STUDIES ON THE FAUNA OF SURINAME AND OTHER GUYANAS: No. 53.

SPECIES OF THE SOUTH AMERICAN GENUS LOMANOXIA

(COLEOPTERA: APHODIIDAE)

by

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About twenty years ago Martínez proposed some new genera for the accommodation of a number of aberrant South American aphodiid beetles, until then placed in Euparia LePeletier & Serville. In 1951 he referred two species, Euparia costulata Harold and E. ovalis A. Schmidt, to his genus Lomanoxia, recognizable i.a. by having the sides of the elytra acutely inflexed. As these scarabs are exceedingly rare in collections, I was delighted at finding specimens referable to Lomanoxia among some material collected from the nests of leafcutting ants in Surinam; one represents a species new to science. My unsuccessful efforts to trace the type of Euparia costulata Harold in the Paris museum were compensated by the recovery of additional specimens of Lomanoxia, one of these, from northwestern Argentina, representing a second undescribed species. These new species are described below; in addition, the known species being incompletely or erroneously characterized, a re-description of these is believed to be opportune.

The new Lomanoxia from Surinam adds to the list of Eupariini collected with ants. Lomanoxia costulata as well as representatives of Euparia sensu stricto, Euparixia Brown, Myrmecaphodius Martínez, Iarupea Martínez, and Cartwrightia Islas were already on this list (see below). The beetles are assumed to feed upon the debris accumulated in and around the nests of their hosts. Most specimens of the recently described Euparixia moseri Woodruff & Cartwright, however, were taken from fungus-gardens of Atta texana Buck. Mean-

while, of the ecology of eupariine scarabs found with ants we know hardly more than a hundred years ago, when HAROLD (1870: 23) wrote: "Ob nähere Beziehungen zwischen den Ameisen und diesen ihren Gästen bestehen, namentlich ob letztere ihre Verwandlung in den Nestern durchmachen, bleibt noch zu ermitteln."

SPECIES OF EUPARIINI ASSOCIATED WITH ANTS

Euparia castanea LePeletier & Serville, 1828: 357 [date of publication from Shenborn & Woodward, 1906: 578]. — U.S.A., Mexico; host not specified (first notice of association with ants by LeConte, 1861), but with Solenopsis geminata (F.) in Wasmann's collection at Maastricht.

Euparia friedenreichi HAROLD, 1870: 27. - Brazil; host not specified (HAROLD, 1870).

Myrmecaphodius proseni Martínez, 1952: 87. – Argentina; with Solenopsis saevissima F. Smith (Martínez, 1952).

Euparizia bruneri Chapin, 1940: 40. - Cuba; with Atta insularis Guérin (Wood-RUFF & CARTWRIGHT, 1967).

Euparixia duncani Brown, 1927: 288. – Arizona; Acromyrmex versicolor (Pergande) suspected to be host ant (Woodruff & Cartwright, 1967).

Euparixia formica Hinton, 1934: 27. – Mexico; with Atta sexdens (L.), from the refuse thrown out of the nests (Hinton, 1934, but see Woodruff & Cartwright, 1967).

Euparizia moseri Woodruff & Cartwright, 1967: 7. - Louisiana; with Atta texana Buck, chiefly fungus-gardens (Woodruff & Cartwright, 1967).

Iarupea lopeteguii Martínez, 1953: 75, 77. - Argentina; with Atta vollenweideri Forel, detritus (Martínez, 1953).

Lomanoxia alternata sp. nov. - Surinam; with Atta cephalotes (L.), detritus-cavity (see below).

Lomanoxia costulata (HAROLD), 1867: 82. - Argentina, Brazil, Surinam; with Atta sexdens (L.), detritus-cavity (EIDMANN, 1936; present paper).

Cartwrightia islasi Cartwright, 1967: 2. – Mexico, El Salvador, Guatemala; with Atta cephalotes (L.), detritus-cavity (Cartwright, 1967).

I have given detailed references to facilitate extension of this list by other workers. Records in scattered species descriptions of such large genera as *Ataenius* Harold and *Saprosites* Redtenbacher may have been overlooked. A full account of myrmecophily and termitophily among the Scarabaeoidea is in preparation.

For submitting specimens thanks must go to the following: Muséum National d'Histoire Naturelle, Paris (Mr. A. DESCARPENTRIES); Naturhistoriska Riksmuseet, Stockholm (Mr. T. Nyholm); Naturhistorisches Museum, Vienna (Dr. F. Janczyk); and Dr. D. C. Geijskes of the Leiden museum. In vain I contacted some larger European museums to obtain further Lomanoxia.

Genus Lomanoxia Martínez

Lomanoxia Martínez, 1951, Publ. Misión Est. Patol. reg. Argent. 22 (80): 29-33 (description and diagnosis; type-sp. Euparia costulata Harold), 33-34 (key 2 spp.), 34-35 (records).

Diagnostic notes. – Species of Lomanoxia are readily recognized by the lateral portions of their elytra being sharply inflexed; the fold runs along the midline of interstriae 8. General form short, compact, strikingly oval. According to Martínez (1951: 33) the cotyloid shape of the middle coxal cavities is unique among the Eupariini. For further descriptive details see Martínez (l.c.).

Type-species: Euparia costulata Harold, by original designation.

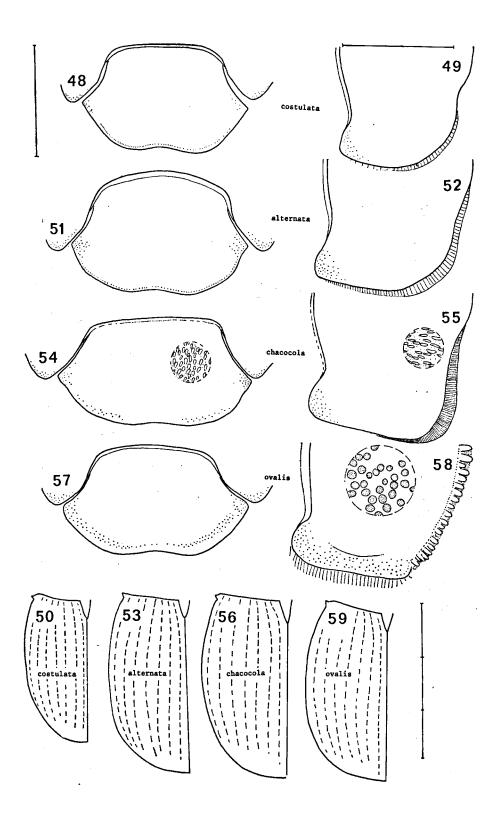
Judged from the characters used in the key given by Martínez, his Lomanoxia ovalis is certainly not that species; it may be identical to L. costulata (Harold), whereas his L. costulata is a different species, possibly one of those described as new in the present paper.

Distribution. - Four species are known from localities in Surinam, Brazil, Paraguay and Argentina.

KEY TO SPECIES OF Lomanoxia

- Elytral interstriae opaque, with distinct microreticulation. All interstriae with a median series of very short bristles. Body

Fig. 48-59. Outlines of head (48, 51, 54, 57; full-face view), left half of pronotum (49, 52, 55, 58; dorsal view), and left elytron (50, 53, 56, 59; dorsal view) of four species of *Lomanoxia*; fringe of closely set marginal bristles of pronotum schematically indicated. 48-50, *L. costulata* (Harold), female from Mendes; 51-53, *L. alternata* sp. nov., holotype from Paramaribo; 54-56, *L. chacocola* sp. nov., holotype from Icaño; 57-59, *L. ovalis* (A. Schmidt), lectotype from Tucumán province. [Smallest scale-unit = 1 mm].



widely ova	l, ratio sutural	length to	base of scutell	um/maxin	ıum
width of el	ytra combined j	presumably	y not exceeding	1.20 mm	. 3

- 2. All interstriae with a median series of frequently widely spaced, recurved bristles. Distal sternites with basal zone of longitudinal costulae. Length 4.5-5 mm. Argentina, Brazil, Surinam costulata (Harold)

- Pronotal surface with deep, sharply defined, subisodiametric punctures separated by less than their own diameters; bristles along lateral edge approximately equal-sized; marginal impression extending from anterior-lateral to shortly rounded posterior-lateral angle; pronotal base lacking median lobe. Inferior side of fore femora smooth (or nearly so). Length 5 mm. Northwest Argentina. ovalis (A. Schmidt)

Lomanoxia costulata (Harold)

(Figs. 48-50)

Euparia costulata Harold, 1867, Col. Hefte 1: 82 (type from "Brasilia"); 1870: 23 (in key), 25. - A. Schmidt, 1922: 392 (in key), 393. - Eidmann, 1936: 432, fig. 9.

Lomanozia costulata; MARTÍNEZ, 1951: 33 (in key), many figs. [mis-identification], comb. nov.

Description. - Approximate length 4.5-5, width 2.5, height 1.5-2 mm. Colour reddish-brown, shiny; legs and marginal/apical

portions of several other elements more or less infuscated; mouth-parts orange-brown; pilosity yellowish.

Cephalic surface slightly convex; clypeal border seemingly slightly emarginate in the middle, margin proper deflexed; limiting lobes rounded, sides regularly widely curving towards distinctly produced obtusangular genae; suture between clypeus and genae hardly discernable; surface somewhat scabrous around central convexity, finely hirsute behind, with minute protuberances in front, in some specimens merely scabrous; fine but distinct punctures anterior to narrow pronotal velum; cephalic edges very slightly bent upwards. Maximum width of head capsule 1.6 mm (lectotype, see below), 1.7 mm (specimen from Mendes).

Pronotum strongly convex, anterior-lateral portions distinctly depressed; posterior-median surface slightly depressed, edge somewhat lobate; posterior-lateral angles obsolete, very widely rounded; sides curvilinear, with fringe of densely arranged stiff bristles proceeding to near median lobe of pronotal base, reaching their greatest length along the posterior-lateral curve; lateral declivities with faint, elongate, subtransverse impression. Pronotal surface with sparse fine recurved bristles. Median length of pronotum 1.3, 1.3 (type; Mendes) maximum width 2.1, 2.1 mm (type; Mendes); ratio 1/w 0.60 (type), 0.62 (Mendes). Scutellum elongately subtriangular, shiny.

Elytra with 10 slightly impressed, hardly punctate, narrow striae; disc evenly oval; lateral zone abruptly inflexed along midline of interstriae 8; epipleura proceeding to apex, slightly narrowing caudad, anterior portion abruptly extending to poorly pronounced humeral tooth. Interstriae of elytral disc distinctly, though shallowly convex; each interstria with a median series of recurved bristles, mostly larger and less closely arranged than in the other species; elytral border with fringe of similar bristles, epipleura lacking pronounced series of bristles. Median length 3.2 (type), 2.9 mm (Mendes); maximum width 2.5 (type), 2.4 mm (Mendes); ratio 1/w 1.28 (type), 1.20 (Mendes).

Ventral side of prothorax concave on each side of median setaebearing prominence; lateral portions may bear several fine, very short bristles. Mesosternum wide, narrowing caudad, oblique middle coxae narrowly separated behind; well-defined median ridge present, obsolete in front. Metasternal disc with shallow median groove; surface with numerous evenly distributed minute bristles; metasternal wings vaguely scabrous, extending to humeral section of elytral epipleura. Lateral elements of meso- and metathorax not visible. Abdominal sternites coalescent; distal sternites with basal zone of longitudinal costulae, remaining surface with many bristle-like protuberances. Pygidial surface scabrous, opaque, with median longitudinal impression.

Fore tibia tridentate; superior as well as inferior side smooth; acuminate terminal spur as long as tarsal segments 1+2. Fore femur and trochanter dorsoventrally flattened, anterior zone of superior side concave to receive tibia; anterior border with about five subclavate bristles; inferior surface with numerous minute bristles Middle and hind tibiae with obsolescent longitudinal ridges, and minute bristles; truncate apex devoid of a fringe of spines, exteriorly with one short, inconspicuous accrete spine, interiorly with two acuminate spurs, inferior one half as long as superior. Middle and hind tarsi long relative to respective tibiae; approximate length proportions of superior spur and tarsal segments 1-5 in the right hind leg: 4/8/3/3/3/4 (type), 4/7/3/3/3/4 (Mendes); middle and hind femora slender; inferior sides with numerous evenly distributed briste-like protuberances; marginal grooves lacking.

Variation. – The few specimens available do not show much taxonomically noteworthy variation. More material is needed to evaluate differences in proportions and distribution of interstrial bristlets.

Diagnostic remarks. – Lomanoxia costulata should be identifiable from the following combination of characters. All interstriae with a series of recurved, usually relatively widely spaced bristles. Distal sternites with basal zone of longitudinal costulae. Elytra distinctly shiny. Base of pronotum lobate; longest bristles of marginal fringe situated along the wide posterior-lateral curves; pronotal surface lacking pronounced, relatively large punctures. Small, comparatively slender species.

This species is closely affined to Lomanoxia alternata sp. nov.

Material examined. - 5 specimens.

HAROLD (1870: 26) examined two specimens, one from Reiche (not found), and another from Redtenbacher of Vienna, but it is not quite clear whether he knew both or only one of these when drawing up the preliminary diagnosis in 1867. I consider both specimens syntypes, and the specimen from the Vienna museum is here selected lectotype (sex unknown, not dissected). It has six labels, partly in Redtenbacher's handwriting: "Euparia costulata Harold" "23," "N.c. M," "Typus," "Costulata Harold. Bras.", "Euparia costulata," "V. 52/L Oxyomus 2." Further material as follows:

Brazil. - Estado do Rio: Mendes, 21.IX.1933, leg. H. Eidmann (1, Paris); Espirito Santo (1, Stockholm).

ARGENTINA. - San Ignacio, 1922, leg. P. Chabanaud (1, Paris).

Surinam. – Paramaribo: Lelydorp, 6–16.XII. 1938; leg. D. C. Geijskes, from detrituscavity nest *Atta sexdens* (L.) (1, Leiden).

Bionomics. – Beside this Surinam record, this species was found in numbers in detritus-cavities of the same *Atta* species in Brazil (EIDMANN, 1937: 431). For details on the Lelydorp nest see STAHEL & GEIJSKES (1939).

Lomanoxia alternata sp. nov.

(Figs. 51-53)

Description (holotype, male). - Approximate length 5, width 3, height 2 mm. Colour reddish-brown, shiny; legs and marginal/apical portions of several other elements more or less infuscated; mouth-parts orange-brown; pilosity yellowish.

Cephalic surface slightly convex; median portion of clypeal border seemingly slightly emarginate, but margin proper deflexed; limiting lobes rounded, sides regularly widely curving to distinctly produced obtusangular genae; clypeal-frontal suture obsolete, clypeal-frontal transition indicated by feeble irregularity of the cephalic border; interocular portion of head with numerous subisodiametric punctures; punctural diameters increasing caudad, posterior punctures separated by less than their own diameters; anterior punctures with short recurved bristles; clypeal punctation extremely vague. Maximum width of head capsule 1.8 mm.

Pronotum strongly convex, anterior-lateral and posterior-median portions depressed; anterior-lateral angles shortly rounded, posterior-lateral angles obsolete, very widely rounded; middle of pronotal base produced caudad, lateral portions concavely curvilinear;

narrow velum along median portion of anterior border. Pronotal sides, and base to median lobe, fringed with closely arranged stiff bristles, their length increasing towards posterior-lateral curve; lateral declivities with numerous short, semiappressed bristles. Median length of pronotum 1.5, maximum width 2.6 mm; ratio l/w 0.56. Scutellum elongately subtriangular, shiny.

Elytra with 10 hardy impressed, narrow striae lacking pronounced punctures; elytral disc evenly oval; lateral zone of elytra abruptly inflexed along midline of interstria 8; epipleura proceeding to elytral apex, gradually narrowing caudad; humeral section abruptly dilated extending to distinct, though inconspicuous humeral tooth. Interstrial edges well-defined, very weakly crenulate; interstrial surface nearly flat, only basal portions slightly convex; interstriae 1, 3, 5, 7 with median series of closely arranged, suberect, very short bristles (apparently rubbed off in front); ridge separating epipleura from elytra proper fringed with similar bristles; epipleural series of bristles imperfect. Median length to base of scutellum 3.6, maximum width of elytra combined 3.0 mm; ratio l/w 1.17.

Ventral side of prothorax anteriorly with a concavity on each side of the setae-bearing median prominence; lateral surface without pronounced features. Mesosternum elongate, wide in front, narrowing caudad, though leaving the oblique middle coxae distinctly separated; midline exhibiting pronounced, anteriorly obsolete ridge. Metasternal disc with fine median groove; metasternal wings well-developed, anterior tips proceeding to humeral section of epipleura; surface anterior to middle coxae shallowly impressed; metasternal surface vaguely, scatteredly punctulate. Lateral elements of meso- and metathorax not visible. Sternites coalescent; base of apical sternite with conspicuous zone of longitudinal costulae, remaining surface with a few scattered punctules; sternites 3–5 with fine, appressed, sparsely, regularly distributed bristles.

Fore tibia tridentate, with long, acuminate terminal spur; both sides without distinct punctures. Fore femur and trochanter dorso-ventrally flattened, explanate anteriorly, covering infolded tibia; superior surface finely pubescent, inferior surface with numerous punctules bearing minute, appressed bristles. The relatively short middle and hind tibiae with vague longitudinal ridges and some

series of minute scale-like bristles; truncate apex with distinct external accrete spine and two interior acuminate spurs, superior spur much longer than inferior; apical fringe of spines lacking. Tarsal length subequal to tibial length; approximate length proportions of superior terminal spur and tarsal segments 1–5 in left hind leg: 6/9/4/4/3/5. Middle and hind femora slender; inferior surfaces with numerous fine, weakly defined punctures bearing scale-like bristles; interspaces in most places exceeding punctural diameters; marginal grooves lacking.

Diagnostic remarks.—Lomanoxia alternata should be identifiable from the following combination of characters. Median series of very short bristles present on odd interstriae only. Only apical sternite with basal zone of longitudinal costulae. Body more robust compared to L. costulata (Harold); elytral contours widely semi-elliptic, ratio sutural length to base of scutellum/maximum width of elytra combined presumably not exceeding 1.20. Elytra distinctly shiny. Pronotum with median-basal lobe; longest bristles of marginal fringe situated along the posterior-lateral curves; pronotal surface lacking pronounced, large punctures.

This species is closely affined to L. costulata (Harold).

Material examined. — The unique type, with one label: "Paramaribo/Charlesburg/in afvalruimte [in detritus-cavity]/nest Atta cephalotes 5.IX.'38/Geijskes," Surinam (Leiden museum).

Bionomics. – Details concerning the Charlesburg nest of *Atta cephalotes* (L.) whence this *Lomanoxia* was collected may be obtained from the excavation report by STAHEL & GEIJSKES (1939).

Lomanoxia chacocola sp. nov.

(Figs. 54-56)

Description (holotype, female). - Approximate length 5.5, width 3, height 2 mm. Colour reddish-brown; legs and marginal/apical portions of several elements more or less infuscated; mouthparts and antennae orange-brown, pilosity yellowish; head and

pronotal disc shiny, pronotal flanges and elytral interstriae opaque owing to reticulate microsculpture; strial impressions shiny.

Head slightly convex centrally, marginal zone deplanate; clypeal border seemingly slightly emarginate in the middle, margin proper deflexed; limiting lobes rounded, sides regularly, widely curving to distinctly produced, nearly rectangular genae; cephalic surface with numerous appressed scales. Maximum width of head capsule 2.0 mm.

Pronotum strongly convex, anterior-lateral and posterior-median portions depressed; lateral borders nearly straight (seen from above), diverging caudad; anterior-lateral angles shortly rounded, posterior lateral angles obsolete, widely rounded; velum along anterior-median border of pronotum narrow. Pronotal base fringed with closely set stiff bristles on both sides of median lobe; nearly entire pronotal surface with sparse fine, short, scale-like, semiappressed bristles. Median length of pronotum 1.5, maximum 2.7 mm; ratio l/w 0.55. Scutellum elongately subtriangular shiny.

Elytral disc with seven subcatenulate, distinct, though narrow and scarcely impressed striae; disc evenly oval, lateral zones abruptly inflexed along midline of interstria 8; striae on inflexed surface hardly discernable; epipleura proceeding to elytral apex, gradually narrowing caudad; humeral section abruptly dilated, extending to poorly developed humeral tooth. Discal interstriae very shallowly convex; discal interstriae with a median series of fine, short, recurved, semiappressed bristles; similar series and inflexed elytral declivities and ridge separating epipleura from these declivities; epipleural series of bristles imperfect. Median length to base of scutellum 3.5, maximum width of elytra combined 3.3 mm; ratio l/w 1.06.

Ventral side of prothorax concave on each side of the setae-bearing median prominence; laterally pubescent, medially scabrous and shiny; posterior-lateral surface with fine, short bristles. Meso-sternum wide in front, narrowing caudad though the oblique middle coxae remain separated; a fine, anteriorly obsolescent median ridge present. Metasternum with median groove; metasternal wings well-developed, anterior tips extending to humeral section of epipleura, portions anterior to hind coxae impressed; disc and parts of wings with sparse minute, scale-like protuberances. Lateral elements of

meso- and metathorax not visible. Sternites coalescent, each with basal zone of longitudinal costulae, increasingly developed on distal sternites; remaining surface with minute punctures bearing minute scale-like setae.

Fore tibia tridentate, superior and inferior surfaces without noteworthy details; with relatively long acuminate terminal spur. Fore femur and trochanter dorsoventrally flattened, explanate in front, some short stiff bristles along anterior border; covering infolded tibia; inferior surface with moderately close punctation, punctures fine, bearing short, curved bristles. Middle and hind tibiae nearly straight, with vague longitudinal ridges and some series of minute scale-like bristles; truncate apex externally with short, inconspicuous accrete spine, interiorly with two acuminate spurs; superior spur approximately twice as long as inferior one; apical fringe of spines lacking. Approximate length proportions of superior terminal spur and metatarsus in left hind leg; 7/8. Middle and hind femora slender; inferior surfaces with numerous regularly distributed minute, scale-like bristles; marginal grooves lacking.

Diagnostic remarks. - Lomanoxia chacocola should be identifiable from the following combination of characters. Pronotum only with vague punctules bearing fine, short, semiappressed brist-

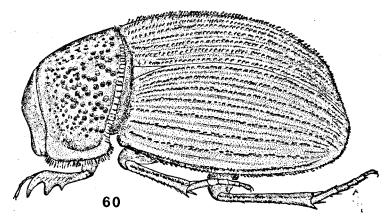


Fig. 60. Habitus of Lomanoxia ovalis (A. Schmidt), after type-specimen from Tucumán province; total length ca. 5 mm; dorso-lateral view.

les; lacking large, well-defined punctures; anterior-lateral surface depressed, base lobate in the middle; posterior-lateral angles of pronotum fully obsolete. Inferior side of fore femora with punctules bearing fine scale-like bristles. Elytral interstriae and other portions of dorsum opaque; owing to distinct fine-meshed reticulation; all interstriae with median series of very short bristles. Elytral contours widely semielliptic.

Material examined. - The unique type, which is accompanied by two labels with the following data: "Muséum Paris/Chaco de Santiago del Estero/Bords du Rio Salada/Env. d'Icaño/E.-R. Wagner 1904" (Argentina), "Juill.-Fév." (Paris museum).

Lomanoxia ovalis (A. Schmidt)

(Figs. 57-60)

Euparia ovalis A. Schmidt, 1911, Soc. ent. 26: 55 (type from "Argentinien"); 1922: 392 (in key), 393.

Lomanoxia ovalis; MARTÍNEZ, 1951: 33 (in key) [mis-identification], comb. nov.

Description (lectotype). – Approximate length 5, width 3, height 2 mm. Colour reddish-brown; legs and marginal/apical portions of certain other elements more or less infuscated; mouthparts and antennae orange-brown, pilosity yellowish; head, pronotal disc and striae shiny, pronotal flanges and elytral interstriae opaque owing to reticulate microsculpture.

Cephalic surface slightly convex centrally; clypeal border seemingly emarginate in the middle, margin proper deflexed; limiting lobes rounded, sides regularly widely curving to distinctly produced, shortly rounded genae; suture between clypeus and gena weakly indicated; surface around central convexity with braided, finely impressed streaks; posterior portion of head with several distinct punctules; cephalic border finely marginate. Maximum width of head capsule 1.8 mm.

Pronotum strongly convex, lateral portions impressed from anterior to posterior curve; sides nearly straight, slightly divergent caudad; lateral declivities slightly swollen; base widely curvilinear, slightly sinuate near lateral curves; velum along anterior-median border narrow. Pronotal disc with large, distinctly impressed, sharp-

ly defined punctures separated by less than their own diameters; disc with about 15 such punctures/0.25 sq. mm; punctures behind anterior-median border slightly smaller than others; lateral border of pronotum with fringe of approximately equal-sized stiff bristles, their length decreasing around anterior and posterior curves; total number of these bristles 40-45; base with conspicuous zone of about 35 longitudinal and sublongitudinal costulae, with short bristles (larger bristles worn off?) placed in the intervening impressions. Median length of pronotum 1.5, greatest width 2.3 mm; ratio l/w 0.64. Scutellum elongately subtriangular, shiny.

Elytral disc with 7 distinct though narrow and hardly impressed striae with weakly pronounced punctures; disc evenly oval, lateral zone abruptly inflexed along midline of interstriae 8; striae of inflexed surface scarcely discernable; epipleura proceeding to elytral apex, gradually narrowing caudad; humeral section abruptly dilated, extending to small but distinct humeral tooth. Interstriae barely convex, mesial borders finely crenulate; discal interstriae each with a median series of fine curved, semiappressed, closely arranged, very short bristles; additional similar series on inflexed declivities and along ridge separating epipleura from these declivities; epipleural series of bristles imperfect. Median length to base of scutellum 3.6, maximum width of elytra combined 3.0 mm; ratio l/w 1.18.

Ventral side of prothorax concave on each side of the anterior-median setae-bearing prominence; lateral portions pubescent. Mesosternum wide in front, narrowing caudad though leaving the oblique middle coxae separated; with fine median ridge, which is obsolete in front. Metasternal wings well-developed, anterior-lateral tips proceeding to humeral section of epipleura; surface anterior to hind coxae impressed; entire metasternum with numerous minute, regularly distributed punctures bearing similarly minute, appressed, somewhat scale-like setae. Lateral elements of meso- and metathorax not visible. Sternites coalescent; with basal zone of longitudinal costulae, increasingly developed on posterior segments; remaining surface with minute punctures bearing minute scale-like, appressed setae.

Fore tibia tridentate; superior and inferior sides polished; acuminate terminal spur as long as tarsal segments 1 + 2. Fore femur

and trochanter dorsoventrally flattened, with nearly 15 more or less clavate bristles, their length decreasing proximad; superior surface of femora pubescent, inferior surface almost glabrous, pustulate in front. Middle and hind tibiae nearly straight, with vague longitudinal ridges and some series of minute scale-like bristles; truncate apex with short, inconspicuous accrete spine externally, and two acuminate spurs internally, superior spur much larger than inferior; apical fringe of spines lacking. Tarsi shorter than tibiae; approximate length proportions of superior terminal spur and tarsal segments 1–5 in the left hind leg: 6/9/4/3/3/4. Middle and hind femora slender; inferior surface with numerous minute, regularly distributed scale-like bristles; marginal grooves lacking.

Diagnostic remarks. – Lomanoxia ovalis should be identifiable from the following combination of characters. Pronotal surface with many deep, sharply defined, subisodiametric punctures, separated by less than their own diameters; bristles fringing lateral borders of pronotum approximately equal-sized; marginal impression extending from anterior-lateral to posterior-lateral, shortly rounded angles; basal lobe of pronotum absent. Inferior side of fore femora smooth (or nearly so). Dorsum largely opaque. All interstriae with median series of very short bristles. Elytral contours widely semielliptic.

Material examined. — A unique specimen (not dissected to establish sex), lectotype by present designation, bearing six labels with the following data: "Typus," "R L Argentina/Prov. Tucuman 190/C. Bruch," "E. ovalis/Type m.," "390/70," "Riksmuseum/Stockholm," "E. ovalis Schm."

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