Resurrection of the Chilean elaterid genus *Mecothorax* Solier, 1851  
(Coleoptera: Elateridae: Pomachiliini)

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Abstract. The resurrection of the Chilean genus *Mecothorax* Solier 1851, type species: *M. castanipennis* Solier 1851 (by original monotypy) with 15 included species is here redescribed, illustrated and mapped: *Mecothorax castanipennis* Solier 1851, *vulgatis* (Solier 1851) comb. nov., *anticura* sp. nov., *calafquen* sp. nov., *carmenjulias* sp. nov., dhuatao sp. nov., girardai sp. nov., *lanin* sp. nov., *maipoensis* sp. nov., *maturanai* sp. nov., *pichinahuels* sp. nov., *pucatrihue* sp. nov., *valdiviensis* sp. nov., *valparaisensis* sp. nov., and *villarricenses* sp. nov. *Mecothorax* belongs to the subfamily Elaterinae and tribe Pomachiliini.


Key Words: *Mecothorax*, *Deromecus*, Pomachiliini, Elaterinae, Elateridae, click-beetles, Chile.

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INTRODUCTION

The French entomologist Antoine Solier (1851) described the genus *Mecothorax* for one species *M. castanipennis*. In 1860, the Belgian Ernst Candéze, in his *Monographie des Élatéridés, sus-tribu Pomachilitées*, placed *Mecothorax* Solier in synonymy with *Deromecus* Solier 1851 creating the new combination *Deromecus castaneipennis*, in which Candéze misspelled the original species name. Later, William Bartlett-Calvert (1898) and the French Edmond Fleutiaux (1907), in their respective revisions of the Chilean Elateridae, also considered the species *castanipennis* (Solier 1851) in *Deromecus*. My studies of the species of *Deromecus* (Solier 1851) revealed that a resurrection of *Mecothorax* is needed because *castanipennis* lacks the generic characters of *Deromecus*.

*Mecothorax* belongs to the subfamily Elaterinae because of the following characters: mesocoxa open to mesepimeron and metaepisternum; antenna serrate; prosternal process longer than procoxal diameter, hind wing with short radial cell; vein MP₄ with apparent cross vein to CuA₂, wedge cell present, tarsal claws without basal setae on outer portion flat (Calder 1996) and articulation of prothoracic sternite around procoxae acute, directed outward, marginate hypomeron (Gur'jeva 1974); and to the tribe Pomachiliini: head distinctly downwards; frontal carina complete across front of frons, antennomere 2 and 3 conic, and remaining ones serrate; pronotum longer than wider; prosternal suture appearing double; prosternal process equal or longer than procoxal diameter; tarsomere 4 smaller than tarsomere
5; hind wing with radial cell present, vein MP₄ + CuA₁ almost always with a cross vein to CuA₂ and wedge cell present (Platia 1994).

Mecothorax differs from Deromecus by the following generic characters: body not parallel-sided; flat and not protruding frontoclypeal carina; clypeus broadly intercepted by frontoclypeal carina; bursa copulatrix with strong alternate spines fan shape; wing venation lacks patch over rp₁; two colleterial glands before bursa (Figs. 18a and 18b), whereas the genus Deromecus presents: body parallel-sided; protruding frontoclypeal carina; clypeus not intercepted by frontoclypeal carina; enlargement before bursa, bursa with fan shape alternate spines smooth; wing venation with patch over rp₁.

The recently reviewed genera Alyma (2004), Lynnyella (2001) and Gabryella (2001) are also members of the tribe Pomachilini.

I am resurrecting and redescriving the genus Mecothorax with the following species: castanipennis (Candeze 1851), vulgaris (Solier 1851) comb. nov., anticaura sp. nov., calafiaquin sp. nov., carmenjuliae sp. nov., duahatao sp. nov., girardai sp. nov., lanin sp. nov., maipoensis sp. nov., maturanai sp. nov., pichinhuem sp. nov., pucatrihue sp. nov., valdiviensis sp. nov., valparaisensis sp. nov., and villarricansis sp. nov.

MATERIALS AND METHODS

Repositories. Museums and institutions that contributed to this work are indicated in the acknowledgements and, in the text, by the acronyms in brackets (Arnett et al. 1997). The coden [ETAJ] refers to author’s reference collection. Type specimen repositories are also indicated in descriptions.

Etymology. Some of the species are named using places derived from the Mapudungun language (mapu means earth and dungen means to speak) (also Mapudungu, Araucano, Araukano, Mapuche, Araucanian), spoken in central Chile and west central Argentina by the Mapuche (mapu is earth and che means people) people (http://www.answers.com/topic/mapudungun).


Measurements. Measurements were made with a calibrated ocular micrometer as follows: total body length (mm) from the frontal margin to apex of elytra and elytral width, and it is measured from dorsal view including the head; the maximum width of the elytra, when both sides are in focus. Pronotal elytral index (PEI) is obtained by dividing the length of the pronotum by the length of the elytra (Calder 1996) and is used here because it gives a general idea in how big the pronotum is compared with the elytra. The pronotal index (PI), is obtained by dividing the length of the pronotum by its width. Antennomere proportion (AP) is the length of antennomeres 2 through 11 in hundrthes of the total antennal length. This is not measured for antennomere 1 because it is curved and hard to measure. Tarsomere proportion (TP), gives the length of the tarsomeres in hundreds of the total tarsal length.

Specimens from which the genitalia were to be removed were first relaxed overnight in warm water with a few drops of soap added. For examination of male genitalia, the last abdominal segment was removed and placed in water with a few drops of soap in a Petri dish and left over night. Male genitalia were then removed, glued to a card with balsam, and placed on the pin under the specimen. Examination of female genitalia followed Becker (1958). Female genitalia were placed in a vial with glycerin.
Drawings were made using a camera lucida on a dissecting scope Leica MZ7. Photos were taken with a Microscopic System Digital Images Camera. All dates in the records given were converted to a standard format of day.month.year, with the month given in Roman numerals. Places and names in the recorded labels are the original spellings.

**Taxonomy**

*Mecothorax* Solier 1851 rev.

*Mecothorax* Solier 1851:22–23, Candèze 1860:8 (treated as synonym of *Deromecus*); Bartlett-Calvert 1898:809, 811 (synonym of *Deromecus*); Fleutiaux 1907:190, 197 (synonym of *Deromecus*); Blackwelder 1957:1407 (synonym of *Deromecus*).

Type species: *Mecothorax castannipennis* Solier 1851 (by monotypy). Gender masculine.

*Description.* Body: elongate; brown; integument dull, or semi-shiny; length 10.22–13.75 mm, width 2.07–3.53 mm. Head: punctate; vestiture yellowish or gold decumbent, sparse or dense; frontoclypeal region generally sloping to base ofclypeus or extending forward, in some species not visible from above. Eyes medium size, slightly protruding, [EI: 0.30–0.42]; clypeus vertical divided broadly by frontoclypeal carina; labrum fully exposed, rounded in shape, widest part near base; antenna 11-segmented, with moderate vestiture, antennomere 2 and 3 longer than wider, antennomeres 4 through 10 serrate, antennomere 11 serrate (Fig. 17d), oval (17a, 17b) or tubular (17c); mandibles bidentate, maxillary and labial palps with apical segments secerniform; antennal groove simple or excavate, carinate anteriorly on pronotal hypomeron side and/or prosternal side. Prothorax: sub-cylindrical, convex usually anteriorly, subquadrate or elongate; narrowed anteriorly to receive head; lateral margins entirely carinate, inclined mesodorsally; lateral carina gradually ventrally; pronotal punctures areolate, punctulate or puncticulate; pronotal basal area strongly declivous to pre-scutum; pronotal basal margin curved or straight; prescutum notch V-shaped; pronotal posterior angles long, acute, uniarinate, divergent; prothorax trapezoidal, convex, longer than wide; prosternal lobe curved, bent or slightly bent; prosternal suture appearing double, curved at procoxal margin; articulation of prothoracic sternite around procoxae acute, directed outward, marginate pronotal hypomeron areolate; prosternal process (spine) longer than procoxae diameter, and following procoxae. procoxae globular, marginate. Scutellum: U-shaped, tongue-shaped or triangular; not notched at anterior margin; mesosternal cavity deep, with cavity sides (also called cavity walls) elevated at mesocoxal region; posterior margin of mesosternal cavity extending in distance posteriorly a short distance; mesocoxae longer than wide; mesocoxal cavity open to mesepimeron and mesepisternum; mesosternum and metasternum separated by distinct external suture. Elytra: striate, stria with punctures tear-shaped or pits, in some species pits surrounded by a darker coloration, elytral apex excavate or with teeth; metathoracic wings present, rp₁ and rp₂ plates, r cell 5.1× as long as wide, MP₂ joints MP₄ + CuA₂, and basal area bifurcate, wedge cell present, light sclerotization in radial field under ScP (Fig. 17e). Metathoracic coxal plate widest region closest to medial bodyline rather than to abdominal lateral side; vestiture semi-decumbent or semi-erect. Leg: femur globate; tarsomeres 1 through 4 decreasing in length distally, tarsomere 4 smaller than tarsomere 5, oblique dorsoventrally or conic. Abdomen: punctate; last abdominal
ventrite angulate. Genitalia. Female: 2.82 mm wide; bursa diameter 1.04 mm; vagina without sclerotized internal structures, enlarged softly towards apex; two colletorial glands before bursa; bursa copulatrix globular, with two sclerotized fan shaped structures with spines alternating between long and short and another long sclerotized structure dorsal; spermatheca consist of one non-sclerotized spiral structure attached to bursa; spermatheca gland at end of bursa (Figs. 18a, 18b).

Distribution. V-X Region, Chile and Southern Argentina (Fig. 77).

Biology. Adult specimens have been collected from November through January (Spring and Summer seasons in the Southern Hemisphere).

Remarks. Mecothorax can be recognized by its elongate body, frontal clypeal carina not protruding and broadly intercepted by clypeus, prosternal cavity walls elevated; wing pattern presents: rp1 and rp2 plates only, MP3 joints MP4 + CuA2, and basal area bifurcate (Fig. 17c). Female genitalia with 2 colletorial glands elongate, before bursa (Fig. 18a, 18b). The species that belongs to this genus do not present a distinctive sexual dimorphism; animals need to be dissected to be identified accurately to species level.

KEY TO THE SPECIES OF MECOTHORAX SOLIER

1. Scutellum triangular (Figs. 3, 4, 6, 12, 14)........................................................................2
1'. Scutellum not triangular ......................................................................................................................6
2. Antennomere 11 serrate (Figs. 17d, 22, 24). ......................................................................................3
2'. Antennomere 11 oval (Figs. 17a, 17b, 21, 30, 32). .................................................................4
3. Elytral apex excavate (Fig. 4) ..............................................................................................................carmenfuliae sp. nov.
3'. Elytral apex with 2 teeth (Fig. 6) ......................................................................................................girardtai sp. nov.
4. Legs same color from elytra (Figs. 4, 12) .........................................................................................5
4'. Legs different color from elytra (Fig. 14) ....................................................................................villaricensis sp. nov.
5. Posterior half of pronotal surface with a longitudinal depression as a line (Fig. 3) .......................................................................................................................... . calafquen sp. nov.
5'. Pronotal surface lacks depression as a line (Fig. 12). ...............................................................valdiviensis sp. nov.
6. Scutellum U-shaped (Figs. 1, 2, 5, 7, 15) .......................................................................................7
6'. Scutellum tongue-shaped (Figs. 8, 9,10, 11, 13) .............................................................................11
7. Prosternal suture appearing double with a short apical carina (Figs. 34, 35) ................................8
7'. Prosternal suture appearing double without a short apical carina (Figs. 38, 40, 48) ..................9
8. Pronotal sides bisinuate (Fig. 1). ......................................................................................................castannipennis Solier
8'. Pronotal sides parallel (Fig. 2). ......................................................................................................anticura sp. nov.
9. Antennal groove simple (Fig. 38). ......................................................................................................duhatao sp. nov.
9'. Antennal groove excavate to accommodate first antennomere (Figs. 40, 48). .........................10
10. Elytral pits surrounded by a darker coloration (Fig. 7) ..............................................................lanin sp. nov.
10'. Elytral pits lacks a surrounding dark coloration (Fig. 15). ..........................................................vulgaris Solier
11. Antennomere 2 longer than antennomere 3 (Fig. 26) .................................................................maipoensis sp. nov.
11'. Antennomere 2nd shorter than 3rd (Figs. 27, also 28, 29, 31) ....................................................12
12. Elytral humeri border angulate .................................................................................................pichinahuel sp. nov.
12'. Elytral humeri border curved ....................................................................................................13
13. Pronotal ratio longer than 1.5 .........................................................................................................pucatrihue sp. nov.
13'. Pronotal ratio less than 1.5 ...........................................................................................................14
14. Elytra humeri same color as rest of elytra (Fig. 9) ......................................................................maturanai sp. nov.
14'. Elytra humeri area orange (Fig. 13) .........................................................................................valparaisensis sp. nov.
Clave para las especies del género *Mecothorax* Solier

1. Escutelo triangular (Figs. 3, 4, 6, 12, 14) ........................................ 2
1'. Escutelo de otra forma ................................................................. 6
2. Antenito 11 aserrado (Figs. 17d, 22, 24) ........................................ 3
2'. Antenito 11 ovalado (Figs. 21, 30, 32) ........................................... 4
3. Apice elitral excavado (Fig. 4) ...................................................... carmenjuliae sp. nov.
3'. Apice elitral con 2 dientes (Fig. 6) ................................................... girardai n. sp.
4. Patas del mismo color de los elitros (Figs. 4, 12) .............................. 5
4'. Patas de color diferente a los elitros (Fig. 14) .................................. villarriicensis n. sp.
5. Superficie pronotal con una depresión en forma de línea (Fig. 3) ............ calafquen n. sp.
5'. Superficie pronotal lisa, sin una depresión en forma de línea (Fig. 12) ....... valdiviensis n. sp.
6. Escutelo de lados paralelos o siguiendo la forma de letra U (Figs. 1, 2, 5, 7, 15) ................................................................. 7
6'. Escutelo con forma de lengua, lados estrechados medianamente (Figs. 8, 9, 10, 11, 13) ................................................................. 11
7. Sutura prosternal doble con una carena corta apical (Figs. 34, 35) .............. 8
7'. Sutura prosternal doble sin una carena corta apical (Figs. 38, 40, 48) ........ 9
8. Pronoto de lados sinuados (Fig. 1) .................................................. castanipennis Solier
8'. Pronoto de lados paralelos (Fig. 2) ................................................ anticura n. sp.
9. Apice humeral simple (Fig. 38) ...................................................... duhatao n. sp.
9'. Apice humeral excavado para acomodar los primeros antenitos (Figs. 40, 48) ................................................................. 10
10. Hoyuelos elitrales rodeados de una coloración más oscura que los mismos (Fig. 7) ................................................................. lanin n. sp.
10'. Hoyuelos elitrales no se hallan rodeados de una coloración más oscura (Fig. 15) ................................................................. vulgaris Solier
11. Antenito 2 más largo que el antenito 3 (Fig. 26) ................................ maitpoensis n. sp.
11'. Antenito 2 más corto que el antenito 3 (Figs. 27, también 28, 29, 31) .... 12
12. Borde humeral del elitro angulado ................................................ pichinahuel n. sp.
12'. Borde humeral del elitro redondeado ........................................... 13
13. Proporción pronotal mayor que 1.5 ................................................. pucatruhue n. sp.
13'. Proporción pronotal menor que 1.5 ................................................. 14
14. Región humeral del elitro del mismo color que el resto del mismo (Fig. 9) ................................................................. maturanai n. sp.
14'. Región humeral del elitro de color anaranjado (Fig. 13) . valparaisensis n. sp.

*Mecothorax castanipennis* Solier, 1851

(Figs. 1, 19, 34, 49)

*Mecothorax castanipennis* Solier 1851:22-23.

Deromecus castanipennis; Candèze 1860:8,10 (spelling error).


*Description.* Body: reddish brown; integument shiny; vestiture gold, rare, erect; length 12.21 mm, head 0.53 mm, width 3.38 mm; [PEI: 3.0] (Fig. 1). Head: frontoclypeal carina region sloping down; labrum convex, 2.23× as long as wide;
Figures 1–12. Photos of Mecothorax spp.: Fig. 1. M. castanipennis Solier, Fig. 2. M. anticura sp. nov., Fig. 3. M. calafquen sp. nov., Fig. 4. M. carmenjuliae sp. nov., Fig. 5. M. duhatao sp. nov., Fig. 6. M. girardai sp. nov., Fig. 7. M. lanin sp. nov., Fig. 8. M. maipoensis sp. nov., Fig. 9. M. maturanai sp. nov., Fig. 10. M. pichinahuel sp. nov., Fig. 11. M. pacatruhue sp. nov., Fig. 12. M. valdiviensis sp. nov.
antenna yellowish red, antennomere 10 reaching apex of posterior angles, [AP: 5.28-5.72-9.69-14.63-11.89-10.13-11.01-10.57-9.69-11.4]; [PI: 1.26] (Fig. 19). Prothorax: convex anteriorly; reddish; vestiture very rare; puncticulate, punctures separated by 2× their own diameter; longitudinal impression as a line over posterior half; sides bisinuate; prosternal lobe bent; pronotal hypomeron rugulose, antennal groove excavate, short carina at middle, carinate on pronotal side (Fig. 34); procoxae separated by 0.7× procoxal diameter; prosternal process 1.4× procoxal diameter; [PI: 1.26]. Scutellum: U-shaped; dark brown; mesocoxae separated by 0.4× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.3× mesocoxal diameter. Elytra: humeri border curved, carinate with vestiture erect, gold; striate, stria soft, light reddish brown; punctate, punctures soft, separated by 1 diameter or less; apex excavate. Leg: vestiture light yellowish brown; reddish except tarsomeres black, [TP: 19.5-10.97-19.5-13.45-36.58] (Fig. 49).

Lectotype (here designated): female, length 12.21 mm, mounted on white card, Chile. [MNHN]. Biology. The only record for this species is the type. There is no other information on the biology of this species.

Distribution. CHILE. Description indicates only se encuentra en la republica [found in the republic]. Golbach (1994) mentioned this species from Argentina.

Remarks. This species can be recognized by its lustrous reddish brown puncticulate pronotum with rare vestiture, light reddish brown softly punctate elytra, and black tarsomeres.

*Mecothurax anticura* sp. nov.
(Figs. 2, 20, 35, 50, 64, 77)

Description. Body: reddish brown; integument lustrous; vestiture yellowish, thick, decumbent; length 12.83 mm, width 3.0 mm, [PEI: 3.28]; (Fig. 2).

Head: frontoclypeal carina region extending forward; labrum slightly convex, 2.18× as long as wide; antenna yellowish, antennomere 11 tubular (Fig. 17c), antennomere 9 reaching posterior angles [AP: 5.13-5.6-10.3-10.96-12.5-13.1-11.5-12.5-9.6] (Fig. 20). Prothorax: convex anteriorly; dark brown; vestiture arranged in a distinctive pattern of from middle body line sideways, long and dense; puncticulate, punctures separated by 2× of their own diameter; longitudinal impression thin over posterior half; parallel-sided; base straight; prosternal lobe bent; prosternal suture bisinuate; pronotal hypomeron rugulose; antennal groove simple, short carina medially at prosternal suture (Fig. 35); procoxal distance 0.78× procoxal diameter; [PI: 1.28]. Scutellum: triangular; vestiture rare, long, erect, semidecumbent, yellow; mesocoxae separated by 0.78× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.78× mesocoxal diameter. Elytra: brown; humeri orange, border curved, carinate; interstriae areolate, slightly convex; striae with pits, pits separated by 1 or 2× of their own diameter; elytral apex excavate. Leg: yellowish brown, [TP: 26-18-14-9-33] (Fig. 50). Male genitalia. Aedeagus 2.99× as long as wide; spoon shaped; median lobe sides bisinuate (Fig. 64) and parameres not reaching apex of median lobe.


Distribution. CHILE, X Region (Fig. 77).
Figures 13–18.  Fig. 13. *M. valparaisensis* sp. nov., Fig. 14. *M. villarricensis* sp. nov., Fig. 15. *M. vulgaris* (Solier) comb. nov.; Fig. 16. *Meco thorax girardai* sp. nov., dorsal habitus; Fig. 17. distal (11th) antennomere shape: Fig. 17a, b. oval, Fig. 17c. tubular, Fig. 17d. serrate; Fig. 17e. Wing venation of *Meco thorax girardai* n. sp.; Figs. 18a, b. Female genitalia of *Meco thorax* sp. Fig. 18a. drawing of a dorsal view, Fig. 18b. photograph of dorsal view, (scale bars = 0.5 mm). (Figs. 16, 18b by N. V. Arias T.)
Figures 19–33. Antenna of *Mecothorax* spp.: Fig. 19. *M. castanipennis* Solier, Fig. 20. *M. anticura* sp. nov., Fig. 21. *M. calafques* sp. nov., Fig. 22. *M. carmenulite* sp. nov., Fig. 23. *M. duhatao* sp. nov., Fig. 24. *M. girardai* sp. nov., Fig. 25. *M. lanin* sp. nov., Fig. 26. *M. maipoensis* sp. nov., Fig. 27. *M. maturanai* sp. nov., Fig. 28. *M. pichinahuel* sp. nov., Fig. 29. *M. pucatrihue* sp. nov., Fig. 30. *M. valdiviensis* sp. nov., Fig. 31. *M. valparaisensis* sp. nov., Fig. 32. *M. villarricensis* sp. nov., Fig. 33. *M. vulgaris* (Solier) (scale bars = 0.5 mm).

**Etymology.** This species is named *anticura* from the Mapudungun word, which means *stone of sun*.

**Remarks.** This species can be recognized by its lustrous brown pronotum with distinctive thick vestiture pattern; frontoclypeal region extending forward; orange elytral humeri, and short carina on apex of prosternal double suture.

*Mecothorax calafques* sp. nov.
(Figs. 3, 21, 36, 51, 65, 77)

**Description.** Body: reddish brown, integument semi-dull; vestiture yellowish, very thick, dense, semi-decumbent; length 12.7 mm, width 2.8 mm; [PEI: 3.64]; (Fig. 3).

Head: brown dark; frontoclypeal carina region sloping down; labrum slightly convex, 2.18× as long as wide; antenna same color as body, antennomere 11 oval, antennomere 8 reaching posterior angles, [AP: 6.11-6.11-11.78-11.40-11.78-10.64-10.26-10.64-9.88-11.40] (Fig. 21). Prothorax: convex anteriorly, subquadrate; vestiture thick, with a distinctive pattern from middle line sideways; punctate, punctures separated by 1 or 2× of their own diameters; longitudinal impression thin
Figures 34-48. Pronotal hypomeron of Mecothorax spp.: Fig. 34. *M. castanipennis* Solier, Fig. 35. *M. anticura* sp. nov., Fig. 36. *M. calafquen* sp. nov., Fig. 37. *M. carmenjuliae* sp. nov., Fig. 38. *M. duhatao* sp. nov., Fig. 39. *M. girardai* sp. nov., Fig. 40. *M. lanin* sp. nov., Fig. 41. *M. malpoensis* sp. nov., Fig. 42. *M. maturanai* sp. nov., Fig. 43. *M. pichinahuel* sp. nov., Fig. 44. *M. pucatihue* sp. nov., Fig. 45. *M. valdiviensis* sp. nov., Fig. 46. *M. valparaisensis* sp. nov., Fig. 47. *M. villarricensis* sp. nov., Fig. 48. *M. vulgaris* (Solier) (scale bars = 0.5 mm).

Over posterior half; parallel-sided; base curved; prosternal lobe bent; prosternal suture bisinuate, carinate on prosternal side; pronotal hypomeron rugulose, antennal groove simple, pronotal hypomeron apex bent (Fig. 36); procoxal distance 0.58× procoxal diameter; prosternal process length after procoxae 1.66× procoxal diameter; [PI: 1.19]. Scutellum: tongue-shaped; vestiture thin, sparse, semi-decumbent, long, yellow; mesocoxae separated by 0.50× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.35× mesocoxal diameter. Elytra: humeri border curved, carinate; interstria rugulose, slightly convex; striae with pits, pits deep, separated by 1× their own diameter, elytral apex excavate. Leg: color same as body, [TP: 32-20-15.2-7.2-25.6] (Fig. 51). Male genitalia. Aedeagus 3.13× as long as wide, median lobe
Figures 49–63. Tarsomeres of *Mecothorax* spp.: Fig. 49. *M. castanipennis* Solier, Fig. 50. *M. anticura* sp. nov., Fig. 51. *M. calafquen* sp. nov., Fig. 52. *M. carmenjuliae* sp. nov., Fig. 53. *M. duhatao* sp. nov., Fig. 54. *M. girardai* sp. nov., Fig. 55. *M. lanin* sp. nov., Fig. 56. *M. maipoensis* sp. nov., Fig. 57. *M. maturanai* sp. nov., Fig. 58. *M. pichinahuel* sp. nov., Fig. 59. *M. pucatrihue* sp. nov., Fig. 60. *M. valdiviensis* sp. nov., Fig. 61. *M. valparaisensis* sp. nov., Fig. 62. *M. villarricensis* sp. nov., Fig. 63. *M. vulgaris* (Solier). (scale bars = 0.5 mm).

anteriorly parallel-sided, apex curved anteriorly, slightly incised medially (Fig. 65) and parameres not reaching apex of median lobe.

Figures 64–76. Male genitalia of Mecothorax spp.: Fig. 64. M. anticura sp. nov., Fig. 65. M. calafquen sp. nov., Fig. 66. M. carmenjuliae sp. nov., Fig. 67. M. duhaitao sp. nov., Fig. 68. M. girardai sp. nov., Fig. 69. M. lanin sp. nov., Fig. 70. M. maipoensis sp. nov., Fig. 71. M. maturanai sp. nov., Fig. 72. M. pichinahuel sp. nov., Fig. 73. M. pucatrihue sp. nov., Fig. 74. M. valdviensis sp. nov., Fig. 75. M. valparaisensis sp. nov., Fig. 76. M. villarricensis sp. nov. (scale bars = 0.5 mm).
Figure 77. Map of Chile, indicating regions V through X, and Argentina, with distribution of Mecothorax species: M. antica sp. nov. ♀, M. calafquen sp. nov. ♂, M. carmenjuliae sp. nov. ♀, M. duhatao sp. nov. A, M. girardai sp. nov. ♦, M. lanin sp. nov. ♀, M. maipoensis sp. nov. ♀, M. maturana sp. nov. ♀, M. pichinahuel sp. nov. □, M. pucatrhuve sp. nov. ♀, M. valdiviensis sp. nov. ♀, M. valparaisensis sp. nov. ♀, M. villarricenesis sp. nov. ♀.

Distribution. CHILE, X Region (Fig. 77).

Etymology. This species is named after the place Calafquen where it was collected. Calafquen is from the Mapudungun word, which means another lake.

Remarks. This species can be recognized by its subquadrate pronotum, distinctive pattern thick vestiture, and oval antennomere 11.

Mecothorax carmenjuliae sp. nov.
(Figs. 4, 22, 37, 52, 66, 77)

Description. Body: brown; integument dull; vestiture yellowish, thin, short, decumbent; length 12.09 mm, width 3.07 mm (Fig. 4), [PEI: 2.94].
Head: frontoclypeal carina region not sloping downward; labrum slightly convex, 1.30× as long as wide; antenna yellowish, antennomere 9 reaching posterior angles, [AP: 6.79-5.82-12.13-10.67-10.67-10.19-11.16-11.16-9.70- 11.71] (Fig. 22). Prothorax: convex anteriorly; punctate, punctures separated by I X their own diameter; longitudinal impression shallow over posterior half; sides bininate; base curved; pro-

sternal lobe slightly bent; prosternal suture bininate; pronotal hypomeron rugulose, antennal groove excavate, carinate on pronotal hypomeron side and prosternal side (Fig. 37); procoxal distance 0.78× procoxal diameter; [PI: 1.32]. Scutellum: triangular, darker than elytra; vestiture rare, semi-decumbent, long, yellow; mesocoxae separated by 0.42× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.41× mesocoxal diameter. Elytra: humeri border curved, carinate, orange; interstria rugulose, slightly convex; striae with pits, pits deep, surrounded by a dark coloration, separated by less than 1 diameter; elytral apex excavate. Leg: yellowish, tarsomere 1 through 4 with setae arranged as comb apically [TP: 34.95-15.44- 12.19-8.94-28.48] (Fig. 52). Male genitalia. Aedeagus 2.85× as long as wide; median lobe elongate, apex triangular, parallel-sided anteriorly, widened at base (Fig. 66).


Distribution. CHILE, VIII Region (Fig. 77).

Etymology. The name of this species honors Carmen Julia Villegas de Papic, a great woman, who loved me as a mother.

Remarks. This species can be recognized by its frontoclypeal carina region not sloping downward; thin decumbent yellowish vestiture; and male genitalia with median lobe of aedeagus with triangular apex and anteriorly parallel-sided.

Mecothorax duhatao sp. nov.
(Figs. 5, 23, 38, 53, 67, 77)

Description. Body: brown; integument lustrous; vestiture yellowish, thin, short, semi-decumbent; length 11.44 mm, width 2.33 mm, [PEI: 3.28] (Fig. 5).

Head: frontoclypeal carina region extending forward; labrum slightly convex, 2.0× as long as wide; antenna yellowish, antennomere 11 oval, antennomere 8 reaching posterior angles, [AP: 5.66-6.07-10.94-11.32-12.07-10.56-10.94- 10.56-10.56-11.32] (Fig. 23). Prothorax: convex anteriorly; reddish brown; puncticulate; longitudinal thin impression over posterior half; sides bininate; base curved; vestiture in a distinctive pattern from middle body line sideways; prosternal lobe bent; prosternal suture bininate; hypomeron rugulose; antennal groove simple (Fig. 38); procoxal distance 0.9× procoxal diameter; [PI: 1.52]. Scutellum: U-shaped; vestiture short, erect; mesocoxae separated by 0.44× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.27× mesocoxal diameter. Elytra: brown; longitudinal band shiny dark brown over most of the elytra; humeri border curved, carinate; humeri orange; interstria rugulose, slightly convex; striae with pits; pits soft with a surrounded darker area; elytral apex excavate. Leg: yellowish, [TP: 30.55-22.90-14.50-7.63-24.42] (Fig. 53). Male genitalia. Aedeagus 3.38× as long as wide; median lobe spoon shaped; (Fig. 67). Holotype: male, 11.44 mm in length. Chile. Duhatao. 16.I.1982. L. E. Peña. [ETA]; Paratype (n = 1) male, Chile, Duhatao. 16.I.1982. L. E. Peña. [SRC].

Distribution. CHILE, X Region Distribution. CHILE, X Region (Fig. 77).
Etymology. This species is named after the place *Duhatao* where it was collected. Duhatao is from the Mapudungun word that means *place of memories*.

Remarks. This species can be recognized by its lustrous integument, frontoclypeal region extending forward, and a shiny band on elytra.

*Meco thorax girardai* sp. nov.
(Figs. 6, 16, 24, 39, 54, 68, 77)

Description. Body: reddish brown; integument dull; vestiture yellowish, thin, dense, semi-decumbent and semi-erect; length 12.44 mm, width 2.84 mm, [PEI: 3.37] (Figs. 6, 16). Head: frontoclypeal carina region sloping downward; labrum slightly convex, 2.35× as long as wide; antenna yellowish, antennomeres 4 though 10 serrate, antennomere 8 reaching posterior angles, [AP: 5.26-5.26-10.91-9.60-10.04-9.6-13.1-10.91-11.79-13.53] (Fig. 24). Prothorax: convex; areolate, parallel-sided; longitudinal thin impression over posterior half; base curved; prosternal lobe strongly bent, curved; prosternal suture bisinuate; prosternum with short carina, parallel to prosternal double suture; pronotal hypomeron rugulose, antennal groove excavate, carinate on pronotal hypomeron side (Fig. 39); procoxal distance 0.72× procoxal diameter; prosternal process 2.2× procoxal diameter; [PI: 1.15]. Scutellum: triangular; black; vestiture semi-erect, long; mesocoxae separated by 0.60× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.9× mesocoxal diameter. Elytra: humeri border angulate, carinate; interstria rugulose, slightly convex; striae punctate; punctures separated by 1 diameter; elytral apex excavate. Leg: yellowish; [TP: 31.19-21.52- 13.19-9.72-23.61] (Fig. 54). Male genitalia. Aedeagus 4.16× as long as wide; median lobe parallel-sided, curved anteriorly (Fig. 68).


Distribution. CHILE, IX Region (Fig. 27).

Etymology. The name of this species honors Claude Girard for his dedication to Elateridae beetles.

*Meco thorax lanin* sp. nov.
(Figs. 7, 25, 40, 55, 69, 77)

Description. Body: brown; integument semi-shiny; vestiture yellowish, thick, dense, semi-decumbent; length 10.22 mm, width 2.46 mm. [PEI: 3.03] (Fig. 7). Head: frontoclypeal carina region sloping downward; labrum slightly convex, 11.97× as long as wide; antenna yellow, antennomere 8 reaching posterior angles, [AP: 6.95-5.94-9.90-9.40-11.88-11.88-10.39-10.89] (Fig. 25). Prothorax: convex anteriorly; punctate, punctures separated by 1 or 2× of their own diameter; longitudinal impression broad over posterior half; parallel-sided; base straight; prosternal lobe bent; prosternal suture bisinuate; pronotal hypomeron rugulose, antennal groove excavate, carinate anteriorly on pronotal hypomeron and prosternal side, carina short, curved anteriorly; (Fig. 40); prosternal process 0.64× procoxal diameter; [PI: 1.23]. Scutellum: U-shaped; vestiture yellow, long, semi-decumbent; mesocoxae separated by 0.42× mesocoxal diameter; posterior margin of mesosternal cavity
extending posteriorly 0.21 × mesocoxal diameter. Elytra: humeri border curved, carinate; interstria rugulose, slightly convex; striae punctate, punctures soft; elytral apex excavate. Leg: color same as body; vestiture highly dense, decumbent; [TP: 32.70-21.56-13.72-9.80-22.22] (Fig. 55). Male genitalia. Aedeagus 3.1 × as long as wide, medial lobe notched anteriorly (Fig. 69). Holotype: male, 10.22 mm in length. Neuquén, Parque Nacional Lanín. X.1970. Col. Schajovskoi [Argentina]. [IMLA]. Paratype: male, Neuquén, Parque Nacional Lanín. X.1970. Col. Schajovskoi [Argentina]. [IMLA].

**Distribution.** Southern ARGENTINA (Fig. 77).

**Etymology.** This species is named after the place Lanín where it was collected.

**Remarks.** This species can be recognized by its brown semi-shiny integument, parallel-sided pronotum with a longitudinal impression broad over posterior half; and male genitalia aedeagus with notched medial lobe.

*Mecothorax maipoensis* sp. nov.

(Figs. 8, 26, 41, 56, 70, 77)

**Description.** Body: reddish brown; integument dull; vestiture yellowish, thin, semi-decumbent; length 11.84 mm, head 0.46 mm, width 3.23 mm, [PEI: 3.23] (Fig. 8). Head: convex; frontoclypeal carina region sloping downward; labrum convex, 2.33 × as long as wide; antennae same color as body, antennomere 10 reaching posterior angles, [AP: 6.64-6.25-10.09-10.09-11.71-10.54-10.54-10.15-10.09-11.71] (Fig. 26). Prothorax: convex anteriorly; areolate and punctate, punctures separated by 1 or 2 × their own diameter, sides bisinuate; base curved; prosternal lobe bent; prosternal suture appearing double straight; pronotal hypomeron rugulose, antennal groove excavate, carinate on prosternal side (Fig. 41); procoxal distance 1.13 × procoxal diameter; prosternal process 3.5 × procoxal diameter; [PI: 1.2]. Scutellum: tongue-shaped; dark brown; vestiture dense, semi-decumbent, yellow; mesocoxae separated by 0.46 × mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.34 × mesoscutal diameter. Elytra: humeri border curved, carinate; interstria rugulose; striae with pits, first pit of striae I through IV deeply incised; elytral apex with 2 teeth. Leg: same as body color, [TP: 28.44-13.94-9.47-8.42-34.73] (Fig. 56). Male genitalia. Aedeagus 3.28 × as long as wide; median lobe with anterior margin rounded; (Fig. 70).


**Distribution.** CHILE, Metropolitan Region (Fig. 77).

**Etymology.** This species is named after the place Maipo where it was collected.

**Remarks.** This species can be recognized by its dull reddish pronotum; dark brown tongue-shaped scutellum; 2 teeth at elytral apex.

*Mecothorax maturanai* sp. nov.

(Figs. 9, 27, 42, 57, 71, 77)

**Description.** Body: brown; integument dull; vestiture yellowish, thin, semi-decumbent; length 11.68 mm, head 0.46 mm, width 2.38 mm, [PEI: 3.17] (Fig. 9). Head: frontoclypeal carina region sloping downward; labrum slightly convex, 2.61 × as long as wide; antennae same color as body, antennomere 11 oval, antennomere 9 reaching posterior angles, [AP: 6.56-7.72-9.56-10.81-12.35-11.19-10.04-10.04-10.04-10.04-
11.58] (Fig. 27). Prothorax: convex anteriorly; punctate, punctures separated by one diameter; sides bisinuate; base curved; longitudinal thin impression over pronotal length; prosternal lobe bent; prosternum orange; prosternal suture bisinuate; pronotal hypomeron rugulose, antennal groove simple, carinate on pronotal hypomeron side (Fig. 42); procoxal distance 0.73× procoxal diameter; prosternal process 1.48× procoxal diameter; [PI: 1.16]. Scutellum: dark brown; tongue-shaped; anterior border raised; vestiture yellow, long, rare, erect and semi-erect; mesocoxae separated by 0.66× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.28× mesocoxal diameter. Elytra: humeri border curved, orange, carinate; interstria rugulose, slightly convex; striae with pits, dark coloration around pits, separated by less than 1 diameter; elytral apex excavate. Leg: same as body color; [TP: 29.82-21.92-12.28-10.52-25.46] (Fig. 57). Male genitalia. Aedeagus 2.71× as long as wide; median lobe not rounded apically (Fig. 71).


Distribution. CHILE, IX Region (Fig. 77).

Etymology. The name of the species honors Humberto Maturana Ronesi a former professor who has dedicated his life to cognitive biology and neurology, presently dedicated to matrisc studies.

Remarks. This species can be recognized by its dull integument, dark coloration around elytral pits; orange prosternum, and male genitalia with a truncate median lobe.

*Mecotherax pichinahuel* sp. nov.
(Figs. 10, 28, 43, 58, 72, 77)

Description. Body: reddish brown, elytra clearer; integument shiny; vestiture thick, long, decumbent; length 11.69 mm, width 2.76 mm, [PEI: 2.9] (Fig. 10). Head: convex; frontoclypeal carina region sloping downward; labrum slightly convex, 2.11× as long as wide; antenna same color as body; antennomere 11 tubular, antennomere 9 reaching posterior angles, [AP: 9.1-7.14-11.60-11.60-11.16-10.28-10.71-10.28-9.82-12.5] (Fig. 28). Prothorax: convex; subquadrate; areolate and punctate, punctures separated by 1 diameter, parallel-sided; depression broad medially; base curved; prosternal lobe slightly bent; prosternal suture appearing double straight; pronotal hypomeron rugulose, antennal groove excavate, carinate on pronotal hypomeron side (Fig. 43); procoxal distance 0.82× procoxal diameter; prosternal process 1.76× procoxal diameter; [PI: 1.06]. Scutellum: tongue-shaped; vestiture yellow, long, semi-erect and semi-decumbent; mesocoxae separated by 0.37× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.24× mesocoxal diameter. Elytra: humeri orange, border angulate, carinate; interstria rugulose, slightly convex; striae with pits, pits separated by 1 or 2× of their own diameter; elytral apex excavate. Leg: same color as body; [TP: 37.5-21.66-10.00-8.33-2.5] (Fig. 58). Male genitalia. Aedeagus 3.09× as long as wide; median lobe softly curved anteriorly; (Fig. 72).


Distribution. CHILE, IX Region (Fig. 77).
Etymology. The name of this species is after the place Pichinahuel near where it was collected. Pichinahuel is from the Mapudungun word, which means little lion.

Remarks. This species can be recognized by its reddish brown shiny integument, subquadrate and parallel-sided pronotum, and angulate elytral humeri.

Mecothorax pucatrihue sp. nov.
(Figs. 11, 29, 44, 59, 73, 77)

Description. Body: reddish brown; integument semi-shiny; vestiture gold, thin, short, semi-erect; length 12.91 mm, head 0.38, width 2.85 mm, [PEI: 2.79] (Fig. 11). Head: frontoclypeal carina region sloping downward; labrum slightly convex, 2.2× as long as wide; antenna yellowish, antennomere 11 oval, reaching posterior angles, [AP: 6.21 -7.48 -11.39-11.39-11.91-9.84-10.3-9.79-10.30-11.39] (Fig. 29). Prothorax: convex anteriorly; areolate; elongate longitudinal thin impression medially over posterior half; parallel-sided; base curved; prosternum lighter color than remaining surface; prosternal lobe bent; prosternal suture bisinuate, short carina anteriorly; pronotal hypomeron rugulose, distinctly highly rugulose by antennal groove area; antennal groove simple (Fig. 44); procoxal distance 0.69× procoxal diameter; prosternal process 1.46× procoxal diameter; [PI: 2.3]. Scutellum: tongue-shaped, darker than elytra, vestiture erect, short, yellow; mesocoxae separated by 0.35× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.35× mesocoxal diameter. Elytra: humeri border curved, carinate; interstria rugulose, slightly convex; striae punctate, punctures tear shaped separated by 1 or 2× of their own diameters; elytral apex excavate. Leg: yellowish, [TP: 33.09-23.38-9.67-7.25- 7.25-26.61] (Fig. 59). Male genitalia. Aedeagus 2.87× as long as wide; median lobe curved anteriorly; (Fig. 73). Holotype: Male, Chile. Pucatrihue, II.1985. Osorno L. E. Peña. G. [ETA].

Distribution. CHILE, X Region (Fig. 77).

Etymology. This species name is after the place Pucatrihue where it was collected. Pucatrihue is the Mapudungun word, that means place isolated by rain.

Remarks. This species can be recognized by its reddish brown, semi-shiny integument; elongate prothorax; small area highly rugulose by antennal groove.

Mecothorax valdiviensis sp. nov.
(Figs. 12, 30, 45, 60, 74, 77)

Description. Body: brown with elytra reddish-brown; integument shiny; vestiture yellowish, thin, decumbent; length 12.98, head 0.30 mm, width 3.0 mm, [PEI: 3.4] (Fig. 12). Head: slightly convex; frontoclypeal carina region sloping downward; labrum slightly convex, 2.0× as long as wide; antenna yellowish, antennomere 8 reaching posterior angles, [AP: 7.42-7.27-12.27-6.36-11.81-11.36-10.45 -11.36-10.90-10.90] (Fig. 30). Prothorax: convex anteriorly; puncticulate; longitudinal impression broad over posterior half, parallel-sided; base curved; prosternal lobe slightly bent; prosternal suture bisinuate; pronotal hypomeron rugulose, antennal groove simple (Fig. 45); procoxal distance 0.76× procoxal diameter; prosternal process 1.46× procoxal diameter; [PI: 1.25]. Scutellum: triangular; vestiture thick, semi-decumbent, long, yellow; mesocoxae separated by 0.44× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.72× mesocoxal diameter. Elytra: integument dull; humeri border curved, carinate; interstria rugulose; striae punctate, punctures soft; elytral apex with 2 teeth. Leg: yellowish, [TP: 32.25-21.77-13.70-7.25-
25.00] (Fig. 60). Male genitalia. Aedeagus 3.52× as long as wide; median lobe parallel-sided, curved anteriorly, parameres parallel-sided at base (Fig. 74).


Distribution. CHILE, X Region (Fig. 77).

Etymology. This species is named after the city of Valdivia where it was collected.

Remarks. This species can be recognized by its shiny integument, broad longitudinal impression over posterior half and parallel-sided pronotum, triangular scutellum, median lobe of male genitalia aedeagus parallel-sided, broad and curved anteriorly.

_Mecothorax valparaisensis_ sp. nov.
(Figs. 13, 31, 46, 61, 75, 77)

Description. Body: light brown, with humeri orange, integument shiny; vestiture yellowish short, thin, decumbent; length 12.45 mm, head 0.6 mm, width 3.07 mm, [PEI: 3.40] (Fig. 13). Head: slightly convex; frontoocypal carina region sloping downward; labrum slightly convex, 2.3× as long as wide; antenna yellowish, antennomere 8 reaching posterior angles, [AP: 6.56-7.29-12.04-10.21-11.67-10.94- 10.58- 9.48-10.21-10.94] (Fig. 31). Prothorax: strongly convex, punctulate; sides biminate; base curved; longitudinal depression thin over posterior half; prosternal lobe slightly bent; prosternal suture biminate; pronotal hypomeron rugulose, antennal groove excavate, carinate on pronotal hypomeron side (Fig. 46); procoxal distance 0.64× procoxal diameter; prosternal process 1.25× procoxal diameter; [PI: 1.25]. Scutellum: tongue-shaped; vestiture rare, semi-erect; mesocoxae separated by 0.61× mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly 0.38× mesocoxal diameter. Elytra: humeri border angulate, carinate; interstria rugulose, slightly convex; striae with pits anteriorly, punctate posteriorly, punctures tear-shaped; elytral apex excavate. Leg: yellowish, [TP: 31.66-20.02-13.33-8.33 - 26.66] (Fig. 61). Male genitalia. Aedeagus 3.04× as long as wide; median lobe narrow towards apex, (Fig. 75).

Holotype: male, 12.45 mm in length. Chile. Valparaiso. X. 1896. [MNNC].

Distribution. CHILE, V Region (Fig. 77).

Etymology. This species is named after the city of Valparaiso where it was collected.

Remarks. This species can be recognized by its light brown, shiny integument, tongue-shaped scutellum, and angulate elytral humeri.

_Mecothorax villarricenis_ sp. nov.
(Figs. 14, 32, 47, 62, 76, 77)

Description. Body: dark brown, integument dull; vestiture yellowish, thick, decumbent; length 12.05 mm, head 0.76 mm, width 2.84 mm, [PEI: 3.46] (Fig. 14). Head: slightly convex; frontoocypal carina region sloping downward; labrum slightly convex, 2.23× as long as wide; antenna yellowish, antennomere 8 reaching posterior angles, [AP: 7.46-6.98- 11.35-10.04-10.91-10.91-10.48- 10.91-10.48-10.48] (Fig. 32). Prothorax: convex anteriorly; areolate, parallel-sided; base straight; thin depression longitudinally over anterior half; prosternal lobe bent; prosternal suture biminate; pronotal hypomeron rugulose, antennal groove simple (Fig. 47); procoxal distance...
0.66× procoxal diameter; prosternal process 1.73× procoxal diameter; [PI: 1.05].
Scutellum: triangular; yellow, vestiture thick, long, semi-decumbent; mesocoxae
separated by 0.61× mesocoxal diameter; posterior margin of mesosternal cavity
extending posteriorly 0.61× mesocoxal diameter. Elytra: humeri border angulate,
orange, carinate; interstria rugulose, slightly convex; striae with pits, pits separated by
1 or 2× of their own diameter, stria I through III with pits surrounding by a darker
area; elytral apex excavate. Leg: yellowish, [TP: 32.25-21.80-13.70-7.25-25] (Fig. 62).
Male genitalia. Aedeagus 3.21× as long as wide; (Fig. 76).
Holotype: male, 12.05 mm in length. 16-CHILE IX Region, Flor del Lago ranch.
Nothofagus obliqua Roble. Arias et al. UC Berkeley. [ETA]. Paratype Male: CHILE
IX Region, Flor del Lago ranch. Villarrica 39°12.456'S/072°08.109'W/290m.

Distribution. CHILE, IX Region (Fig. 77).

Etymology. This species is named after the city of Villarrica where it was collected.
Remarks. This species can be recognized by its dull integument, orange humeri,
elytral pits surrounded by a darker area, and male genitalia with aedeagus apex
slightly convex medially.

Mecothorax vulgaris (Solier 1851) comb. nov.
(Figs. 15, 33, 48, 63)

Deromecus vulgaris Solier 1851:13–14; Candèze 1860:9, 13; Bartlett-Calvert
1898:817, 818; Fleutiaux 1907:196; Blackwelder 1957:1407.

Redescription. Body: brown with elytra reddish-brown; integument shiny; vestiture
yellowish semi-decumbent; length 12.7 mm, width 2.85 mm, [PEI: 4.34], (Fig. 15).
Head: slightly convex; frontoclypeal carina region sloping downward; labrum
slightly convex, 1.75× as long as wide; antenna similar color with pronotum,
antennomeres 4 through 10 serrate, antennomere 9 reaching posterior angles,[AP:
reddish brown; convex anteriorly; reddish; areolate; parallel-sided; base curved;
prosternal lobe bent; prosternal suture bisinuate; pronotal hypomeron rugulose,
tennal groove excavate (Fig. 48); procoxal distance 1.4× procoxal diameter;
prosternal process 0.66× procoxal diameter; [PI: 1.23]. Scutellum: U-shaped;
vestiture yellow, rare, long, semi-decumbent; mesocoxae separated by 0.46×
mesocoxal diameter; posterior margin of mesosternal cavity extending posteriorly
0.26× mesocoxal diameter. Elytra: humeri border curved, carinate; dark yellowish
brown; interstria rugulose, slightly convex; striae strongly incised; elytral apex
excavate. Leg: similar color with elytra; [TP: 24.23-21.05-14.73-9.47-30.52] (Fig. 63).

Lectotype here designated: female, 12.7 mm in length, mounted on a white card,
hand written, Chile [MNHN].

Distribution. The card information and original description are not sufficient
to give an approximate locality of this species, Solier (1851) mentions in its original
description “se halla en todo Chile, en los jardines, bajo las piedras, las tables, etc.”
which means this species can be found throughout Chile, in gardens, under stones.

Remarks. This species can be recognized by its shiny integument, parallel-sided
and dark reddish brown pronotum and elytral apex with 2 teeth.
DISCUSSION

The genera *Mecothorax* and *Deromecus*, both Solier 1851, are natural members of Pomachiliini and share the following characters: complete lateral carina, complete frons, antennomeres 2 and 3 elongate, pronotum longer than wider, prosternal suture appearing double, prosternal cavity walls elevated, mesocoxae open to mesepimeron and mesepisternum, presence of wedge cell and scutellum not cordiform. The genus *Mecothorax* differs from the genus *Deromecus* because of the following main characters: body not parallel-sided, flat and not protruding frontoclypeal carina; clypeus broadly intercepted by frontoclypeal carina; wing venation lacks patch over r_{P1}, whereas the genus *Deromecus* presents: body parallel-sided; protruding frontoclypeal carina; clypeus broadly vertical, not intercepted by frontoclypeal carina; wing venation with a patch over r_{P1}. A phylogenetic treatment of this genus will be presented in a future publication.

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