunberg, 1815 are closely related and both will be the basis to establish another species group in the genus. As in the latest papers on *Amblycerus* (KINGSOLVER, 1991; RIBEIRO-COSTA & KINGSOLVER, 1993; RIBEIRO-COSTA & KINGSOLVER, in press), this paper also describes new species, making names available for future revision and taxonomic analysis.

Amblycerus kingsolveri, sp. n.

Figs 1-6

The dimensions of the **holotype** are: pronotal length 1.74mm; width 2.92mm. Elytral length 5.33mm; width 4.08mm.

Range of dimensions in type series are: pronotal length 1.26-1.74mm; width 2.08-2.92mm. Elytral length 3.84-5.33mm; width 2.90-4.08mm.

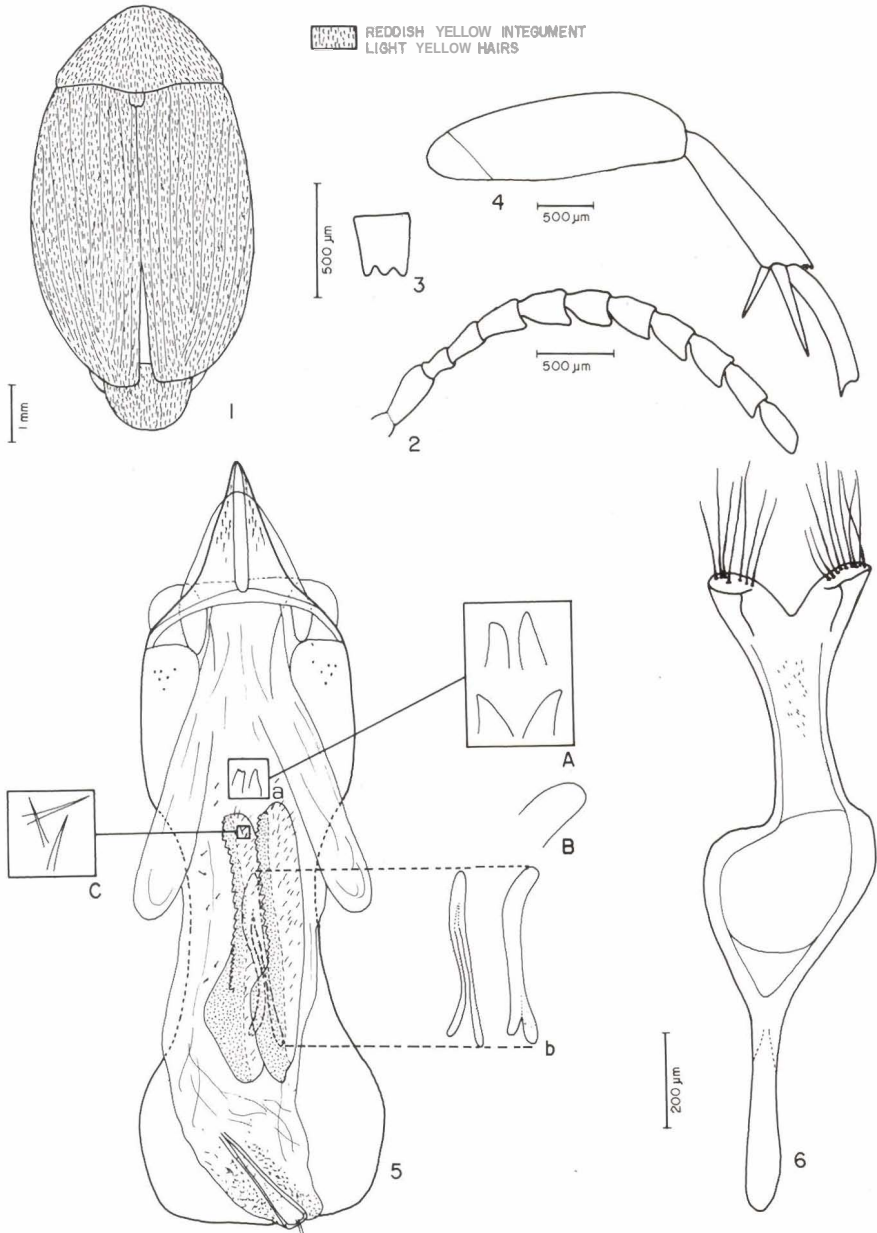
Integument. Reddish yellow except: eyes and from third to eleventh antennal segments, dark red or black; clypeus, mandibles and legs sometimes gently darker yellow.

Vestiture. Body clothed with very fine light yellow hairs with slightly golden sheen (Fig. 1).

Body elliptical (Fig. 1). Vertex and frons **micropunctate**; clypeus except in a granulose apical narrow band, **slightly more** coarsely punctate; **labrum** with a few basal punctures. Frons strongly convex, frontal carina evanescent in lower half. **Mesal** margin of eye with fine carina and umbilicate punctures; eye coarsely faceted, strongly protruding laterally; ocular sinus 1/4 length of eye; ocular index 5:0; postocular lobe very narrow. Antennas serrate from fourth to tenth segments, all perceptibly longer than wide; terminal segment elliptical (Fig. 2). **Pronotum** (Fig. 1) trapezoidal, lateral margins slightly arcuate; disk moderately convex; basal lobe broadly angulate, not sulcate; surface evenly densely punctulate

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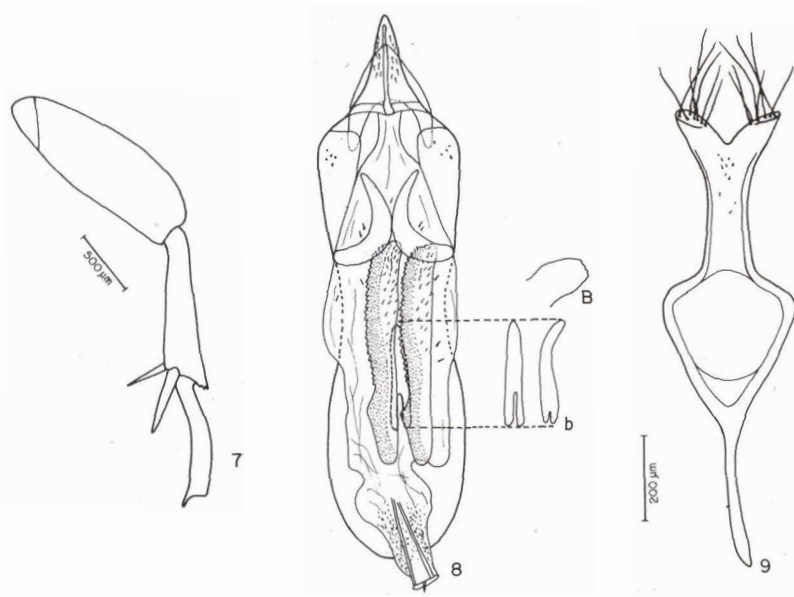
Figs 1-6. *Amblycerus kingsolveri*, sp.n. (1) dorsal habitus; (2) antenna; (3) scutellum; (4) hind trochanter, femur, tibia and first tarsal segment; (5) male genitalia, median lobe: (a) basal sclerites, (A) intraspecific variations of basal sclerites enlarged, (b) lateral view of unpaired median sclerite, (B) lateral view of apex enlarged, (C) spiculae enlarged; (6) male genitalia, tegmen.

throughout, lateral **one-third** of disk on either side also coarsely punctate; a **fine** submarginal dorsal and a submarginal ventral sulcus from base to middle of lateral margin, submarginal dorsal sulcus visible for nearly entire basal margin; cervical sulcus along lateral thirds of apical margin, hooked dorsad to **cervical** boss, **this** with two **fine** setae; posterior angle of pronotum with one seta. Prosternal process moderately or very narrow, not expanded beyond forecoxae; with sulcate lateral margins. Forecoxae conspicuously lower than median coxae in ventral view. **Scutellum** 1.3 times as long as wide, with trilobed apex (Fig. 3). **Elytra** 1.3 times as long as wide, somewhat depressed **medially**; sutural interstices gently convex; all striae strongly impressed, free apically; **strial** punctures fine; **elytral** apices **subtruncated**. Mesosternum truncated apically. Metepisternum evenly punctulate, lacking striate **file**; metepisternal sulcus forming a right angle with the parasutural sulcus, metepisternal sulcus not reaching dorsal margin and parasutural sulcus reaching middle length of metepisternum. Metasternum between middle coxae not bulging; postmesocoxal **sulci** meeting **mesally** at obtuse angle, then extending laterally and connecting to parasutural sulcus, the latter extending beyond middle length of metasternum. Face of hind coxa in distal two-thirds and along posterior border of proximal one-third, setose and densely punctulate; many scattered, moderately coarser punctures on distal two thirds; proximal one-third glabrous in part and with coarser punctures near trochanteral insertion; anterior margin slightly elevated and glabrous. Hind femur slender, 2.7 times as long as wide (Fig. 4); ventral face slightly sulcate from middle to distal portion; mesoventral carina complete and lacking blunt, angulate process near apex; lateroventral carina incomplete, along middle to distal portion. Ventral face of hind tibia slightly convex, with inconspicuous rows of punctures and short, stiff setae on each margin; inner distal two-thirds without **tumidity**; apex (Fig. 4) with short coronal denticles. **Mesal tibial** spur 1.9 as long as the lateral spur and 2.5 as long as the first hind tarsal segment (Fig. 4). **Pygidium** moderately declivous. Fifth visible abdominal sternum slightly **emarginate** in male. Female not known.

Male **terminalia** (Figs 5, 6). Eighth tergite **truncated**. **Median** lobe (Fig. 5) with ventral valve acute apically, lateral margins moderately **incurvate**, base broad; dorsal valve subtriangular, lateral margins slightly convex, apex rounded. Internal sac armature (Fig. 5) consisting of two basal spine-shaped straight sclerites, 2.8 times as long as wide (Fig. 5a) or as in figure 5A; two long, laminar and median sclerites, each one slightly angulate in basal one-fourth and with a row of marginal denticles along apical three fourths, and armed on the reverse face with spiculae (Fig. 5C); unpaired, median wishbone-shaped sclerite, 0.6 as long as the length of the **laminars**, with slightly separate stems, moderately sinuate toward apex and with rounded apex in lateral view (Fig. 5b, B); apical sclerite with **thin** base and long stems. Membrane of internal sac with sparse spines on basal and median portions (Fig. 5). Lateral lobes moderately developed and expanded laterally (Fig. 6).

Holotype male. Brazil: Amazonas, Rio **Tarumã Mirim**, 2Km from Rio Negro, 03°02'S-06°17'W; 30 July 79; **Adis**, Erwin, Montgomery leg. One

paratype male, Brazil: Amazonas, Manaus; 1941. Deposited in the **Coleção de Entomologia** Pe. J. S. **Moire**, Curitiba (DZUP).



Figs 7-9. *Amblycerus marionii*, sp. n. (7) hind trochanter, femur, tibia and first tarsal segment; (8) male genitalia, median lobe; (b) lateral view of unpaired median sclerite, (B) lateral view of apex enlarged; (9) male genitalia, tegmen.

Discussion. There is a close relationship between *A. kingsolveri* and *A. marionii*, the next new species. The conspicuous external character to immediately recognize them is the integument **colour** (body reddish yellow except eyes and from third to eleventh antennal segments dark red to black in *A. kingsolveri* and uniformly dark red in *A. marionii*). Another distinctive character is the basal spine-shaped pair of sclerites in the internal sac of male genitalia (straight in *A. kingsolveri*, strongly **curvate** in *A. marionii*). Median laminar and wishbone-shaped sclerites are similar in both species, suggesting the close affinity.

Host plant unknown.

Amblycerus marionii, **Sp. n.**

Figs 7-9

The description of *A. marionii* is similar of *A. kingsolveri* except for the following characters:

The dimensions of the **holotype** are: pronotal length **1.24mm**; width **2.00mm**. Elytral length **3.60mm**; width **2.52mm**.

Integument: Dark red.

The second and ninth, third and eighth, sixth and seventh striae nearly joined apically. Hind **mesal tibial** spur 1.7 as long as lateral spur and 2.8 as long as first tarsal segment (Fig. 7). Fifth visible abdominal sternum rounded in male. Female not known.

Male **genitalia** (Figs 8, 9). Dorsal valve of median lobe (Fig. 8) with straight lateral margins and acute apex. Internalsac armature (Fig. 8) consisting of two basal, spine-shaped, strongly **curvate** sclerites.

Holotype male. Brazil: **Goiás, Dianópolis; 16-22.I.1962, J. Bechyné** leg. Deposited in the **Coleção de Entomologia** Pe. J. S. Moure, **Curitiba** (DZUP).

Post plant unknown.

Eymology: These two new species are named for my friends and advisors Drs. John M. **Kingsolver** and Renato C. **Marinoni** who have helped me in the studies of Systematic and Numerical Taxonomy Analysis of Bruchidae.

BIBLIOGRAPHIC REFERENCES

- KINGSOLVER, J.M. 1991. A new species of *Amblycerus* (Coleoptera: Bruchidae) from Central and South America, with notes on its biology. **Proc. ent. Soc. Wash.** 93 (2):433-436.
- RIBEIRO-COSTA, C.S. & J.M. KINGSOLVER. 1993. A new species of *Amblycerus Thunberg*, 1815 (Coleoptera: Bruchidae) and a lectotype designation. **Insecta Mundi** 6 (3-4): 183-187.
- . (in press). *Amblycerus teutoniensis*, a new species of seed beetle (Coleoptera: Bruchidae). **Ent. News**.

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