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A new genus and two new species of Argentine Rhinotragini (Coleoptera, Cerambycidae, Cerambycinae)

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Abstract. Rhopalessa irwini sp.nov. and Rhinion parkeri gen. nov., sp. nov. (Coleoptera, Cerambycinae, Rhinotragini) are described from Argentina. A key to species of Rhopalessa is provided.

Keywords. Neotropical region; South America; taxonomy.

Introduction

Currently, 46 species of Rhinotragini belonging to 21 genera are known from Argentina (Monné 2016). The largest is *Odontocera* Audinet-Serville, 1833 with 10 species, followed by *Tomopterus* Audinet-Serville, 1833 with five species (Monné 2016).

Rhopalessa Bates, 1873 was revised by Clarke et al. (2011) who divided the genus into two species groups: "clavicornis" and "rubroscutellaris". Later, Clarke et al. (2012) synonymized Rhopalessa rubroscutellaris Tippmann, 1960 with Ommata fulvicolle Lacordaire, 1868 (= Laedorcari fulvicollis), and created the genus Rashelapso for the other species of the "rubroscutellaris" group sensu Clarke et al. (2011). Currently, Rhopalessa includes six species, of which two are known from Argentina (Monné 2016). Here, a new and third species from Argentina is described.

Bates (1873) commented on species of Rhinotragini: "In fact the abruptness with which important parts of structure change from species to species renders the definition of genera impossible in this group; almost every species offers structural characters sufficient in amount to render generic separation plausible." This remains a true statement and a problem for many Rhinotragini. Here a new genus (Rhinion) is described, to accommodate a new species from Argentina, as we were not able to satisfactorily place it in any currently described genus.

Materials and Methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1-5X macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken in "mm" using a micrometer ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The collection acronyms used in this study are as follows:

ACMT - American Coleoptera Museum (James Wappes), San Antonio, Texas, USA

MZSP - Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

FSCA - Florida State Collection of Arthropods, Gainesville, Florida, USA

Results

Rhopalessa irwini sp. nov.

(Fig. 1-8)

Description. Female. Head, prothorax and mesosternum reddish-brown; scape reddish-brown with brown apex; pedicel and basal antennomeres dark brown, gradually lighter toward distal antennomeres; mesosternal process, ventral side of metathorax and abdominal ventrites yellow-orange; elytra black with slightly violaceous reflections except reddish-brown epipleural margin, area under humerus, basal area on sides of scutellum, and small basal area along suture; femora reddish-brown except pale yellow basal area of peduncles (mainly on meso- and metafemora); tibiae reddish-brown at base, black on remaining surface; tarsi from dark brown to black.

Head. From finely, abundantly punctate; with yellowish-white pubescence not obscuring integument, interspersed with moderately long, erect, sparse yellowish-white setae close to eyes. Vertex finely, abundantly punctate laterally, minutely punctate centrally; with yellowish-white pubescence not obscuring integument, interspersed with moderately long, erect yellowish-white setae close to eyes. Antennal tubercles finely, moderately abundantly punctate toward frons, gradually sparser toward vertex, smooth close to apex; pubescence as on frons, except glabrous area close to apex. Area behind eyes finely, abundantly punctate, slightly sparser toward ventral side of head; with fringe of yellowish-white pubescence close to eyes, almost glabrous toward prothorax; with long, erect, pale yellow setae close to eyes (mainly behind lower eye lobes). Genae minutely, abundantly punctate, interspersed with a few finer punctures, except smooth area close to apex; with yellowish-white pubescence not obscuring integument, except glabrous smooth area. Postclypeus minutely punctate along base of wide central region, smooth toward apex and lateral area; pubescence in punctate areas as on frons, smooth area glabrous; with one long, erect, dark seta on each side of punctate area. Labrum coplanar with anteclypeus on basal half, inclined on this half; with moderately long and abundant yellowish-white setae directed forward, and fringe of yellow setae on distal margin. Distance between upper eye lobes 0.75 times length of scape; distance between lower eye lobes as wide as length of scape. Antennae 1.45 times elytral length, slightly surpassing elytral apex; antennomeres III-V cylindrical, antennomere V slightly and gradually widened toward apex, and antennomeres VI–XI cylindrical, as wide as apex of antennomere V; scape with long, erect, sparse yellow setae throughout; ventral side of pedicel and antennomeres III-VIII with long, erect, dark setae, gradually sparser toward VIII; antennal formula (ratio) based on length of antennomere III: scape = 0.57; pedicel = 0.22; IV = 0.63; V = 0.81; VI = 0.88; VII = 0.75; VIII = 0.71; IX = 0.69; X = 0.51; XI = 0.61.

Thorax. Prothorax cylindrical, 1.4 times longer than wide. Pronotum with five gibbosities: one on each side of basal third, sub-circular; one on each side of central third, sub-circular; one centrally, elongate, from basal quarter to almost distal margin, more distinct and wider between lateral gibbosities, carina-shaped toward distal margin. Pronotal surface coarsely, abundantly punctate, smooth on central and laterodistal gibbosities; with short pale yellow pubescence on base, area between laterobasal gibbosities, between laterodistal gibbosities and distal margin, and laterally (pubescence abundant, but not obscuring integument); with short, sparse pale yellow pubescence on remaining surface; with short and long, erect, moderately sparse pale yellow setae throughout. Sides of prothorax moderately coarsely and abundantly punctate (punctures slightly denser on base); with pale yellow pubescence as on pronotum, sparser centrally; with long, erect, sparse pale yellow setae. Prosternum coarsely, abundantly punctate on basal 2/3 (punctures finer than on pronotum), sparsely punctate on distal third; with pale yellow pubescence on basal 2/3 (abundant, but not obscuring integument), interspersed with long, erect, pale yellow setae; distal third with short and long, erect, sparse pale yellow setae. Ventral side of mesothorax with sculpture and pubescence as on basal area of prosternum. Metepisternum finely, sparsely punctate; with pale yellow pubescence not obscuring integument, interspersed with long, erect pale yellow setae. Metasternum finely, sparsely punctate; sides with yellowish-white pubescence (abundant, but not obscuring integument; more white depending on angle of light), distinctly sparser toward central area; with short and long, erect, sparse pale yellow setae throughout. Scutellum with pale yellow pubescence obscuring integument. Elytra. Not covering last abdominal segment; coarsely, densely punctate (becoming somewhat rugose); with short, decumbent, moderately abundant pale yellow setae not obscuring integument, interspersed with long, erect yellow setae on basal half (mainly on basal third). **Legs**. Apex of metafemora slightly surpassing elytral apex; metatarsomere I nearly 1.25 times length of II–III together.

Abdomen. Ventrites with grayish-white pubescence (abundant, but not obscuring integument), interspersed with long, erect, sparse setae. Apex of ventrite V slightly rounded.

Variation. Integument mostly black except reddish-brown part of clypeus, labrum and base of femoral peduncle (mainly on metafemora), and dark brown distal antennomeres (Figs 5–8); antennae from 1.30 to 1.45 times elytral length, from almost reaching to slightly surpassing elytral apex; apex of metafemora only reaching elytral apex; metatarsomere I from 1.15 to 1.25 times length of II–III together.

Dimensions (holotype/paratype females). Total length, 9.35/7.10-8.60; prothorax: length, 1.95/1.50-1.75; anterior width, 1.30/1.05-1.15; posterior width, 1.25/1.00-1.15; widest width, 1.40/1.10-1.25; humeral width, 1.80/1.35-1.60; elytral length, 5.80/4.60-5.30.

Type material. Holotype female from ARGENTINA, Catamarca: 9 km N La Merced (1041 m; $28^{\circ}06.43$ 'S / $65^{\circ}36.96$ 'W), 24.X-12.XI.2003, M.E. Irwin & F.D. Parker col. (FSCA). Paratypes – 4 females same data as holotype (1, ACMT, 2 FSCA, 1 MZSP).

Etymology. This species is named for M. E. Irwin, one of the collectors of the type series.

Remarks. Rhopalessa irwini sp. nov. agrees well with the characters pointed out for Rhopalessa by Clarke et al. (2011) except for antennal shape (translated): "III–V slender, slightly widened toward apex; VI–VII or VI–VIII distinctly widened toward apex; VIII–XI or IX–XI distinctly thicker than the other antennomeres." In Rhopalessa irwini sp. nov. none of the antennomeres are distinctly widened. However, in R. demissa (Melzer, 1934) although IX and XI are thicker than the other antennomeres, the enlargement is not distinctly wider either. Rhopalessa irwini differs from the female of R. demissa (Melzer, 1934), besides the antennal shape, by the metafemora shorter, with peduncle slightly longer than club, and club more abruptly widened. In R. demissa, the metafemora are slender, with peduncle about twice length of club, and the club is gradually enlarged.

Key to species of Rhopalessa (adapted from Clarke et al. 2011)

(For comparisons, see photographs at Bezark 2016)

1.	Distal antennomeres slightly widened; Argentina (Catamarca)
2(1).	Pronotal pubescence long and distinct, visibly contrasting with integument
3(2).	Pronotal pubescence compact, obscuring nearly all integument; Brazil (Paraíba, Bahia)
_	Pronotal pubescence abundant but not obscuring the integument; Bolivia, Argentina (Salta, Tucumán)
4(2).	Basal third of elytra primarily with long setae, with little or no short setae interspersed; Bolivia
	Basal third of the elytra primarily with short setae, with only a few long setae interspersed. 5
5(4).	Elytra yellowish-brown; French Guiana

Rhinion gen. nov.

Type species: *Rhinion parkeri* sp. nov.

Etymology. Diminutive of "rhino" (nose, beak) (Brown 1954), alluding to the short rostrum. Neuter gender.

Description. Female. Small size (< 10 mm). Head not prolonged behind eyes (posterior edge of eyes near anterior edge of prothorax), not forming a distinct rostrum (distance from inferior side of lower eye lobes to apex of genae smaller than half of length of lower eye lobe); dorsal surface pubescent. Eyes large; lower eye lobe occupying most of side of head; distance between lower eye lobes wider than length of one lobe. Antennae filiform, surpassing elytral apex, not reaching abdominal apex; antennomeres III–VI cylindrical, slender; antennomeres VI–XI slightly club-shaped. Prothorax barrel-shaped, pubescent. Pronotum with gibbosities slightly elevated. Procoxal cavities closed behind. Elytra not reaching fourth abdominal segment, gradually narrowed toward apex, slightly dehiscent toward apex along suture, without humeral carina; without translucent or vitreous areas; humeri obscuring mesepisterna when viewed dorsally; apex rounded. Pro- and mesocoxae without spicule. Profemora clavate; meso- and metafemora pedunculate-clavate; apex of metafemora distinctly surpassing elytral apex, nearly reaching middle of abdominal segment IV. Metatibiae without brush of setae. Metatarsomere I slender, about 1.6 times II–III together. Abdomen narrow, subfusiform (slightly widened toward apex of ventrite II, gradually tapering toward apex of V); apex of ventrite V slightly rounded.

Diagnosis. Although *Rhinion* gen. nov. resembles some genera of Rhinotragini with rounded elytral apex, it differs as follows:

- From Lygrocharis Melzer, 1927 by the longer antennae, antennomeres VIII-XI slender and not distinctly shorter than previous ones, and the club of meso- and metafemora gradually enlarged (in Lygrocharis, the antennae are shorter, not reaching elytral apex, the antennomeres VIII-XI are thicker and distinctly shorter than the previous ones, and the club of meso- and metafemora are abruptly enlarged);
- From Ephippiotragus Clarke, 2013 by the procoxal cavities closed behind (open in Ephippiotragus);
- From Acatinga Santos-Silva, Martins and Clarke, 2010 by the antennae not surpassing abdominal apex (slightly or distinctly surpassing in Acatinga), but primarily by the elytra without translucent areas (present in Acatinga);
- From *Anomalotragus* Clarke, 2010 by the elytra not lobed at apical third and reaching middle of the third abdominal segment (distal third lobed and reaching at most middle of the second abdominal segment in *Anomalotragus*);
- From *Rhopalessa* Bates, 1873, and *Pyrpotyra* Santos-Silva, Martins and Clarke, 2010, by the shorter elytra (at least reaching base of abdominal ventrite V in *Rhopalessa* and *Pyrpotyra*);
- From *Ischasia* Thomson, 1864, by the longer elytra (reaching about basal third of abdominal ventrite I in *Ischasia*);
- From *Ischasioides* Tavakilian and Peñaherrera-Leiva, 2003, by the longer elytra (reaching, at most, the base of the second abdominal segment);

- From *Rashelapso*, by shorter elytra and lack of humeral carina (longer elytra and with distinct humeral carina in *Rashelapso*).

Males of *Rhinion* are currently unknown.

Rhinion parkeri sp. nov.

(Fig. 9-12)

Description. **Female**. Head dark brown; scape dark reddish-brown; pedicel dark reddish-brown on basal 2/3, lighter on distal third; antennomeres III–VI reddish-brown, slightly darkened toward apex; antennomere VII entirely reddish-brown; antennomeres VIII–IX yellowish-brown; antennomere X brown; antennomere XI dark brown; prothorax and ventral side of meso- and metathorax dark brown, except narrow reddish-brown area close to distal margin of prothorax; elytra light reddish-brown, darkened on distal quarter; coxa reddish-brown; femoral peduncle yellow and club brown (slightly lighter on apex); protibia reddish-brown at base, brown on remaining surface; mesotibia light reddish-brown on basal half, gradually brown toward apex on distal half; metatibia light yellowish-brown except brown apex; pro- and mesotarsi dark brown; metatarsomere I yellowish-brown; metatarsomere II reddish-brown; metatarsomere III–V brown; abdominal ventrites reddish-brown.

Head. Frons and vertex finely, abundantly punctate except smooth narrow area along coronal suture; with decumbent yellowish-white pubescence not obscuring integument. Area behind eyes finely, moderately abundantly punctate; with short, abundant yellowish-white pubescence close to eye, interspersed with long, erect setae. Antennal tubercles finely, sparsely punctate, mainly toward apex; with short, moderately sparse yellowish-white pubescence. Genae finely, abundantly punctate (punctures finer than on frons); with yellowish-white pubescence not obscuring integument. Postclypeus finely, abundantly punctate close to frons, gradually sparsely punctate toward apex and sides; with yellowishwhite pubescence not obscuring integument; with one long seta on each side. Labrum coplanar with anteclypeus on basal half, inclined on distal half; with short and long, moderately sparse yellowishwhite setae. Submentum large, moderately coarsely, abundantly punctate; with short and long, sparse yellowish-white setae. Distance between upper eye lobes 0.75 times length of scape; distance between lower eye lobes 0.85 times length of scape. Antennae 1.65 times elytral length, reaching elytral apex at midlength of antennomere X; scape, pedicel and antennomeres III-VI with long, erect, sparse setae $ventrally \ (sparse \ on \ scape \ and \ pedicel, \ gradually \ sparser \ from \ III \ to \ VI); \ antennal \ formula \ (ratio) \ based$ on length of antennomere III: scape = 0.57; pedicel = 0.21; IV = 0.51; V = 0.70; VI = 0.70; VII = 0.59; VIII = 0.51; IX = 0.54; X = 0.43; XI = 0.51.

Thorax. Prothorax 1.25 times longer than wide. Pronotum coarsely, abundantly punctate except on smooth central gibbosity and most laterobasal gibbosities; with yellowish-white pubescence, sparser centrally and sides of basal half; with long, erect, moderately abundant yellowish-white setae. Sides of prothorax with punctures as on pronotum, except area close to distal margin with sparse punctures and somewhat striate (this area widened toward ventral side); with grayish-white pubescence partially obscuring integument on coarsely punctate area, almost glabrous on area close to distal margin. Prosternum coarsely, abundantly punctate on basal 2/3, less punctate on distal third (finely, transversely striate toward distal margin); with grayish-white pubescence partially obscuring integument on basal 2/3 (interspersed, with long, sparse setae), distal third less pubescent. Ventral side of thorax with grayishwhite pubescence, partially obscuring integument (less so on central area of metasternum), interspersed with long, erect, sparse setae; metepisternum and sides of metasternum moderately coarsely, sparsely punctate. Scutellum with dense grayish-white pubescence. Elytra. Coarsely, abundantly punctate (distinctly denser on distal quarter); with short, decumbent, sparse, grayish-white setae, denser along suture after basal third and entire distal quarter; with long, erect, moderately abundant setae on basal third, setae sparser toward midlength. Legs. Femora with yellowish-white pubescence distinctly not obscuring integument, interspersed with long, erect, sparse setae. Tibiae with long, erect dark setae throughout (longer than on femora).

Abdomen. Ventrites with grayish-white pubescence, partially obscuring integument, interspersed with long, erect, sparse setae.

Dimensions (holotype female). Total length, 6.55; prothorax: length, 1.35; anterior width, 0.95; posterior width, 0.85; widest width, 1.10; humeral width, 1.15; elytral length, 3.30.

Type material. Holotype female from ARGENTINA, Jujuy: Jujuy (17 km S Arroyo Pte. de Avelos; -24.3102 / -65.2568; 1228 m), 27.X-14.XI.2003, M.E. Irwin & F.D. Parker col. (FSCA).

Etymology. This new species is named for Frank Parker, one of the collectors of the holotype.

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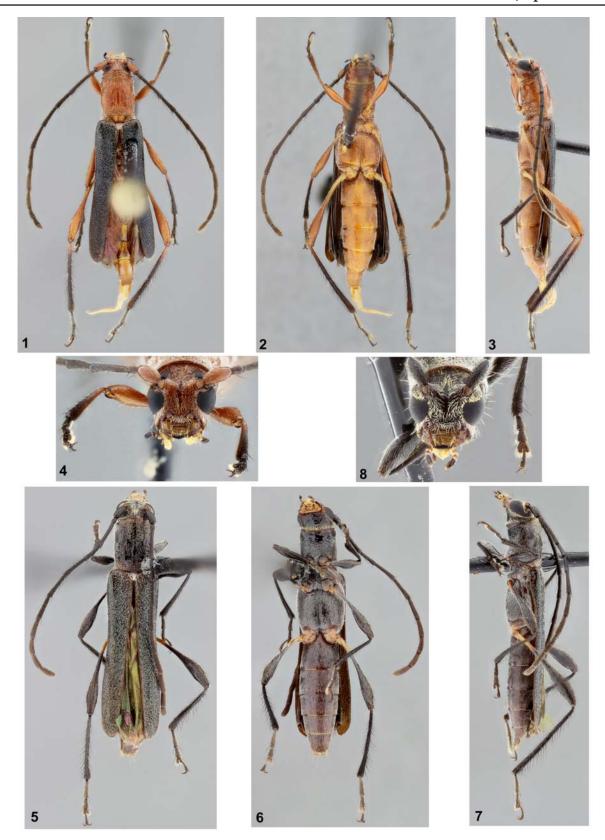
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Figures 1–8. Rhopalessa irwini sp. nov. **1–4)** Holotype female. **1)** Dorsal habitus. **2)** Ventral habitus. **3)** Lateral habitus. **4)** Head, frontal view. **5–8)** Paratype female. **5)** Dorsal habitus. **6)** Ventral habitus. **7)** Lateral habitus. **8)** Head, frontal view.



Figures 9–12. Rhinion parkeri sp. nov., holotype female. **9)** Dorsal habitus. **10)** Ventral habitus. **11)** Lateral habitus. **12)** Head, frontal view.