

Revision of *Trachelissa* Aurivillius, 1912 (Insecta: Coleoptera: Cerambycidae)

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Abstract

A revision of the genus *Trachelissa* Aurivillius, 1912, based on a study of external morphology and terminalia, is presented. The genus and its species are redescribed. Five species are recognized, two of which are described as new: *T. bella* sp. nov. from Bolivia and *T. opaca* sp. nov. from Argentina. A new host plant for *T. maculicollis* Audinet-Serville, 1834 is recorded. A key to all species, and their photographs and distribution maps are provided.

Key words: Cerambycinae, Trachyderini, redescription, new species, taxonomy

Resumo

Apresenta-se a revisão do gênero *Trachelissa* Aurivillius, 1912 com base no estudo da morfologia externa e terminália das espécies. O gênero e suas espécies são redescritos, das quais duas novas são descritas: *T. bella* sp. nov. da Bolívia e *T. opaca* sp. nov. da Argentina. É registrada uma nova planta hospedeira para *T. maculicollis* Audinet-Serville, 1834. São apresentados chave para identificação das espécies, fotografias e mapas com a distribuição geográfica das espécies.

Palavras-chave: Cerambycinae, Trachyderini, redescrições, novas espécies, taxonomia

Introduction

The tribe Trachyderini consists of 132 genera and about 450 species (Monné, M. A. 2005; Bezark & Monné, 2013), and is divided into two subtribes: Trachyderina, with 125 genera and almost 400 species, and Ancylocerina with 6 genera and 43 species (Fragoso *et al.*, 1987; Monné & Monné, 2013).

Trachelissa was described by Audinet-Serville (1834) for *Trachelia maculicollis* from South America, *T. octolineata* from South America, and *T. pustulata* from Brazil. Gistel (1848) proposed two new names for *Trachelia*: *Hippias* and *Loxodromus* because the name was preoccupied by *Trachelia* Scopoli, 1769 (Aves). Chevrolat (1848) designated *Trachelia pustulata* as the type species. White (1853) proposed the synonymy between *T. octolineata* Audinet-Serville, 1834 and *T. pustulata* Audinet-Serville, 1834 and described a new species, *T. eburioides* from New Granada (Colombia). Gounelle (1911) described *Trachelia rugosipennis* and *Trachelia maculicollis* var. *rufiventris*, both from Goiás, Brazil. Aurivillius (1912) in the “Catalogus Coleopterorum” proposed a new name for *Trachelia*, *Trachelissa*. Quintino & Monné (2010) considered *Trachelissa* as a *nomen protectum*. Viana (1972) proposed the synonymy of *Trachelissa maculicollis* var. *rufiventris* Gounelle, 1911 and *T. maculicollis* Audinet-Serville, 1834. Delfino (1990) transferred *Trachelissa eburioides* White, 1853 to *Pseudophimosia* Delfino, 1990.

Baucke (1955) recorded *Trachelissa maculicollis* on branches of peach (*Prunus persica* (L.) Batsch, Rosaceae), on branches cut by *Oncideres impluviata* of black wattle (*Acacia* sp., Rosales, Mimosaceae), and adults

Measurements (mm). male/female n= 21/24. Total length 9.1–13.6/8.5–12.7; prothorax length 1.8–2.7/1.7–2.5; greatest prothorax width 1.9–3.1–6.2–7; elytral length 6.2–8.7/5.8–8.6; humeral width 2.4–3.5/2.2–3.5.

Type material. We examined the female holotype from South America, deposited in the BMNH.

Comments. See comments on *Trachelissa pustulata*.

Geographical distribution. The species is reported for Brazil (Goiás, Mato Grosso do Sul, Espírito Santo to Rio Grande do Sul), Argentina, Paraguay and Uruguay (Monné, M.A., 2005) (Fig. 157, 161).

Biological data. Baucke (1955) cited *Acacia* sp. (Mimosaceae), *Prunus persica* (L.) Batsch (Rosaceae), and *Eugenia uniflora* L. (Myrtaceae) as hosts. Di Iorio (1997) reported *Solanum glaucophyllum* Desf. (Solanaceae). Monné, M.A. (2005) indicated *Acacia decurrens* Willd., *Mimosa uruguensis* Hook & Arn. (Mimosaceae), and *Prunus domestica* L (Rosaceae) as host plants. We add *Anadenanthera* sp. (Fabaceae) as a new host plant for the species.

Specimens examined. ARGENTINA. Corrientes: San Tomé, female, X.1923, (MNRJ); Misiones: Campo Grande, male and female, XII.1969, R. Foerster leg. (MZSP); Iguazú, female, XII.1980, R. Foerster leg. (MZSP); Loreto, female, X.1955, (MNRJ); San Antonio, male, 9.X.1949, (MNRJ); Moconá, female, 22.IV.1984 (ACMT). BRAZIL. Distrito Federal: Taguatinga, female, 8.XI.1983, J. Dalmacio leg. (MZSP). Goiás: Jataí, male (MNHN); male, XII.1897–I.1898, C. Pujol leg. (MNHN). Paraná: Arapongas, female, XII.1951, A. Maller leg. (MNRJ); Curitiba, male, XI.1912, P. Lombard leg. (MNRJ); male, X.1935 (DZUP); Curitiba (Barigui) 1, X.1945, Rolando leg. (DZUP); Curitiba (Pilarsinho), male and female, IX.1945, Rolando leg. (DZUP); male, IX.1945 (DZUP); Foz do Iguaçu, female, 7.XII.1966 (DZUP); female, 12.XII.1966 (DZUP); Guarapuava, female, XI.1973, H. L. leg. (MNRJ); male, XII.1956, H. L. leg. (MNRJ); Guarauna, female, 1940 (DZUP); Jussara (Horto Florestal), male and female, 12–15.X.1974 (DZUP); Pinhal, female, XII.1951, A. Maller leg. (MNRJ); female, XII.1958 (MNRJ); Olho d'Água, female, XI.1943 (DZUP); Ponta Grossa (Vila Vilela; guarda-chuva) male, VIII.1946 (DZUP); Rolândia, male and female, 1940, A. Maller leg. (MNRJ); male, IX.1943, A. Maller leg. (MNRJ); male, X.1949, A. Maller leg. (MNRJ); 2 males, X.1953, A. Maller leg. (MNRJ). Santa Catarina: Blumenau, male, 13.VIII.1972, M. Lauterjung leg. (DZUP); Corupá, female, X.1939, A. Maller leg. (MNRJ); female, XII.1939, A. Maller leg. (MNRJ); female, XI.1963, A. Maller leg. (MNRJ); female, X.1960, (MNRJ); female, XII.1968, A. Maller leg. (DZUP); female, I.1970, A. Maller leg. (DZUP); Corupá (60 m), 2 females, XII.1969 (DZUP); Piçarras, female, 22.X.1975, L. Pereira leg. (DZUP); Rio Vermelho, male, I.1944, A. Maller leg. (MNRJ); female, XII.1949, Dirings leg. (MZSP); female, XII.1966, A. Maller leg. (MNRJ); São Bento, female, I.1992 (MNRJ); Seara, male, 25.X.1941, F. Plaumann leg. (MNRJ); Seara (27°11'S 52°23'W) female, 18.XI.1948, F. Plaumann leg. (DZUP); female, 8.XI.1956, F. Plaumann leg. (MNRJ). Rio Grande do Sul: Porto Alegre, male, 17.IX.1980, Grumann leg. (MNRJ). Santa Maria, male, 19.VIII.1972, G.R. Jaenisch leg. (DZUP); female, 8.XI.1972, J.S. Comis leg. (DZUP); male, 7.XI.1983, Link & Costa leg. [“Angico fino”, *Anadenanthera* sp.] (DZUP); Santo Augusto, female, I.1968, O. Roppa leg. (MNRJ); female, X.1966, O. Roppa leg. (MNRJ); male and female, X.1969, O. Roppa leg. (MNRJ). PARAGUAY. Itapuá, male and female, XII.1954, Montes leg. (MNRJ); female, XII.1954, Montes leg. (DZUP); Guairá: Villa Rica, female, IX.1997 (MNRJ); URUGUAY. Artigas, Sepulturas, 2 females, 10.III.1966, C.S. Carbonell, M.A. Monné & P.R. San Martín leg. (MNRJ); Canelones: Las Toscas, male, 29.XII.1963, C.S. Carbonell leg. (MNRJ).

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References

- Audinet-Serville, J.G. (1834) Nouvelle classification de la famille des longicornes. (suite). *Annales de la Société Entomologique de France*, 3 (1), 5–110.

- Aurivillius, C. (1912) *Coleopterorum Catalogus, pars 39, Cerambycidae: Cerambycinae*. W. Junk, Berlin, 574 pp.
- Baucke, O. (1955) Catálogo dos insetos encontrados no Rio Grande do Sul, Col., Cerambycidae. *Boletim da Secretaria de Agricultura Industria e Comercio*, 1, 1–87.
- Bezark, L.G. & Monné, M.A. (2013) Checklist of the Oxypeltidae, Vesperidae, Disteniidae and Cerambycidae, (Coleoptera) of the Western Hemisphere. Technical Report, 484 pp. Available from: <http://plant.cdfa.ca.gov/byciddb/wdocuments.asp?w=n> (accessed 21 August 2013)
- Botero, J.P. & Monné, M.L. (2012) Revision of the genus *Andraegoidus* Aurivillius (Insecta: Coleoptera: Cerambycidae). *Zootaxa*, 3169, 1–60.
- Chevrolat, L.A. (1848) In: D'Orbigny, C.D. (Ed.), *Dictionnaire universel d'histoire naturelle résumant et complétant tous les faits présentés par les encyclopédies, les anciens dictionnaires scientifiques, les œuvres complètes de Buffon, et les meilleurs traités spéciaux sur les diverses branches des sciences naturelles; donnant la description des êtres et des divers phénomènes de la nature, l'étymologie et la définition des noms scientifiques, les principales applications des corps organiques et inorganiques, à l'agriculture, à la médecine, aux arts industriels, etc.; dirigé par M. Charles d'Orbigny, et enrichi d'un magnifique atlas de planches gravées sur acier*. Paris, C. Renard & Martinet, 12, 1–816.
- Clarke, R.O.S. (2007) New species of Rhinotragini and Heteropsini and a note on *Trachelissa maculicollis* (Trachyderini) (Coleoptera, Cerambycidae, Cerambycinae). *Papéis Avulsos de Zoologia*, 47 (11), 153–158. <http://dx.doi.org/10.1590/s0031-10492007001100001>
- Delfino, S.M. (1990) Um gênero novo de Trachyderini (Coleoptera, Cerambycidae, Cerambycinae). *Revista Brasileira de Biologia*, 50 (3), 695–699.
- Di Iorio, O. (1997) Plantas hospedadoras y biogeografía de Cerambycidae (Coleoptera) del noroeste y centro de la Argentina. *Revista de Biología Tropical*, 44/45, 149–158.
- Fernandes, F.L., Picanço, M.C., Chediak, M., Fernandes, M.E.S., Ramos, R.S. & Moreira, S.S. (2010) A low-cost trap for Cerambycidae monitoring in Forest plantations in Brazil. *Pesquisa Agropecuária Brasileira*, 45 (9), 1044–1047. <http://dx.doi.org/10.1590/s0100-204x2010000900015>
- Fragoso, S.A., Monné, M.A. & Seabra, C.A.C. (1987) Preliminary considerations on the higher classification of Cerambycinae (Coleoptera, Cerambycidae), with nomenclatural alterations. *Revista Brasileira de Biologia*, 47 (1–2), 189–202.
- Gistel, J.N.F.X. (1848) *Naturgeschichte der Thierreiche für höhere Schulen*. Stuttgart, Hoffmann, 216 pp.
- Gounelle, E. (1911) Liste des cérambycides de la région de Jatahy, Etat de Goyaz, Brésil. *Annales de la Société Entomologique de France*, 80, 1–150.
- Monné, M.A. (2005) Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part I. Subfamily Cerambycinae. *Zootaxa*, 946, 1–765.
- Monné, M.A. (2012) Catalogue of the type-species of the genera of the Cerambycidae, Disteniidae, Oxypeltidae and Vesperidae (Coleoptera) of the Neotropical Region. *Zootaxa*, 3213, 1–183.
- Monné, M.A. & Monné, M.L. (2000) Novo Gênero Sul-Americano de Trachyderina Dupont, 1836 (Coleoptera, Cerambycidae, Cerambycinae, Trachyderini). *Boletim do Museu Nacional*, N.S., Zoológica, 416, 1–4.
- Monné, M.L. (2005) Revisão, análise cladística e biogeográfica de *Coccoderus* Buquet (Coleoptera, Cerambycidae). *Revista Brasileira de Entomologia*, 49 (3), 369–391. <http://dx.doi.org/10.1590/s0085-56262005000300007>
- Monné, M.L. & Monné, M.A. (2013) Synonymical and nomenclatural notes on Trachyderini (Coleoptera, Cerambycidae, Cerambycinae). *Zootaxa*, 3686 (3), 356–362. <http://dx.doi.org/10.11646/zootaxa.3686.3.4>
- Monné, M.L., Monné, M.A., Martins R.S., Simões, M.V.P. & Machado, V.S. (2010) Espécies de Cerambycidae (Insecta, Coleoptera) ocorrentes no estado do Rio de Janeiro (Brasil). *Arquivos do Museu Nacional*, 67 (3–4), 235–251.
- Monné, M.L., Monné, M.A. & Mermudes, J.R.M. (2009) Inventário das espécies de Cerambycinae (Insecta, Coleoptera, Cerambycidae) do Parque Nacional do Itatiaia, RJ, Brasil. *Biota Neotropica*, 9 (3), 1–30. <http://dx.doi.org/10.1590/s1676-06032009000300027>
- Nearns, E.H. & Ray, A.M. (2006) A new species of *Curius* Newman (Coleoptera: Cerambycidae) from Venezuela with notes on sexual dimorphism in the genus. *Zootaxa*, 1256, 49–57.
- Noldt, U., Fettköther, R. & Dettner, K. (1995) Structure of the sex pheromone-producing prothoracic glands of the male old house borer, *Hylotrupes bajulus* (L.) (Coleoptera: Cerambycidae). *International Journal of Insect Morphology and Embryology*, 24 (2), 223–234. [http://dx.doi.org/10.1016/0020-7322\(95\)93345-d](http://dx.doi.org/10.1016/0020-7322(95)93345-d)
- Quintino, H.Y. & Monné, M.L. (2010) *Trachelissa* Aurivillius, 1912 (Insecta, Coleoptera, Cerambycidae): a protected name. *Zootaxa*, 2497, 66–68.
- Ray, A.M., Lacev, E.S. & Hanks, L.M. (2006) Predicted taxonomic patterns in pheromone production by longhorned beetles. *Naturwissenschaften*, 93, 543–550. <http://dx.doi.org/10.1007/s00114-006-0142-x>
- Viana, M.J. (1972) Aporte al catálogo de Cerambycidae del Paraguay (Insecta, Coleoptera). *Revista del Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”*, 3 (4), 207–405.
- Wappes, J.E., Morris, R.F., Nearns, E.H. & Thomas, M.C. (2006) Preliminary list of Bolivian Cerambycidae (Coleoptera). *Insecta Mundi*, 20 (1–2), 1–45.
- White, A. (1853) *Catalogue of the coleopterous insects in the collection of the British Museum*, 7, Longicornia 1, British Museum, London, pp. 1–17.