

Beetles (Coleoptera) of Peru: A Survey of the Families. Ptinidae Latreille, 1802

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ABSTRACT: A checklist of the ptinid beetles (including Anobiidae) of Peru is presented with 5 subfamilies, 22 genera, and 33 identified species. One species, *Calymmaderus funki* Pic, is reported as a new country record. Six genera are reported as new records for Peru (i.e. *Byrrhodes*, *Caenocara*, *Mirosternus*, *Petalium*, and *Cryptorama*), however, species within these genera are not yet identified. This contribution is part of the ‘Beetles of Peru’ project.

KEY WORDS: Death-watch beetles, spider beetles, powderpost beetles, biodiversity, checklist

Diversity in Peru: 5 subfamilies, 22 genera, 33 species.

Nomenclature: The family name Ptinidae Latreille (1802: 112) is used here as it has priority over the name Anobiidae Fleming (1821: 50) if the family includes the spider beetles (Subfamily Ptiniinae Latreille, 1802; Lawrence and Newton 1995).

Recognition: Identification of these beetles, commonly referred to as the death-watch and spider beetles, is difficult not only because of their small size and compact body structure, but also due to the highly variable morphology seen within the group. Body structure ranges from rotund and strongly compact to narrow and elongate. Despite this variation, members of this family can generally be recognized by the hood-like pronotum which strongly conceals the head from above, insertion of the antennae just before the eyes, and in many cases, highly contractile appendages that are retained within grooves along the ventral surface. Other characteristics that will aid in identification of members of this family include the antennae with having the apical three segments elongate or broadened or antennae serrate, pectinate, or filiform; trochanters on the metathoracic leg cylindrical and square attached to the femora; and five segmented tarsi.

Habitat: Ptinids have evolved to utilize a variety of food resources, but are perhaps best known for their ability to develop in well-seasoned lumber (10+ years old) of both hardwoods and softwoods (Smith and Whitman 1992, Philips 2002). Other food resources include fungi (e.g., puffballs, woody shelf fungi) along with a wide variety of organic plant and animal materials including a number of commercial stored products (e.g., spices, dried food/plants, animal feed) (Fall 1905, Ebling 1978, Smith and Whitman 1992, Philips 2002). Thus, numerous species in this family have been shown to be of significant economic concern, particularly in stored food products and historic wooden structures (Hinton 1941, Halstead 1986). Ptinids can be collected by beating foliage or by passive trapping with Lindgren funnel traps or flight intercept traps.

Notes: The checklist presented below is based on Blackwelder (1945), Borowski (2006), Pic (1912a, b), White (1973, 1980, 1981, 1983), and Zahradník and Háva (2014), along with a cursory examination of material from the National Museum of Natural History [NMNH], Washington, D.C., U.S.A. The NMNH has a large collection of undetermined

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Ptinidae from a 1983–1984 insecticidal fogging study (Erwin 1983). The present checklist serves as a starting point for research on Peruvian fauna as this species list will likely increase substantially upon further analysis of NMNH material, new Chaboo collections, and other collections.

Species denoted as [NMNH] were added to the list after examination of specimens collected during the 1983–1984 fogging study, and are associated with the following label data unless otherwise noted in the checklist, below the species name:

Peru-Madre de Dios; Rio Tambopata Res.; 30 km (air) SW Pto./Maldonato, 290 m; 12°50'S 069°20'W/Smithsonian Institution; Canopy fogging project/T.L.Erwin et al. Colls.

The senior author identified NMNH specimens in Erwin's canopy fogging samples as belonging to these five genera. These genera are **new records** for Peru, but are not included in the checklist.

Dorcatominae: Dorcatomini

Byrrhodes (species undetermined) [NMNH]

Caenocara (species undetermined) [NMNH]

Dorcatominae: Mirosternini

Mirosternus (species undetermined) [NMNH]

Dorcatominae: Petaliini

Petalium (species undetermined) [NMNH]

Mesocoelopodinae: Tricorynini

Cryptorama (species undetermined) [NMNH]

Checklist:

Ptininae: Meziini

Mezium americanum (Laporte, 1840)

Ptininae: Ptinini

Niptus schmidti Fairmaire, 1878

Ptinus fascicularis Erichson, 1847

Ptinus riveti Pic, 1910

Trigonogenius globulus (Solier, 1849)

Trigonogenius impressicollis Pic, 1917

Trigonogenius peruvianus Pic, 1903

Trigonogenius discoelongatus Borowski, 2006

Tropicoptinus jatayensis (Pic, 1899)

Anobiinae: Stegobiini

Stegobium paniceum (Linnaeus, 1758)

Anobiinae: Gastrallini

Gastrallus marginipennis LeConte, 1879 [NMNH]

Xyletininae: Lasiodermiini

Lasioderma serricorne (Fabricius, 1792)

Xyletininae: Xyletinini

Xyletinus byssinus Kirsch, 1874

Xyletininae: Incertae sedis

Xyletineurus bombycinus (Erichson, 1847)

Dorcatominae: Calymmaderini

Calymmaderus byrrhoides (Kirsch, 1873)

Calymmaderus funki (Pic, 1904) [NMNH]

Peru: Dpt. Ayacucho; La Mar, Santa Rosa, 640m, 8-15-IX-1976; Robert Gordon
Calymmaderus metallicus (Pic, 1902)
Calymmaderus theresae (Pic, 1902)
Calythea convexa White, 1973
Dorcatominae: Prothecini
Chondrotheca asperula Lesne, 1911
Protheca aberrans White, 1979 [NMNH]
Mesocoelopodinae: Tricorynini
Stichtoptychus elegans White, 1980
Stichtoptychus humeralis (Kirsch, 1874)
Stichtoptychus megalops White, 1980
Stichtoptychus ornamentus White, 1980
Stichtoptychus peruvianus (Pic, 1904)
Stichtoptychus platyops White, 1980
Stichtoptychus rubidus White, 1980
Stromatanobium delgadoi Viñolas, Navarro-Rosinés & Pujade-Villar, 2014
Tricorynus baeri (Pic, 1904)
Tricorynus distinctipennis (Pic, 1904)
Tricorynus gossypii (Brèthes, 1924)
Tricorynus peruviana (Kirsch, 1874)

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