

New records of Aulacidae (Hymenoptera) from Vienna, Austria

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Abstract

Specimens of Aulacidae are rarely collected. We report on the first record of *Pristaulacus galitae* (GRIBODO, 1879) in Vienna. A large series of this species – previously recorded from Austria only once – was reared from larvae of the longhorn beetle *Leioderes kollari* REDTENBACHER, 1849 (Cerambycidae). In addition, we present a new record of *Pristaulacus gloriator* (FABRICIUS, 1804); this species has not been found in Vienna since 1861.

Keywords. Evanioidea, Aulacidae, *Pristaulacus galitae*, *Pristaulacus gloriator*, records, Vienna, host.

Zusammenfassung

Exemplare der artenarmen Familie Aulacidae, für die kein deutscher Name im Umlauf ist, werden selten gesammelt. Wir melden den Erstnachweis von *Pristaulacus galitae* (GRIBODO, 1879) für Wien. Eine große Serie dieser zuvor erst einmal in Österreich gefundenen Art wurde aus den Larven von Kollars Scheibenbock, *Leioderes kollari* REDTENBACHER, 1849 (Cerambycidae), gezogen. Außerdem berichten wir über einen neuen Fund von *Pristaulacus gloriator* (FABRICIUS, 1804); diese Art wurde in Wien seit dem Jahr 1861 nicht mehr nachgewiesen.

Introduction

Like most parasitoid wasps, the small evanoid family Aulacidae is relatively poorly studied. Two genera and six species are recorded from Austria (SCHWARZ 2014). *Pristaulacus gloriator* (FABRICIUS, 1804) was the first aulacid ever collected from Vienna. MADL (1988: 388) reported on a historical specimen (“Wien” [=Vienna], 1861, leg. Josef Johann Mann) kept in the Natural History Museum Vienna.

Pristaulacus galitae (GRIBODO, 1879) was recorded in Austria only once: MADL (1988: 366; as *P. immaculatus* KIEFFER, 1904) lists a single specimen collected in Burgenland in 1960 by Karl Kusdas (in Natural History Museum Vienna). *Pristaulacus galitae* is a relatively unspecific parasitoid wasp of wood-boring beetles. TURRISI (2007) lists 14 host species.

Material and methods

In 2015, the first author caught a single specimen of *Pristaulacus gloriator* with a hand net during a survey of Hymenoptera in the Lainzer Tiergarten. This formerly imperial hunting area in the 13th District of Vienna is a nature reserve and famous for xylobiotic insects.

In early April of 2020, the second author collected infested wood from a broken stem (diameter approximately 6–9 cm) of field maple (*Acer campestre*) in the Prater (Vienna, 2nd District) to rear the locally rare longhorn beetle *Leioderes kollari* REDTENBACHER, 1849. Besides adults of this beetle, 34 specimens of *P. galitae* hatched a few weeks later.

Specimens were identified by the first author using the key by TURRISI (2007). Reference specimens of *P. galitae* will be deposited in the Natural History Museum Vienna, in the Biology Centre in Linz, in the Tyrolian State Museums in Hall, and in the first author's collection.

Records

Pristaulacus galitae (GRIBODO, 1879)

Material examined. 12 females, 22 males, hatched ex larvae of *Leioderes kollari*, 24.IV.–9.V.2020; from a stem of *Acer campestre*, collected from Austria, Vienna, 2nd District, Prater, near Krebsenwasser, N 48° 11' 31", E 16° 26' 54", 150 m a. s. l., 2.IV.2020, leg. A. Dostal, det. H. Zettel.

First record from Vienna. *Leioderes kollari* as first host record from Austria.

Pristaulacus gloriator (FABRICIUS, 1804)

Material examined. 1 female, Austria, Vienna, 13th District, Lainzer Tiergarten, Hirsch-gstemm, N 49° 10' 18", E 16° 12' 12", 410 m a. s. l., 11.VI.2015, leg., det. and in coll. H. Zettel.

Second record from Vienna after more than 150 years.

Discussion

SCHWARZ (2014) states that Aulacidae are represented in Austria by two genera and six species. The majority of records were already published by MADL (1988; five species, 59 specimens) and KOFLER & MADL (1990; one species, 23 specimens). Only few specimens were added later (SCHWARZ 1994, 2000, TURRISI 2007). The total number of aulacid specimens reported from Austria is 95 (M. Madl, pers. comm.).

Despite the fact that *P. galitae* is not among the rarest aulacids, the long series of 34 specimens reared by the second author is surprising. For comparison, in his revision based on numerous European museum collections TURRISI (2007) had only 94 specimens of *P. galitae* from the Western Palaearctic Region at hand.

Pristaulacus galitae is a relatively unspecific parasitoid wasp of wood-boring beetles. TURRISI (2007) lists 14 host species: twelve of them (including *Leioderes kollari*) belong to Cerambycidae, one of each to Bostrichidae and Cleridae. The wide spectrum of hosts makes the rarity of *P. galitae* even more inexplicable.

The authors would like to encourage entomologists who bring beetle larvae or caterpillars to development to pass on “unwanted” material of parasitoids (wasps, flies) either directly to specialists or to museum collections, instead of discarding them. Especially from reared specimens, many interesting insights can be gained, provided they are well documented.



Fig. 1. Female of *Pristaulacus galitae* from Prater, Vienna. © Alice Laciny.

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References

- KOFLER A. & MADL M., 1990: Über Evanioidea von Osttirol (Hymenoptera, Evaniiidae, Gasteruptiidae, Aulacidae). – Linzer biologische Beiträge 22 (2): 319–324.
- MADL M., 1988: Über Aulacidae von Österreich (Hymenoptera, Evanioidea). – Entomofauna 9 (17): 361–368.
- SCHWARZ M., 1994: Verbreitung der Holzwespen (Sircidae), Aulacidae, Hungerwespen (Evaniiidae) und Honigwespen (Masaridae) (Hymenoptera) im Bundesland Salzburg (Österreich) sowie eine vorläufige Bibliographie der Hymenopterenfauna von Salzburg. – Linzer biologische Beiträge 26 (2): 861–871.
- SCHWARZ M., 2000: Hautflügler (Hymenoptera: Sircidae, Xiphydriidae, Argidae, Cephidae, Aulacidae, Evaniiidae, Gasteruptiidae, Sapygidae, Eumenidae, Vespidae, Sphecidae) im Stadtgebiet von Linz. – Naturkundliches Jahrbuch der Stadt Linz 45: 73–134.

SCHWARZ M., 2014: Bienen, Wespen und Ameisen – eine Übersicht über heimische Hautflügler (Hymenoptera) sowie praktische Tipps für angehende Hymenopterologen. – Entomologica Austriaca 21: 153–207.

TURRISI G.F., 2007: Revision of the Palaearctic species of *Pristaulacus* KIEFFER, 1900 (Hymenoptera: Aulacidae). – Zootaxa 1433 (1): 1–76.

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