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Two new species of *Conognatha* Eschscholtz, 1829 (Coleoptera, Buprestidae, Stigmoderini) from Southeast and South Brazilian regions with distributional notes

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Abstract

Conognatha (Pithiscus) coffeatus sp. nov. and *Conognatha (Pithiscus) puris* sp. nov., both from the Atlantic Rainforest (type locality: Itatiaia, Rio de Janeiro State, Brazil), are described and illustrated. They differ from each other mainly by the elytral colour pattern, presence of a short longitudinal groove between the vertex and the frons in *C. (P.) puris* sp. nov., and differences in frons shape, antennae sensory fields, pronotum and aedeagus. The distribution of *C. (P.) gounellei* is extended to the State of Minas Gerais, Brazil. A modified key to include the new species, as well as illustrations, are presented.

Key words: Taxonomy, bionomy, Buprestinae, new species, key, Neotropical Region

Resumo

Conognatha (Pithiscus) coffeatus sp. nov. e *Conognatha (Pithiscus) puris* sp. nov., ambas provenientes da Mata Atlântica (localidade tipo: Itatiaia, Estado do Rio de Janeiro, Brasil), são descritas e ilustradas. Elas diferem entre si, principalmente, pelo padrão elytral de coloração, pela presença de uma sutura longitudinal curta entre o vértice e a fronte em *C. (P.) puris* sp. nov., e diferenças no formato da fronte, fossetas sensoriais das antenas, pronoto e edeago. A distribuição de *C. (P.) gounellei* é estendida para o Estado de Minas Gerais, Brasil. Uma chave modificada para incluir as novas espécies, bem como ilustrações, são apresentadas.

Palavras chave: Taxonomia, bionomia, Buprestinae, espécies novas, chave, Região Neotropical

Introduction

Conognatha Eschscholtz, 1829 comprises the subgenera *Conognatha* s. str. Eschscholtz, 1829, and *Pithiscus* Solier, 1849 (Bellamy 2008; Gardner 1989), and is present in Patagonian and Neotropical Regions, with 79 species and five subspecies (Bellamy 2008; Moore & Lander 2010).

Previous data (Bellamy 2008; Moore & Lander 2010), as well as examined material, indicate the occurrence of 48 species from the southeast and south regions of Brazil. Together, these regions include approximately 17% of the Brazilian territory and comprise, respectively, the states of Minas Gerais (MG), Espírito Santo (ES), Rio de Janeiro (RJ) and São Paulo (SP), Paraná (PR), Santa Catarina (SC) and Rio Grande do Sul (RS) (IBGE 1992).

Three biomes can be found in the above area: Atlantic Rainforest (Tropical Deciduous Forest)—extending throughout most of the studied area, Cerrado (Tropical Grassland and Savannah) and Pampas (Grassland). Currently, these states have the greatest density of human population, and lead the economic activities in the country (Embrapa 2007; IBGE 1992). Even so, their reduced remaining plant communities have a unique biodiversity, still not well known (Embrapa 2007).

Two new species from Rio de Janeiro State are described and illustrated, as part of a series of studies of the

***C. (P.) rogersii* Saunders, 1872**

BRAZIL. Paraná: Curitiba, 1ex, II (XI?).1940, Coll. J. Guerin, Claretiano col., (CEIOC); Rio Grande do Sul: Porto Alegre, 1ex, XII.75, S. Meyer leg. Pe. P. Buck & F. R. Meyer col., 1ex, 25.X.94, Pe. P. Buck & F. R. Meyer cols. (MAPA).

***C. (P.) rufipes* Saunders, 1869**

BRAZIL. Rio Grande do Sul: São Francisco de Paula, 2ex, 2.II.42. Pe. P. Buck leg. F. R. Meyer col. (MAPA); Silveira Martins, 1ex, 15.XI.1988, V. Soprano col. (MCNZ).

***C. (P.) sangunipennis* (Mannerheim, 1837)**

BRAZIL. São Paulo: São Paulo: 1ex, XII.1949, 1ex, ex-coll. Zikán (CEIOC); São Paulo: São Paulo, Ipiranga, 1ex, 1.I.1932, R. Spitr. col., Lage de Morretes, 1ex, 9.XII.1936 (CEIOC).

***C. (P.) thoreyi* (Chevrolat, 1837)**

BRAZIL. Rio de Janeiro: Duque de Caxias, 1ex, without other data (MNRJ). Rio Grande do Sul: Farroupilha, Emboaba, 1ex, IV.1953, Buckup col.; Santa Maria, 1ex, 12.III.1976, M.F. Tarragó col. (MCNZ).

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References

- Bellamy, C.L. (1992) A new species of Euplectalecia Obenberger from Guyana (Coleoptera: Buprestidae). *Giornale Italiano di Entomologia*, 6, 175–178.
- Bellamy, C.L. (2008) *A World Catalogue and Bibliography of the Jewel Beetles (Coleoptera: Buprestoidea). Volume 2: Chrysochroinae: Sphenopterini through Buprestinae: Stigmoderini*. Pensoft Publishers, Sofia-Moscow, 634 pp.
- Bellamy, C.L. & Volkovitsh, M.G. (2005) Buprestoidea Crowson, 1955. In: Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (Eds.), *Handbook of Zoology. Vol. IV. Arthropoda: Insecta, Part 38, Coleoptera, Beetles. Vol. 1. Morphology and Systematics*. De Gruyter, Berlin, pp. 461–468.
- Blackwelder, R.E. (1944) Checklist of the coleopterous insects of Mexico, Central America, The West Indies, and South America. Part 1. *Bulletin of the United States National Museum*, 185 (2), 306–341.
- Bruch, C. (1911) Catálogo sistemático de los Coleópteros de la Republica Argentina, pars V, Buprestidae, Trixagidae, Monommidae, Eucnemidae, Elateridae. *Revista del Museo de La Plata*, 17 (5), 143–260.
- Embrapa (2007) *A Embrapa nos Biomas Brasileiros*. EMBRAPA, Brasília, DF, 16 pp.
- IBGE (1992) *Manual técnico da vegetação brasileira*. IBGE, Rio de Janeiro, 92 pp.
- Gardner, J.A. (1989) Revision of the genera of the tribe Stigmoderini (Coleoptera: Buprestidae) with a discussion of phylogenetic relationships. *Invertebrate Taxonomy*, 3, 291–361.
<http://dx.doi.org/10.1071/IT9890291>
- Hoscheck, A.B. (1931) Beiträge zur Kenntnis der Buprestiden III. (Col.). *Mitteilungen aus dem Zoologischen Museum in Berlin*, 17, 133–164.
- Hoscheck, A.B. (1934) Monographie der gattung Conognatha Eschz. *Mémoires Société Entomologique de Belgique*, 24, 95–289.
- Kerremans, C. (1903) Coleoptera, Fam. Buprestidae. In: Wytzman, P. (Ed.), *Genera Insectorum*. Verteneuil & Desmet, Bruxellis, pp. 49–338.
- Lawrence, J.F., Beutel, R.G., Leschen, R.A.B. & Ślipiński, A. (2010) Glossary of Morphological Terms. In: Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (Eds.), *Handbook of Zoology. Arthropoda: Insecta. Coleoptera. Beetles. Morphology and*

- systematics (Elateroidea, Bostrichiformia, Cucujiformia partim)*. De Gruyter, Berlin, pp. 9–20.
- Moore, R.T. & Lander, T. (2010) *Révision du genre Conognatha*. Magellanes, Andrésy, 172 pp.
- Obenberger, J. (1934) Pars 132. Buprestidae III. In: Schenkling, S. (Ed.), *Coleopterorum Catalogus*. W. Junk, Berlin, pp. 569–781.
- Rothkirch, H.O.H.K. (1912) Neue Südamerikanische Stigmoderidae, nbest einer Zusammenstellung der mir bekannten Vertreter der Gattungen Conognatha und Pithiscus. *Deutsche Entomologische Zeitschrift*, 1912, 589–595.
- Waterhouse, C.O. (1912) Observations on Coleoptera of the family Bupretidae, with descriptions of new species. *Annals and Magazine of Natural History*, 9 (8), 57–63.