Redescriptions, new combinations, synonymies, and new records of South American Lepturini (Coleoptera: Cerambycidae: Lepturinae)

Osvaldo Di Iorio
Buenos Aires, Argentina,
Redescriptions, new combinations, synonymies, and new records of South American Lepturini (Coleoptera: Cerambycidae: Lepturinae)

Osvaldo R. Di Iorio


Internet: diiorio@biolo.bg.fcen.uba.ar

Abstract: Some Neotropical Lepturini are studied: Euryptera latipennis Audinet-Serville, 1828 (type species) redescriptions, Strangalia dimidiata (Redtenbacher, 1868) new combination (= Strangalia melanophthisis (Berg, 1889) new combination, new synonymy, and lectotype designation), Strangalia fulvicornis (Bates, 1872) new record from Argentina; Strangalia melanura (Redtenbacher, 1868) new combination from Brazil; Strangalia rubricollis (Bates, 1870) new record from Peru. "Leptura" bonariensis Burmeister, 1865 is not a true Leptura, being exotic for Argentina and for the Neotropical fauna; the type-specimen was mislabelled as coming from Buenos Aires. Elytral patterns, posterior tarsi, antennae, 5th apparent urosternite, and elytral apices of E. latipennis, and S. dimidiata are illustrated. A key to Argentinian genera and species is provided.

Key words: Coleoptera, Cerambycidae, Lepturini, systematics.

Introduction

Linsley & Chemsak (1971) characterized the genera Euryptera Audinet-Serville, 1828 (type species E. latipennis Audinet-Serville, 1828) and Strangalia Audinet-Serville, 1828 (type-species Leptura lateicornis F.: Thomson, 1860 designation), and transferred many Central American species from Euryptera to Strangalia. The revision of the North American fauna of Lepturinae, started by Linsley and Chemsak (1972), was completed in 1976 by the same authors, who included Strangalia and Leptura among the genera with the sides of the prothorax inerm.

Within the South American fauna, not all the species originally described in Euryptera and still placed in this genus (Monné and Giesbert, 1995) belong to it. Of the 3 species recorded for Argentina, Euryptera latipennis, Strangalia dimidiata Redtenbacher (1868) and Euryptera melanophthisis Berg (1889), the last 2 belong in the genus Strangalia, the last being a synonym of the second. One new record of species of Strangalia for Argentina is added here, the first species of this genus is recorded for Perú, and the diagnosis of the genus Euryptera is amplified.

Leptura bonariensis Burmeister (1865), described from Buenos Aires, is an exotic species for the Argentinian fauna: it was mentioned with an interrogation mark (Monné and Giesbert, 1995), and besides it is no true Leptura (Linsley and Chemsak, 1976; Villiers, 1978).

Collections examined: CB: Carlos Bruch (MACN); HB: Hermann Burmeister (MACN); FHC: Facultad de Humanidades y Ciencias, Montevideo; GP: Glorialdo Pellerano (MACN); MACN: Museo Argentino de Ciencias Naturales "Bernardo Rivadavia," Buenos Aires; MLP: Museo de La Plata, Buenos Aires; ODI: Osvaldo Di Iorio, Buenos Aires; MV: Manuel Viana, Rosario de Lerma, Salta; MZ: Mateo Zelich, Liebig, Entre Ríos.

Euryptera Audinet-Serville, 1828

Type-species: E. latipennis Audinet-Serville, 1828 (by monotypy).

Diagnosis (from Linsley and Chemsak, 1971): elytra more or less flattened, costate, expanded posteriorly; apices transversely sinuate; sutural and external angles dentiform (Fig. 6); prosternal process narrow, more or less lam-iniform, arcuately declivous behind; coxae exerted, extending well above the intercoxal process; mesosternal process prominent, elevated above the coxae, arcuately but subvertically declivous in front.

Euryptera latipennis Audinet-Serville, 1828

(Figs. 1, 5-6, 8, 11-13, 27)

Euryptera latipennis: Bruch, 1912; Buck, 1959.
Euryptera latipennis var. virgata Gounelle, 1911; Bruch, 1915; Buck, 1959.

Redescription: Body depressed, wider than its height. Antennae 11-segmented (Fig. 1): scape gradually broadening toward apex, somewhat arched; antennomere II very short, wider than long; antennomere III 3/4 length of scape; antennomere IV shorter than III; antennomere V as long as III,
with narrow base and broadening gradually toward apex, with outer apical angle acute, but not produced; antennomeres VI, VII, and VIII, subequal, becoming steadily broader at base and less angular at outer apex; antennomeres IX and X somewhat shorter than the VIII, with inner and outer margins arcuate, as wide as VIII in middle of their length; antennomere XI longer than X, with distal 1/3 acuminate, acute at apex. Scape and antennomeres II, III, and IV coarsely, more or less densely punctured; antennomeres V to XI with very fine punctures and microsculpture.

Fore tibiae as long as femora; first tarsomere little shorter than second and third taken together. Middle tibiae slightly shorter than femora; first tarsomere as long as second and third taken together. Hind tibiae longer than femora, narrow, slender, with apex not exceeding the posterior margin of elytra, bearing 2 apical spurs, inner one longer than outer; tarsi shorter than tibiae, first tarsomere half as long as second and third taken together (Fig. 5).

Pronotum trapezoidal, gradually broadening backwards; lateral margins slightly convex in anterior half; anterior margin somewhat concave; posterior margin strongly convex on median line (not covering scutellum); posterior angles acute, projecting backward and going around humeri, which are rounded. Elytra slightly narrowed behind humeri, behind this, lateral margins diverge gradually backward, broadening on apical 1/4 (Figs. 11-13); outer apical angle produced into more or less triangular spine; posterior margin truncate, first outwardly concave and then inwardly convex; sutural angle straight, slightly projecting (Fig. 6). Elytra with 5 costae, not reaching anterior and posterior margins of each elytron; 3 very weak veins, which coincide with first, second, and fourth costae, counting from suture.

Prosternal process little less strongly raised than fore coxae (globose, prominent), strongly narrowed between these and backward, not exceeding posterior margin of coxae; mesosternal process slightly raised above middle coxae, with anterior margin subvertical.

Urosternites subequal in length, gradually narrowing backward, with setigerous punctures evenly spaced; posterior margin straight in first 3 urosternites and slightly concave on median line of fourth; posterior margins with microscopically small teeth; posterior angles of fifth projecting into acute, triangular spines, posterior margin between them concave (Fig. 8), exceeding posterior margin of elytra in 1/3 of its length.

Two lengthwise spots on pronotum and those on distal 1/3 of elytra, black in colour, are found in all specimens. Black spot on the apical 1/3 of elytra may form band, broader toward suture and following along it up to scutellum (Fig. 11); it also may be reduced (Fig. 12) or absent (Fig. 13). In this last case, apical black band on elytra is reduced to half its size.


Taxonomic discussion: Linsley and Chemsak (1971) give more characters for Strongalía than for Euryptera, probably because they did not have specimens of E. latipe7tlzis. To the genus diagnosis (Linsley and Chemsak, 1971), the following characters are added, different from Strongalía: III antennomere slightly shorter than scapus (Fig. 1); hind tibiae not carinate, not exceeding the posterior margin of elytra; first segment of hind tarsus twice as long as the second and third taken together (Fig. 5); posterior angles of the prothorax going round the humeri; posterior margin of the pronotum strongly convex on the median line; elytra with 5 costae; posterior angles of the 5th apparent urosternite strongly projecting (Fig. 8).

Biogeography: distribution of E. latipe7tlzis covers from the north-east and central-east of Brazil (Zajciw, 1958, 1972, 1973) to Paraguay (Viana, 1972), and from there along the Yungas in Bolivia, and the northwest of Argentina (material examined), outside the Chaco sensu stricto (Prado, 1993).

"Leptura" bonariensis Burmeister, 1865

Ophiostomis bonariensis (Burm.): Bruch, 1912.
Leptura bonaerensis: Blackwelder, 1946.


**Known geographical distribution:** Argentina: Buenos Aires (Monné & Giesbert, 1995).

**Material examined:** "Buenos/Ayres" (printed, black on green paper), 1 ex. (HB), labelled "Leptura bonariensis Burm., 1865 / Typos" (hand-written by Axel Bachmann, reddish colour).

**Taxonomic discussion:** The type specimen shows that this is not a true Leptura (Linsley and Chemsak, 1976; Villiers, 1978) or a species of Strangalia (= Ophistomis) (Bruch, 1912). This species is exotic for the Argentinian fauna, and it is not known whether the specimen was wrongly labelled by Burmeister as coming from Buenos Aires or whether it is an introduced individual (although the species was never found again in Argentina). The generic and nomenclatorial status of this species remains uncertain, as it should be determined towards both ends.

**Redescription:** Body not depressed, as high as wide at middle of its length, narrowing gradually towards both ends.

**Female:** Antennae 11-segmented (Fig. 2); antennomere III little longer than scape; antennomere IV shorter than V; antennomere VI subequal to IV; following antennomeres decrease gradually in length, except antennomere XI longer than X, with apex acuminate.

Pronotum trapezoidal; anterior margin straight; lateral margins diverging backwards, convex at middle of their length; posterior margin slightly convex on middle line; posterior angles acute, slightly projecting backward, shorter than elytral width between humeri.

Humeri rounded; lateral margins of elytra straight, narrowing gradually backwards, slightly curved towards median line at apical 1/4; outer apical angle projecting into short broad spine; posterior margin concave; sutureal angle projecting into very short spine; suture dehiscent on apical 1/4 (Fig. 7). Elytra not costate, with 3 veins in dorsal view and 1, parallel to margin, in lateral view.

Middle tibiae slightly shorter than femora; 1st tarsomere little longer than 2nd and 3rd taken together. Hind tibiae little longer than femora; 1st tarsomere twice as long as 2nd and 3rd taken together; 5th tarsomere little shorter than 2nd and 3rd taken together (Fig. 4).

First apparent urosternite longer than each of following ones; 2nd, 3rd, and 4th decreasing gradually in length and width; posterior margin of each sternite with small teeth; 5th urosternite nearly twice as long as the 4th, trapezoidal, with posterior angles projecting into very small, but evident spine, with slightly convex margin (Fig. 10).

Prosternal process very narrow and placed at base of fore coxae; mesosternal process broad, with

**Habitus:** Long, slender; antennae inserted on front along an- tennomere longer than scape; IV shorter than V; antennomere VI subequal to IV; following antennomeres decrease gradually in length, except antennomere XI longer than X, with apex acuminate.

**Pronotum:** Trapezoidal; anterior margin straight; lateral margins diverging backwards, convex at middle of their length; posterior margin slightly convex on middle line; posterior angles acute, slightly projecting backward, shorter than elytral width between humeri.

**Humeri:** Rounded; lateral margins of elytra straight, narrowing gradually backwards, slightly curved towards median line at apical 1/4; outer apical angle projecting into short broad spine; posterior margin concave; sutureal angle projecting into very short spine; suture dehiscent on apical 1/4 (Fig. 7). Elytra not costate, with 3 veins in dorsal view and 1, parallel to margin, in lateral view.

**Middle tibiae:** Slightly shorter than femora; 1st tarsomere little longer than 2nd and 3rd taken together. Hind tibiae little longer than femora; 1st tarsomere twice as long as 2nd and 3rd taken together; 5th tarsomere little shorter than 2nd and 3rd taken together (Fig. 4).

First apparent urosternite longer than each of following ones; 2nd, 3rd, and 4th decreasing gradually in length and width; posterior margin of each sternite with small teeth; 5th urosternite nearly twice as long as the 4th, trapezoidal, with posterior angles projecting into very small, but evident spine, with slightly convex margin (Fig. 10).

**Prosternal process:** Very narrow and placed at base of fore coxae; mesosternal process broad, with

**Insecta Mundi, Vol. 12, Nos. 1 & 2, March-June, 1998**
lateral margins somewhat converging backward, at anterior end very little raised above level of coxae, with anterior margin oblique.

Entirely black, except for lateral margins of prothorax, which are yellow. According to color of elytra, light or dark forms may be distinguished, yellow dominating in former, and black in latter. Dark forms (Figs. 15-18): elytra black on most of their surface, except for following parts: 1) narrowly yellow humeri (Fig. 15); 2) narrowly yellow humeri; lengthwise spot behind scutellum, common to both sutural edges (Fig. 16); 3) narrowly yellow humeri, spot against lateral margin of each elytron behind humerus; 4) narrowly yellow humeri; both spots present, sutural and posthumeral marginal; 5) posthumeral marginal spot merged with humeral spot into band behind.


Taxonomic discussion: The original description (Redtenbacher, 1868) is based, although this is not stated, on a female, as can be deduced by the yellow and black color of the elytra. As characterized by Linsley and Chemsak (1971), E. dimidiata belongs to Strangalia.

Strangalia succincta has been found only at Río de Janeiro (Monné and Giesbert, 1995), and can be distinguished from S. dimidiata by the reddish prothorax, and the elytra entirely black except for a transverse yellow band about middle of their length (Redtenbacher, 1868). Some specimens of Strangalia dimidiata (Fig. 17) resemble S. succincta, but in the first species the humeri are always yellow and the pronotum is black and yellow.

Biogeography: E. latipennis and S. dimidiata are sympatric in Brazil (Zajciw, 1972; Buck, 1959), but the distribution of S. dimidiata extends southward, as far as Uruguay (Zajciw & Ruffinelli, 1962) and Argentina, only east of the Chaco stricto, in the so-called mesothamnic region, from Misiones to Entre Ríos (along the Gallery Forest of the Uruguay river), and Buenos Aires (coast of the Río de la Plata) (Fig. 27).
**Strangalia melanopthithis** (Berg, 1889), new combination, and new synonymy

**Known geographical distribution:** Brasil: Rio Grande do Sul: Porto Alegre (Buck, 1959); Argentina: Corrientes (cerca ciudad de Corrientes) (Berg, 1889; Bruch, 1912); Uruguay: Tacuarembo: Puntas Arroyo Laureles (Zajciw & Ruffinelli, 1962); Rocha: Parque San Miguel (Zajciw and Monné, 1968); Florida: Paso de Pache (Bosq and Ruffinelli, 1951; Zajciw & Ruffinelli, 1962).

**Material examined:** Argentina: Misiones: without locality, 20-I-1910, Bruch C. leg., 1 ♂ (CB), "Gen. = Ophiostomis melanopthithis Berg" (hand-written by Bruch); Corrientes: 2 ♂♂ Syntypes (MLP), both labelled "Corri- lentes" (green label hand-written by Berg within print with black frame), "Typus" (white label with red printed word and frame), one with additional labels: white paper with illegible number (?), "Bruch foto" (hand-written by Bruch on orange frame), "Euryptera melanopthithis Berg 1899" (hand-written by Berg within red printed frame on white paper), "779" [hand-written in black] and "779/1" [hand-written in blue] on blue board disk (type catalogue number of the MLP), the other ex. with the following additional labels: "14 bis" (hand-written on white paper), "779 [in black] /2 [in blue]" on blue board disk (type catalogue number of the MLP); Buenos Aires: without locality, 23-XII-1917, Bruch C. leg., 1 ♂ (CB), "Euryptera melanopthithis Berg" (hand-written by Bruch on orange frame); Uruguay: Artigas: Sepulturas, Cuareim river, Picada del Negro Muerto, 10-XI-1966, Carbonell, Monné and San Martín leg., 1 ♂ (FHC); Rocha: Parque San Miguel, 21-XI-1964, San Martín leg., 1 ♂ (FHC).

**Taxonomic discussion:** The specimens labelled as "Typus" tally with the original description based on 2 specimens (Berg, 1889). Examination of these specimens shows, in the first place, that this species corresponds to the genus Strangalia, and in the second place, that the specimens are males of S. dimidiata. The specimen numbered "779/1" is designated Lectotype, since it is better preserved than the one numbered "779/2" (Parallectotype). Two males in the Bruch collection (MACN), 1 from Buenos Aires and another from Misiones, were labelled by Bruch as belonging to Berg's species, although he placed them in a series of specimens of S. dimidiata.

Zajciw & Ruffinelli (1962) give as a diagnostic character for E. dimidiata that this species has the prothoracical sides and the anterior part of the elytra more or less yellowish-rufous, while in E. melanopthithis, "the sides of the prothorax alone bear golden yellow hairs". One of Bosq's classic nomenclatorial comments (in Bosq and Ruffinelli, 1951) says that "Melzer, when describing his E. melanura Rdtb., 1868, ab. nigripennis Melz., 1930, expressed doubts about specimens from Rio Grande do Sul [Brazil], seen by him, which also correspond to the description of E. melanopthithis Berg, from Argentina" [translated from Spanish]. By the characters discussed further on, S. melanura is a different species from S. melanopthithis and, therefore, from S. dimidiata.

**Strangalia fulvicornis** (Bates, 1872) (Figs. 25-26, 27)

**Ophistomis fulvicornis** Bates, 1872; Monné and Zajciw, 1970

**Strangalia fulvicornis:** Monné and Giesbert, 1995

**Diagnosis:** Female: Entirely of light reddish brown, excepting: lengthwise band at each side of median line on pronotum, hind coxae and black posterior margins of sternites, except on 5th which is entirely black; elytra black, each having 3 yellow spots against epipleuron and transverse preapical yellow band (Fig. 26); Male: Head; basal antennomeres, prothorax, abdomen and elytra black, excepting yellow spot at base of each elytron, acuminate on posterior end; elytra strongly narrowed behind basal 1/4 (Fig. 25); 3 pairs of legs reddish; last apparent sternite modified, expanded laterally in 2 lobes.

**Known geographical distribution:** southeastern Brazil (Monné and Giesbert, 1995); Uruguay: Artigas: río Cuareim, Sepulturas, Picada del Negro Muerto (Monné and Zajciw, 1970).

**Material examined:** Argentina: Misiones: Dos de Mayo, XII-1965, Giai leg., 1 ♀ (ODI); Corrientes: Departamento Ituzaingó, Puerto Valle, X-1981, Martínez A. leg., 1 ♀ (ODI); same locality, IX-1992, Martínez A. leg., 1 ♂ (ODI); Uruguay: Artigas: río Cuareim, Sepulturas, Picada del Negro Muerto, 10-XII-1966, Carbonell, Monné and San Martín leg., 1 ♂ (FHC).

**Strangalia melanura** (Redtenbacher, 1867), new combination (Figs. 14)

**Euryptera melanura var. nigripennis** Melzer, 1930

**Diagnosis** (male): Elytra narrowed at middle, with lengthwise black spot on basal third (Fig. 14); 5th apparent urosternite not modified, projected at outer angles, slightly emarginated on median line (Fig. 14).
Latter the base of the head, behind the eyes, is black; the light red pronotum bears about the center an elytra, and the last apparent sternite modified elongate and slender. Strangalia tristis Melzer, shaped spot; the general shape of the body is more Montenegro, 12-XI-1961, TefQ (var. ~zigra Similar to Strangalia Melzer, 1930) appear to differ from males of S. nigripeltltis (described as var. nigrilpennis Melzer, 1930) by their greater size and the shape of the abdominal coloring. In S. melanura, the basal black spot on the elytra is placed lengthwise and the humeri are extensively yellow (Fig. 14), while in S. dimidiata the same spot is placed transversely, while the humeri are narrowly yellow (Fig. 19). Entirely black males of S. melanura (described as var. nigripennis Melzer, 1930) appear to differ from males of S. dimidiata by their greater size and the shape of their elytra.

Some females of S. dimidiata are similar in coloring. In S. melanura, the basal black spot on the elytra is placed lengthwise and the humeri are extensively yellow (Fig. 14), while in S. dimidiata the same spot is placed transversely, while the humeri are narrowly yellow (Fig. 19). Entirely black males of S. melanura (described as var. nigripennis Melzer, 1930) appear to differ from males of S. dimidiata by their greater size and the shape of their elytra.

Strangalia rubricollis (Bates, 1870)

Ophistomis rubricollis Bates, 1870.
Diagnosis: Entirely black, except for the base of the head behind the eyes, the prothorax, scutellum and anterior margin of elytra, all of which are reddish.


Remarks: First record of a Lepturini for Perú. Similar to Strangalia succincta Redtb. 1868 [var. nigra Redtb.: Brazil: 9-IX-1901, 1σ (CB)], but in the latter the base of the head, behind the eyes, is black; the light red pronotum bears about the center an U-shaped spot; the general shape of the body is more elongate and slender. Strangalia tristis Melzer, 1922 differs in being entirely black, still more elongate and slender than Strangalia succincta (var. nigra), with the abdomen longer than the elytra, and the last apparent sternite modified (males).

Biology of Lepturini

Larval host plants are unknown for any species of Lepturini from Argentina and nearby countries. Adults are often captured by daylight on flowers, feeding on nectar or pollen or copulating: E. latipennis from Rosario de Lerma on Baccharis medulloso DC. (Asteraceae); S. dimidiata from Liebig, I.N.T.A Station, and Uruguay (Zajciw and Monné, 1970) on Eryngium sp. (Apoaceae); S. fulvicornis on Eryngium sp. (Zajciw and Monné, 1970). Deltosoma xerophila in Salta (Di Iorio, 1996), with the same elytral pattern in black and yellow, was also captured together with E. latipennis on the same flowers of Baccharis (Viana, pers. com.). Variations in elytral patterns of E. latipennis and S. dimidiata are concordant with those observed in Lycid beetles and other mimic insects, visiting the same flowers. Dark and light forms may correspond to color pattern of different genera and species of Lycid models or to a single species of Lycid beetle with the same variations.

Key to the Argentine species of Lepturini

1. Elytra broadened backwards, flattened, with 5 ribs; posterior margin of elytra wide, and transversely truncate (Fig. 6); body more or less depressed; posterior tibiae not carinate along inside, and not exceeding posterior margins of elytra; antennomere III shorter than scape (Fig. 1); first segment of posterior tarsi 2 times as long as following 2 taken together (Fig. 5): Euryptera (Bolivia, northwestern Argentina: Jujuy, Salta, Tucumán ... E. latipennis)

1'. Elytra narrowed backward, wedge-shaped (Figs.14-26), sometimes narrowed at middle (Fig. 14), convex, without ribs; posterior margin of elytra short and obliquely truncate (Fig. 7); body not depressed; posterior tibiae longer than elytra, carinate along their inner face, and exceeding largely posterior margin of elytra; antennomere III longer than scape (Figs. 2-3); 1st segment of posterior tarsi twice as long as following 2 taken together (Fig. 4) Strangalia ...

2. Ventral side of the body entirely black ..........3
2'. Ventral side of the body reddish brown (except metacoxae, and posterior margins of urosternites 1st to 4th, (5th black); elytral pattern as in Fig. 26. Northeastern Argentina: Misiones, Corrientes (Fig. 27) .................................................................

................................. Strangalia fulvicornis (females)
3. Elytra totally black, including humeri, with small basal yellow spot (Fig. 25); all femora and tibiae reddish. Northeastern Argentina: Corrientes (Fig. 27) .................. Strangalia fulvicornis (male)

3'. Elytra totally black, excluding humeri (females), without small basal yellow spot (Figs. 15-16), or yellow area increasing progressively (Figs. 17 to 24); if elytra entirely black, including humeri (males), all femora and tibiae also black. Northeastern Argentina: Misiones, Corrientes to Entre Rios, and Buenos Aires (Fig. 27).................. Strangalia dimidiata

References


Prado, D. E. 1993. Contribution to the study of the flora and vegetation of the Chaco. VII. What is the Gran Chaco vegetation in South America?


Figs. 1, 5-6, 8 *Euryptera latipennis*: 1, right antenna; 5, hind tarsi; 6, apical portion of left elytron; 8, 5th visible sternite; Figs. 2, 4, 7, 10, *Strangalia dimidiata* (female): 2, right antenna; 4, posterior tarsi; 7, apical portion of left elytron; 10, 5th apparent urosternite; Figs. 3, 9, *Strangalia dimidicta* (male): 3, right antenna; 9, 5th visible sternite.

Fig. 27. Geographical distributions of Lepturini: stars, *Euryptera laiipennis*; triangles, *Strangalia dimidiata*; arrow, *Strangalia fulvicornis*, wide horizontal stripes: Province of Chaco (according to Prado, 1993); diagonal stripes: Province of Monte (according to Morello, 1958); vertical stripes: Province of the Espinal (according to Lewis and Collantes, 1973); narrow horizontal stripes: Paranaense Province (a: Transition Austro-brazilian Forest; b: Paranaense Forest; c: Gallery Forest).