Beetles (Coleoptera) of Peru: A Survey of the Families. Lampyridae

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Diversity in Peru: 3 subfamilies, 22 genera, 89 species.

Recognition: The adults have the head completely or partially concealed from above by pronotum. Antennae filiform to serrate, bipectinate, flabellate, biflabellate, or rarely capitate. Mandibles are falcate, without a mola. The trochanter is obliquely joined to the femur. The tibial spurs are usually indistinct or absent. The claws are paired and simple or toothed or bifid, without setae near base. Light organs sometimes present on the adults of one or both sexes and are usually located on ventrites 5, 6, and 7, which correspond to segments VI, VII, and VIII (Branham, 2010). Bioluminescent signals in adults are used to locate mates. Non-luminous adults often possess large non-filiform antennae and use pheromones to locate mates.

Habitat: Lampyrids are found in a diverse array of habitats and across most elevations. While higher species diversity usually corresponds to regions with high humidity, lampyrids are also known from arid regions. All lampyrids are predacious as larvae, often specializing on either snails or earthworms. While the adults of most species are not known to feed, some evidence exists for adults opportunistically feeding on nectar. It is well known that the adult females of the Photuris pennsylvanica-versicolor species group in North America practice aggressive mimicry. These “femmes fatales” lure in and feed on heterospecific males by mimicking the flashed responses of heterospecific females (Barber, 1951; Lloyd, 1965). While aggressive mimicry is not known to occur in Peruvian Photuris species, Viviani (1996) <http://entnemdept.ufl.edu/Lloyd/firefly/ffcomp1-2.pdf> reported it in Bicellonycha ornaticollis (Blanchard) in Brazil. Bicellonycha ornaticollis is known to occur in Peru.

Notes: The following checklist of Peruvian Lampyridae was derived from a survey of the Peruvian fauna by Kirsch (1873, 1874), a checklist by Blackwelder (1945), the catalog of Lampyridae by McDermott (1966), and specimens housed in the USNM collection. The author is not aware of any regional works, checklists and identification keys to the Peruvian fauna of Lampyridae other than those listed above. The Peruvian lampyrid fauna is undoubtedly under sampled as the Neotropics is probably the most species diverse region for this family.

Checklist:

Amydetinae
Amydetes vigorsi Westwood, 1830
Dodacles interfusa E. Olivier, 1912
Dryptelytra cayennensis Laporte, 1833
Dryptelytra longipennis Pic, 1927
Ethra conserta (E. Olivier, 1909)
Ethra testaceicollics (Pic, 1929)
Psilocladus apicalis (Kirsch, 1865)
Psilocladus atricornis Pic, 1925
Psilocladus atrornaculatus Pic, 1930
Psilocladus haemorrhoidalis E. Olivier, 1909
Psilocladus peruvianus (Kirsch, 1874)
Psilocladus pici E. Olivier, 1907
Vesta cincticollis Blanchard, 1846
Vesta melanura (Laporte, 1833)
Magnoculus jocosus (E. Olivier, 1909)
Magnoculus olivieri (Pic, 1930)