

REDISCOVERY OF *RHAGIO CHRYSOSTIGMA* (LOEW, 1857) (DIPTERA: RHAGIONIDAE)

LIBOR DVOŘÁK

Tři Sekery 21, CZ-35301 Mariánské Lázně, Czech Republic

E-mail: lib.dvorak@seznam.cz

Abstract

The rediscovery of *Rhagio chrysostigma* (Loew, 1857) after ca. 90 years, as well as the first record from Slovenia, are presented. The published data of this species are known only from northeastern Italy and are based on old records (Loew 1857, Schiner 1862, Szilády 1934).

KEY WORDS: Diptera, faunistics, Slovenia, new records

Introduction

In 2015, the author identified a *Rhagio* male from Slovenia, which was photographed by Janez Kamin and posted on diptera.info, as *R. chrysostigma* (Loew, 1857). In 2021, the author was contacted by J. Kamin with the information that another specimen had been photographed and collected. In this contribution, the results of those two events are published.

Material

Slovenia, Ajševica village, about a mile away from Nova Gorica, humid wood, 31.05.2015, 1 ♂ (Fig. 1), Janez Kamin photo, Libor Dvořák det.

Slovenia, Ajševica vill., bank of Lijak stream, 45°57'35"N, 13°43'12"E, open forest, undergrowth, 10.06.2021, 1 ♀ (Figs. 2-4), Janez Kamin lgt., det. et photo, Libor Dvořák revid. et coll.



Figure 1. Male *Rhagio chrysostigma*. Photo by Janez Kamin.



Figure 2. Female *Rhagio chrysostigma* from dorsal view. Photo by Janez Kamin.



Figure 3. Female *Rhagio chrysostigma* from lateral view.
Photo by Janez Kamin.



Figure 4. Female *Rhagio chrysostigma* from ventral view.
Photo by Janez Kamin.

Identification

As the last identification key for European *Rhagio* spp., including *R. chrysostigma*, is almost 80 years old, herein are presented some characteristics of *R. chrysostigma* and some similar species. *R. chrysostigma* has a bicolored stigma; two other European species with such colored stigma are *R. maculatus* (De Geer, 1776) and *R. immaculatus* Meigen, 1804. Both species (*R. maculatus* and *R. immaculatus*) could be separated from *R. chrysostigma* by having the grey or black parts of thorax. The main characteristics distinguishing *R. chrysostigma* from another similar species, *R. tringarius* (Linnaeus, 1758), are bicolored stigma and strong black setae on the palpi, lower part of the head and on the apical quarter-to-half of all coxae.

Discussion

There are few published data concerning *R. chrysostigma*. The species was described by Loew (1857) as *Leptis chrysostigma* from Tergeste (= Trieste), based on males only. Meyer-Dür (1862) mentions the species from Switzerland in a paper on the fauna of Burgdorf (North of the Alps). Schiner (1862) published the key covering the territory of Austria and adjacent territories: he caught both sexes in Trieste (which at this time was part of the Austro-Hungarian Empire). Other identification keys were later published by Becker (1921) and Lindner (1925). There is a note in the key by Szilády (1934) that *R. chrysostigma* is known from Görtz (=Gorizia) and Trieste, both currently in Italy: I was unable to find any paper with precise faunistic data of the record from Görtz. The distribution of *R. chrysostigma* in the Catalogue of Palaearctic Diptera (Majer 1988) was noted only from Yugoslavia. This is probably based on the fact that Trieste was an independent territory after World War II, later acquiring its two neighbors, Italy and Yugoslavia (see https://en.wikipedia.org/wiki/Free_Territory_of_Trieste for the details). Majer and Bächli (1997) wrote that the old record mentioned from Switzerland is doubtful and the species' biology unknown. This species is treated as having dubious occurrence in the Checklist of Swiss Diptera (Majer 1998). However, Majer (2017) listed the distribution of *R. chrysostigma* as being Italy and Switzerland.

The data published in our paper represent the first precise records from Slovenia, and moreover, the rediscovery of the species after ca. 90 years. The rediscovery is due to an increase in interest in Rhagionidae after a long period without any studies whatsoever. Similar cases are *R. sardosus* and *R. maculipennis* (Zeegers & Alvarez Fidalgo 2018).

Conclusions

Currently, the distribution of *R. chrysostigma* is known from a small area near Trieste Bay in the northeastern part of the Adriatic Sea: Trieste/Tergeste (Loew 1857, Schiner 1862), Gorizia/Görtz (Szilády 1934), and the records published herein from Ajševica (Fig. 5). The actual distribution range of this species is still in need of investigation.

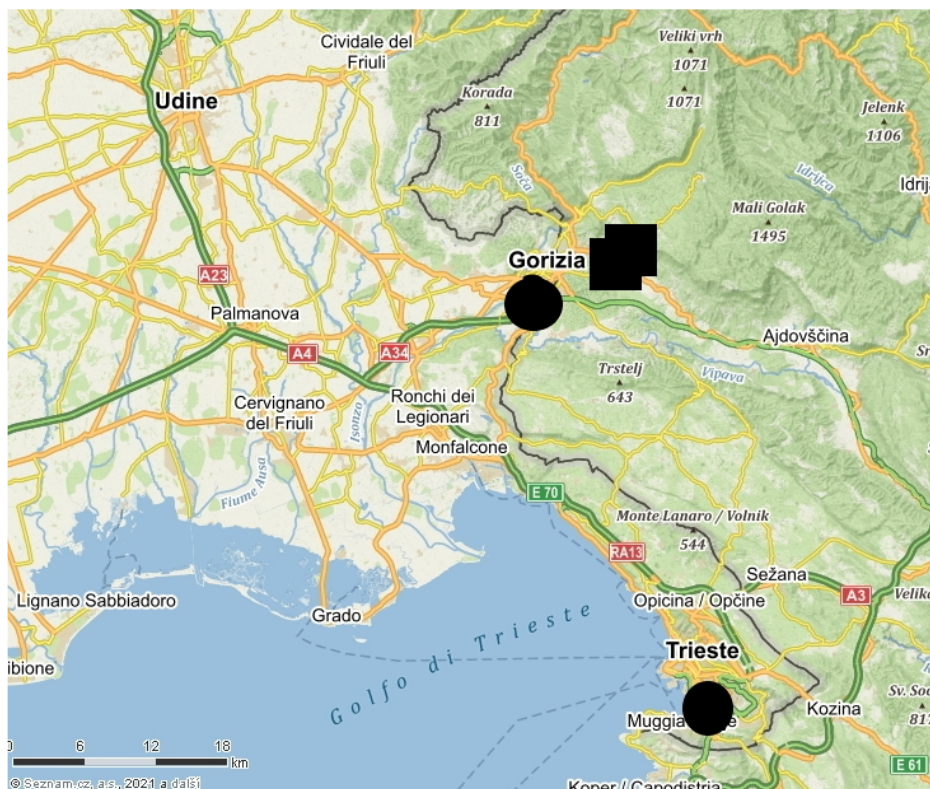


Figure 5. Present known distribution of *Rhagio chrysostigma*. Circles – old records, squares – new records.

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ПОНОВНИ НАЛАЗ *RHAGIO CHRYSOSTIGMA* (LOEW, 1857) (DIPTERA: RHAGIONIDAE)

ЛИБОР ДВОРЖАК

Извод

Поновно откриће *Rhagio chrysostigma* (Loew, 1857) после скоро 90 година, као и први налаз за Републику Словенију су представљени у овом раду. Претходни налази ове врсте су познати само из североисточне Италије и базирани су на старим публикацијама (Loew 1857, Schiner 1862, Szilády 1934).

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