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The Neotropical Genus Cryptocranium Serville, with the Description of a New Species (Coleoptera, Lamiidae)¹

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In the Neotropical fauna the tribe Niphonini is only sparingly represented by two monotypic genera, Cryptocranium Serville, 1835, and Catafimbria Aurivillius, 1922, with no new species included since the original descriptions. The last-named genus was described by Belon in 1896, under the name Fimbria (nec Boheman, 1761), for his new species boliviana, from the Bolivian province of Cochabamba (see Blackwelder, 1946, Checklist, p. 596). Serville's genus, omitted in Blackwelder's "Checklist," as well as the pertinent bibliographical reference in his bibliography, included until now only the originally described Cryptocranium laterale, based on a female specimen (or specimens) from Brazil, without further geographical specification. Castelnau's 1840 description of this species, in a slightly different wording, was based on the same material from the Serville collection. Thomson, (1860 and 1864) added nothing of importance besides references, key characters, and a type designation which, in this case, is not relevant. Lacordaire, 1872, gave a generic diagnosis and an abridged description

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of *laterale*, as yet undoubtedly based on the female of the species. He noted the proximity of the genus to *Etaxalus* Pascoe, 1865, from Borneo, a systematic position maintained in the Munich and Junk catalogues, *Etaxalus* preceding *Cryptocranium*, as in Lacordaire.

The species seems to be only occasionally represented in collections, at most by a few specimens. In the American Museum of Natural History, only three specimens were found, all from Brazil, State of Santa Catarina, Corupa (Hansa Humboldt), A. Maller, collector, Frank Johnson, donor, collected on different dates: November, 1945 (male); December, 1948 (female); and February, 1949 (female). The Tippmann collection of cerambycids, recently acquired in Vienna and now in the United States National Museum, also includes a female from the same locality, collected during March, 1931.

As the male of this species shows some peculiar dimorphic characters, and has evidently been overlooked, its description seems pertinent (see fig. 1).

GENUS CRYPTOCRANIUM Cryptocranium laterale Serville

Cryptocranium laterale Serville, 1835, Ann. Soc. Ent. France, vol. 4, pp. 76–77. Castelnau, 1840, Histoire naturelle des insectes coléoptères, vol. 2, p. 493. Lacordaire, 1872, Histoire naturelle des insectes, genera des coléoptères, vol. 9, pt. 2, pp. 534–535.

MALE: Medium-sized, elongate, robust, strongly convex; dark reddish chestnut brown, lighter on whitish parts of elytra and tarsi, very dark on prothorax; clothed with fine, decumbent, stiff, elongate, scaly hairs, ferruginous on head, scape of antennae, and anterior legs; yellowish gray on prothorax, but so fine and sparse as not to disturb the dark ground color, except an agglomeration of light hairs on middle posterior border of pronotum, just opposite whitish scutellum; elytra yellowish white, with a very dark brown humeral patch on each side and a dark, blackish, marginal, semicircular, large patch on distal half of each elytron, curving towards but distant from suture; anteriorly the patch tapering towards basal half of elytra and through a slender dark margin joining humeral patch; hairs bordering dark patches of elytra denser and pure white, producing a contrasting contour; each elytron with a pre-apical, light brown, irregular spot, not reaching suture or apical margin; intermediate and posterior legs dark brown, except tarsi which are yellowish white. Interspersed among this general clothing, with many more or less bent or curved white setae, embedded in the body punctures, very conspicuous on head, prothorax, sides of prothorax, mesothorax, metathorax, and elytra, but also on abdomen, legs, and antennae, although much finer and rising through the clothing from beneath finer punctuation.

Head retractile, moderately punctured; front only slightly convex; antennal tubercles short, inconspicuous, unarmed, widely separated, the space between flattened, not sulcate; mandibles rather long, moderately curved and bidentate at apex; eyes small, lobes widely separated, rather transverse, united only by a slender remaining line with a few scattered single omatidea, the upper lobe only slightly smaller than lower one which is a full diameter distant from lower margin of head. Antennae with a short pyriform scape, flattened on under side, reaching slightly beyond anterior margin of prothorax; second segment small, about one-third of the length of scape; third segment nearly twice as long and fourth only slightly shorter than scape; third segment not quite reaching posterior margin of prothorax; segments 5–7 shorter than fourth segment, subequal; remaining segments missing.

Prothorax cylindrical, about as long as wide, sides subparallel, unarmed; shorter below to nearly one-half of the length of pronotum; strongly raised to front and curved on vertex of head; anterior margin thick, not transversely sulcate in front or behind; posterior margin slightly bisinuate; surface with irregularly spaced punctures, larger on posterior half of pronotum.

Scutellum obliquely raised, moderately narrowed to and rounded at apex, the thick marginal clothing at apex giving it a truncated aspect.

Elytra about three and one-half times the length of pronotum, strongly convex, sides parallel, rounded at humeri; slightly raised on each side of scutellum, the elevations curved to suture, leaving a marked sutural depression behind scutellum; curved and acuminately rounded at apex; at apical third slanting on a regular curve; surface unequal, transversely and irregularly undulating and punctured, the punctures shallower and smaller than those on prothorax, and becoming scarcer and finer, nearly obsolete, towards apex.

Prosternal process moderately curved, narrow and parallel sided between coxae, triangularly broadened to apex and slightly concave on this area; acetabula angulated laterally, closed behind. Mesosternal process wider, concave at base and tapering, at a slightly oblique angle, to a blunt apex; intermediate acetabula open. Metasternum deep, meta-episterna narrow. Abdomen with intermediate segments subequal and shorter than first; fifth segment only slightly longer than anterior, rather flattened, narrowed to apex which is broadly sinuate-truncate, the external angles rounded.

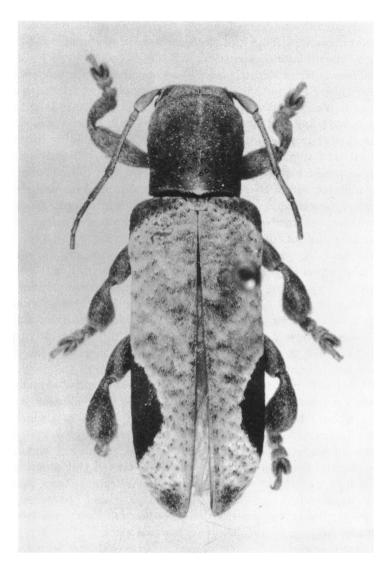


Fig. 1. Cryptocranium laterale Serville, 1835. Allotype, male.

Legs rather short, very robust, anterior and intermediate pair subequal, posterior pair somewhat longer; anterior femora very thick, robust, hardly narrowed at base, strongly curved dorsally, straight inferiorly; intermediate and posterior femora not so thick, less rounded dorsally and more narrowed at base, the posterior pair the longest, reaching to third abdominal sternite; tibiae shorter than femora, the anterior pair gradually thickened to apex, slightly curved dorsally; intermediate pair very thickened from base, with strong dorsal curve, the posterior pair still more robust and dorsally curved, and at apex slanting from dorsal to lower end where tarsi are inserted; nude apical area surrounded on each side by a half crown of stiff setae, not reaching upper or lower ends; on intermediate pair the exterior half crown of setae extending subdorsally in a straight line along the apical third of tibiae; below tarsal insertion, at lower end of both intermediate and posterior tibiae, with a pencil of longer soft yellowish hairs and at each side of base of tarsi with a small dark spine. Tarsi not much shorter than tibiae, with the first segment subequal to the third, the second slightly shorter, the apical segment subequal to segments 2 and 3 jointly; tarsi rather narrow, the basal segments more rounded.

Length, 16.5 mm.; humeral width, 5 mm.

LOCALITY: Brazil, State of Santa Catarina, Corupa (Hansa Humboldt), November, 1945, A. Maller, collector.

Allotype, male, in the collection of the American Museum of Natural History.

The female specimens, somewhat larger, correspond to the original description, although the third antennal segment does not quite reach the length of the next three segments combined. The grayish white elytra, with pale yellowish brown intermixed, and the dark patches with dense pile and velvety appearance, circled with a border of dense pure white, are very characteristic.

The male also fits the description with the exception of the sexual dimorphic secondary characters, the most notable of which are the shorter and curved mandibles, the extremely robust and thickened intermediate and posterior tibiae which are strongly curved dorsally, and the broadly sinuate-truncate last abdominal sternite. In the female the mandibles are rather long and straight and curved only at the apex; the intermediate and posterior tibiae are identical to the anterior ones in their linear form, although uniformly thickened from base to apical portion; the three intermediate abdominal sternites are shorter than extremes, and slightly decreasing in length, the last sternite, as in the male, only slightly longer than the anterior one, but rounded at the apex. The other antennal segments in the male specimen conform with the female antennal formula.

The Tippmann collection also includes two male specimens from other localities. One of these, from Rio de Janeiro, has Dr. Stephan

Breuning's identification label and measures 15.25 mm. in length. Its darker tegumen accentuates the gray in the clothing. The humeral dark patches of the elytra are more removed from the scutellum; the white contour of the lateral dark patches becomes less distinct posteriorly because of intermixed yellowish brown hairs; the pre-apical spots are lacking. The second specimen is somewhat larger (16.75 mm.), very similar in color and pattern, and comes from Bolivia, Department of Santa Cruz (Buenavista), Jose Steinbach, collector. These specimens indicate a large geographical dispersion and some variation in color and pattern. In the male specimens the antennae are about two-thirds, in the female slightly over one-half, of the length of the body.

Cryptocranium cazieri, new species

Figure 2

FEMALE: Robust, cylindrical; tegumen reddish brown, clothed with fine, slender, scaly hairs, on front and sides of head, lower side of prothorax, whitish; on vertex of head and prothorax, except lower sides, reddish brown, paler on central part of pronotum; scutellum pale brown; elytra reddish brown, each with a large, lateral, irregular, semicircular, whitish spot, the convex side beginning very close to external margin at first third of elytra and widening out to sides of dorsal surface, where it fades away and intermingles with the light brown above; the anterior limit of the macula reaching the basal elevations of elytra. the posterior extending to middle of elytra; the white of these maculae varied with pale yellow-brown concentric lines; the posterior declivity of elytra, on each side, with a large, roundish, whitish macula, connected at suture, and occupying all apical portion, varied with light reddish brown and including a central, semilunar, dark brown spot; dorsal part light brown; humeri and area between the whitish maculae dark brown; the coarse punctuation on head, prothorax, and elytra each with an embedded white scaly hair; under side whitish, with the exception of sides of metasternum, the meta-episterna, sides of fourth abdominal segment, and most of the fifth, which are reddish brown; legs reddish brown, with interspersed whitish scales; under side of pro-femora and under side of tibiae rather whitish. Antennae reddish brown interspersed with white scaly hairs, denser on scape, diminishing and finally disappearing towards apical segments.

Head retractile, with large punctures, rather uniformly distributed; front transverse, rather flat; antennal tubercles short, unarmed, rather inconspicuous, widely separated, the area between them flattened; vertex moderately convex, genae blunt; clypeal margin slightly curved;

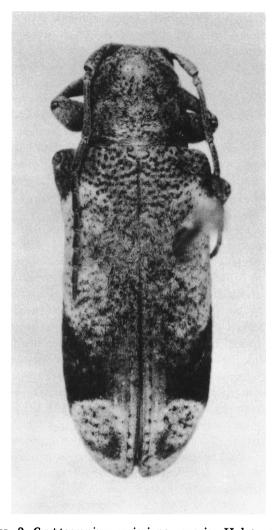


Fig. 2. Cryptocranium cazieri, new species. Holotype, female.

mandibles rather straight, curved at apex; eyes with medium granulation, rather small, strongly notched in front, the lobes transverse, the upper not much smaller than lower lobe, both slightly hemispherical, the straight sides opposed and separated by a fine line of single omatids; the lower lobe about length of genae. Antenna short, about two-thirds of the length of body, not reaching to middle of elytra; the scape small, conical, flattened on under side; second segment about one-fifth of the length of scape; third segment nearly double the length of scape,

slightly bent towards apex; fourth segment about half of the length of third; segments 5 to 9 and 11 nearly subequal, each about half of the length of fourth; tenth segment visibly shorter; segments 4–10 slightly produced at inner side at apex; third segment fringed on under side with short recumbent stiff hairs, second and fourth segments sparsely, the following segments with a few short hairs at apex.

Prothorax subcylindrical, strongly punctured, more sparsely on pronotum, the length less than width, slightly wider posteriorly, unarmed at sides, strongly convex on front of pronotum and curved on front margin; depressed at middle near posterior margin; prosternum much narrower than dorsal length, the anterior acetabula close to anterior rim, closed behind. Scutellum very finely punctured, transverse, sides parallel, apex broadly rounded.

Elytra about four times the width at base; strongly convex, at sides declivous; humeri rounded, below humeri rather depressed; at base raised to a blunt low hump on each side; thickened or raised transversely on apical fourth, along rim of white macula and dark brown patch; apices conjointly rounded, individually slightly acuminate; surface with large punctures, closer set, deeper and nearly tuberculate at base, towards apex gradually somewhat more shallow and sparse.

Prosternal process very narrow between coxae, declivous to both ends, at distal declivity widened towards apex; mesosternal process wider between coxae, depressed at base, at apex abruptly narrowed; metasternum prominent; abdomen with intermediate segments subequal, shorter than extremes; first segment about the length of segments 2 and 3 taken together, rather blunt at anterior apex; fifth slightly longer than preceding segment, rounded to apex, the anterior margin slightly sinuous; at base with a short, longitudinal, median, fine groove, near apex depressed.

Legs robust, rather short; femora narrow only at base, strongly clavate from there, posterior pair less so; anterior pair rugulose at base on under side; tibiae shorter than femora, widening towards apex, front pair more cylindrical, median and posterior pairs slightly flattened; median tibiae not grooved, but with a fringe of stiff, short, dorsal spines on keel at apex; tarsi about two-thirds of the length of tibiae, moderately wide; first segment only slightly longer than second.

Length, 16.25 mm.; width, 5.5 mm.

Type Locality: Peru, Achinamiza, October 8, 1927 (H. Bassler collection).

Holotype, female, in the collection of the American Museum of Natural History.

Cryptocranium cazieri, new species conforms very strikingly to most of the Cryptocranium characters of laterale, but shows a more uniformly rounded prothorax, somewhat narrowed anteriorly, with shining or lustrous tegumen, shallower punctures and denser clothing; the clypeal margin is narrower and curved in a deep semicircle; the elytra are more densely punctured and show a distinct transverse elevation on each side on apical curvature; the white curved setae of punctures are less conspicuous and more deeply embedded; the antennal formula is equal, but the total length is greater, reaching two-thirds of the body length. In color, although conforming to a general identical pattern, some striking modifications occur: the prothorax has a predominant reddish brown clothing, which extends into elytra right down to the posterior dark patches, isolating the grayish clothing to a lateral situation; and again, the posterior dark patches being confluent at suture restrict the lighter apical clothing; the humeral marking is more diffused and lighter in color; the light brown apical smudges of laterale are darker in *cazieri* and form a distinct semicircular spot on each elytron.

Cryptocranium laterale has an opaque prothoracic tegumen, and the females show a nearly straight, broad, opaque, clypeal margin. The abdomen of laterale shows two lighter whitish longitudinal stripes between center and margin, also a lighter, not very conspicuous longitudinal pronotal stripe.

It is a great pleasure to name this species in honor of Dr. Mont A. Cazier, Chairman and Curator of the Department of Insects and Spiders of the American Museum of Natural History.

I also wish to express my indebtedness to Mr. Rudolph Schrammel for the photographic illustrations of both species.

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