

# The first record of the family Pyrgotidae (Diptera: Tephritoidea) a very rare parasitic fly on Coleoptera Lamellicornia from Belgium

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## Abstract

*Adapsilia coarctata* Waga 1842 and the family Pyrgotidae are recorded for the first time from Belgium; distribution of this rare species in Europe is discussed.

**Keywords:** Diptera, Cyclorrhapha, Tephritoidea, Pyrgotidae, Belgium.

The family Pyrgotidae includes about 365 species in ca. 55 genera, with the greatest number of species in the tropics (KORNEYEV, 2006). Pyrgotids are medium to large-sized acalyptrate flies of 4–18 mm wing length, and usually can be recognized by pictured wings with short lobate cell *bcu*, rather slender body, oblique face, and stiletto-like aculeus that is much shorter than the strong conic oviscape. The larvae parasitize adult lamellicorn beetles of the families Melolonthidae and Cetoniidae (FERRAR, 1987; KORNEYEV, 2006); hosts are known for a few species; adult flies are usually active in the dusk and collected at light.

The only known species of the Pyrgotidae in Europe is *Adapsilia coarctata* Waga 1844, which is relatively common in the Far East Russia, China and Mongolia (NARTSHUK & KORNEYEV, 2005), but very rare in Europe. It was recorded from Austria, Hungary, Italy and Poland (SOÓS, 1984), Switzerland (MERZ, 1996) and the south of European Territory of the USSR, without more detailed geographical data (STACKELBERG, 1970). NARTSHUK & KORNEYEV (2005) listed specimens from Belarus and South-Western Russia (North Caucasus).

While studying unsorted pyrgotids at the Royal Museum of Natural History, Brussels, the author found one male specimen: [Belgium] "La Fôret, 10.10.1913" [no collector's name], which represents the first record of the family Pyrgotidae in the fauna of Belgium.

Most known collection specimens of *A. coarctata* from Europe are dated from the XIX or the first half of XX century. As there were no recent records, it was believed to be almost entirely extinct here. However, based on a few specimens collected in 1952, TROJAN (2007) rediscovered this species in Poland, where it has not been reported since its original description in 1842. Furthermore, it has been surprisingly recorded from Lithuania (LUTOVINOVAS *et al.* 2003) based on specimens

collected in 2002, and again from Switzerland, based on specimens collected in 2008 (B. Merz, personal communication); in the latest case, the specimens were collected in the daytime resting on leaves or feeding on flowers rather than collected at light as most other pyrgotids.

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