

New insights on the knowledge of family Corylophidae LeConte, 1852 (Coleoptera) in Portugal

Aportaciones al conocimiento de la familia Corylophidae LeConte, 1852 (Coleoptera) en Portugal

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Family Corylophidae LeConte, 1852 is a group of mycetophagous Cucujoidea mainly comprised of ovate minute beetles with a small head concealed under a hood-like pronotum. Members of this family rank among the smallest beetles known, ranging from 0.5 to 2.0 mm in length in the West Palaearctic region. Both larvae and adults are attracted to moulds growing on decaying vegetation in a wide array of situations, such as grass heaps, hay, litter, under bark, at the roots of plants (mostly herbs), on herbivore dung or in nests (Freude, 1971; Bowstead, 1999).

Being a species-poor family, only 45 species are listed to the West Palaearctic (Bowstead, 1999); no more than 16 are known to occur in Spain and only 3 species were recorded from Portugal to this day (Seabra, 1943; Bowstead, 1999, 2007; Audisio, 2007). There are very few references on the Corylophidae fauna from our country, probably owing to their dimensions and the difficult taxonomical characters provided by Matthews (1899), which were mainly based on the mouthparts. Subsequent study of other characters, such as the microsculpture, the male genitalia and ultimately the spermatheca opened ways to practical and reliable methods of determination, therefore allowing for a growing interest in this often neglected family.

In this short note 3 Corylophid genera and 4 species are reported for the first time from Portugal: *Aposericoderus revelierei* (Reitter, 1878), *Orthoperus aequalis* Sharp, 1885, *Orthoperus anxius* Mulsant & Rey, 1861 and *Gloeosoma velox* Wollaston, 1854. With this contribution the number of Corylophidae species known from Portugal is thus raised from 3 to 7 species belonging to 5 genera.

Site locations are given in the text by UTM 10x10 km coordinates. Faria e Silva and Prado e Castro's material is deposited at Faculdade de Ciências, Universidade de Lisboa. Species names follow Bowstead (2007).

Aposericoderus revelierei (Reitter, 1878)

MATERIAL EXAMINED:

29SND35 - Azinhaga, Golegã, Reserva Natural do Paúl do Boquilobo, Ribatejo; altitude: 20m ASL; 08-v-2002, 1♂, fully winged (Faria e Silva leg., det. et col.); habitat: floodplain forest (mainly *Salix* spp.); collecting method: unbaited pitfall trapping.

29SND36 - Azinhaga, Golegã, Reserva Natural do Paúl do Boquilobo, Ribatejo; altitude: 20m ASL; 05-vi-2002, 1♂, fully winged (Faria e Silva leg., det. et col.); habitat: grassy causeway in a floodplain forest (mainly *Salix* spp.); collecting method: unbaited pitfall trapping.

KNOWN DISTRIBUTION: Europe: Spain, France (including Corsica), Italy (including Sardinia and Sicily), Croatia, Albania, Hungary, Bosnia-Herzegovina, Greece (including Corfu and Crete), Romania. North Africa: Morocco, Tunisia, Egypt. Western Asia: Turkey, Armenia, Azerbaijan, Georgia, Israel, Jordan. Central Asia: Kazakhstan (Bowstead, 1999, 2007).

REMARKS: Similarly to our findings, *A. revelierei* has been found to occur around wet areas, among plant debris and tussocks (Bowstead, 1999). These specimens represent the first records of this genus and species in Portugal.

Orthoperus aequalis Sharp, 1885

MATERIAL EXAMINED:

29SMC88 – Tapada da Ajuda, Ajuda, Lisboa, Estremadura; altitude:

140 m ASL; 30-vii-2007, 1♀, fully winged (Prado e Castro leg., Faria e Silva det., Prado e Castro col.); habitat: small patchy woodland park inside urban perimeter, mainly composed of *Ailanthus altissima*, *Fraxinus angustifolia* and *Ulmus minor*; collecting method: modified Schoenly trap (Prado e Castro et al., 2009) baited with a piglet.

KNOWN DISTRIBUTION: North Africa: Canary Islands, Madeira. Europe: Spain, Britain, France (including Corsica), Switzerland, Italy and Croatia. Pacific: Hawaii. Australian Region: New Zealand. South East Asia (Bowstead, 1999, 2007).

REMARKS: Though originally described from Hawaii, *O. aequalis* has since been spreading its range and is now widely adapted to Europe and other parts of the world (Audisio, 2007). Its arrival in the West Palaearctic Region is presumably quite recent (Bowstead, 1999).

This specimen was caught by means of a modified Schoenly trap (Prado e Castro et al., 2009) baited with a piglet carcass in the course of a sarcosaprophagous insect succession study. A few other Corylophidae species have been shown to be present in the drier stages of carcass decomposition (Arnaldos, 2000; Arnaldos et al., 2004; Watson, 2004), specifically feeding on fungi or fungal hyphae (Smith, 1986); however, no direct association between *O. aequalis* and cadavers can be ascertained, given the sole specimen found. According to Bowstead (1999) this species is seemingly quite adaptable and has been detected in a variety of habitats where moulds are present, be it under bark, on recently cut wood, in grass heaps or old fig leaves.

Orthoperus anxius Mulsant & Rey, 1861

MATERIAL EXAMINED:

29SMC88 – Tapada da Ajuda, Ajuda, Lisboa, Estremadura; altitude: 140 m ASL; 01-viii-2007, 1♀, fully winged (Prado e Castro leg., Faria e Silva det., Prado e Castro col.); habitat: patchy woodland park inside urban perimeter, mainly composed of *Ailanthus altissima*, *Fraxinus angustifolia* and *Ulmus minor*; collecting method: modified Schoenly trap (Prado e Castro et al. 2009) baited with a piglet.

KNOWN DISTRIBUTION: North Africa: Morocco, Algeria. Europe: Spain (including the Balearic Islands), France (including Corsica) and Italy (including Sardinia and Sicily).

REMARKS: This *O. anxius* specimen was caught next to a piglet carcass, in the same experimental design as the species listed above, but once more no clear association with cadavers can be inferred, given the sole exemplar detected. Moreover, the few previous records show this species to be present among plant debris, often in wet areas, just like many other Corylophids (Bowstead, 1999).

Gloeosoma velox Wollaston, 1854

MATERIAL EXAMINED:

29SND36 - Azinhaga, Golegã, Reserva Natural do Paúl do Boquilobo, Ribatejo; altitude: 20m ASL; 05-vi-2002, 1♂, micropterous (Faria e Silva leg., det. et col.); habitat: grassy causeway in a floodplain forest (mainly *Salix* spp.); collecting method: unbaited pitfall trapping.

29SND36 - Azinhaga, Golegã, Reserva Natural do Paúl do Boquilobo, Ribatejo; altitude: 20m ASL; 22-v-2002, 1♂, micropte-

rous (Faria e Silva leg., det. et col.); habitat: black poplar (*Populus nigra*) stand in floodplain; collecting method: unbaited pitfall trapping.

KNOWN DISTRIBUTION: North Africa: Madeira, Morocco, Algeria, Tunisia, Libya. Europe: Spain (including Ibiza), France, Italy (including Sicily and Sardinia), Greece (including Corfu). Western Asia: Israel, Lebanon, Turkey, Russia (Caucasus).

REMARKS: Originally described from a specimen caught under a stone in Madeira Island, *G. velox* has also been found among leaf litter and moulds at the base of plants (Bowstead, 1999).

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Corrigenda a la "Primera cita [sic] de *Catocala fraxini* L. (Lepidoptera, Noctuidae) en la provincia de La Rioja"

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Hace algo más de 15 años, se decidió dentro de las filas de ADEMAR-RIOJA (Asociación para la Defensa del Medio Ambiente Rural de La Rioja) ampliar el conocimiento de las mariposas de La Rioja. De común acuerdo con su Presidente, se me asignó el estudio, catalogación y atlas de los Noctuidae de esta región.

Para la realización del Catálogo y Atlas (aún hoy en día en estudio y curso) se revisaron todos los textos donde pudiera encontrarse alguna cita de captura, se contactó con todos aquellos expertos y especialistas nacionales relacionados con esta familia de heteróceros, así como con investigadores de otros grupos que hubieran prospectado en esta Comunidad Autónoma y pudieran disponer de datos sobre la familia objeto de estudio. Evidentemente, se puso en conocimiento de esta investigación a todos los entomólogos riojanos que pudieran haber realizado capturas fortuitas para incluirlas en el estudio y, que a día de hoy siguen aportando importantes datos al catálogo. Se visitaron las colecciones depositadas en colegios, institutos y museos a fin de recoger todas las citas históricas que pudieran existir. Así, y tras hacer cúmulo de todas estas citas y de las prospecciones sistemáticas posteriores, se han conseguido catalogar 313 especies de noctuidos en La Rioja.

Por ello, me gustaría realizar una serie de correcciones a la nota breve de Monasterio & Escobés (2008): los datos expuestos por el autor no representa la "primera cita" de esta especie para La Rioja, puesto que ya se citó por primera vez en Vega Escandón (1980) para la localidad de Navarrete (sin fecha ni número de ejemplares y adscrita a la entonces provincia de Logroño). Además, los datos expuestos en Monasterio & Escobés (2008) ya fueron aportados por uno de los autores de la nota a revisión (Y. Monasterio

León), al trabajo de catalogación mencionado en el párrafo más arriba, siendo el primero de ellos un ejemplar "atropellado" (según escribe de su puño y letra en una cuartilla que aún conservo), con fecha de 16.IX.1998, en Tobía. En dicho catálogo quedan reflejadas, además, dos citas anteriores a las expuestas: un ejemplar capturado en Manjarrés (carretera a Santa Coloma) (30T WM29, 630 metros) "en la última casa del pueblo, posada en la pared blanca que seguramente había sido atraída por la luz de una farola, en octubre de 1985" (com. pers.) y depositada en la colección de M. Gómez Bustillo (T. Latasa leg.) y otro ejemplar en el término municipal de Mansilla, en el margen derecho del río Calamantío (30T WM06, 1.000 metros), donde I. Sarabia, P. Rodríguez y P. C. Rodríguez avistaron un ejemplar que se posó repetidas veces sobre los troncos de los árboles el 7 de agosto de 1996.

Por tanto, y a la vista de lo expuesto, un título más adecuado a la anterior nota hubiera sido "Nuevas aportaciones a la presencia de *Catocala fraxini* L. (Lepidoptera, Noctuidae) en la provincia de La Rioja"; y además de la corrección con los nuevos datos aportados, en la bibliografía debiera añadirse la referencia de Vega Escandón (1980). Todo ello con objeto de corregir y solventar los errores cometidos en la nota objeto de revisión.

Bibliografía: MONASTERIO LEÓN, Y. & R. ESCOBÉS JIMENEZ 2008. Primera cita de *Catocala fraxini* L. (Lepidoptera, Noctuidae) en la provincia de La Rioja. *Boln. S.E.A.*, **43**: 434 • VEGA ESCANDÓN, F. 1980. Datos relacionados con *Catocala fraxini* L. *SHILAP Revta. Lepid.*, **8** (32): 305-310.