

The genus *Rhaphium* MEIGEN (Diptera: Dolichopodidae) in Iran, with new species records for the country

[Die Gattung *Rhaphium* MEIGEN (Diptera: Dolichopodidae) im Iran,
mit neuen Artnachweisen für das Land]

by

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Abstract

The genus *Rhaphium* MEIGEN, 1803 (Diptera: Dolichopodidae) was studied in Iran, based on specimens collected by sweep net in 2013. Of six species identified, four proved to be new for the Iranian fauna: *Rhaphium antennatum* (CARLIER, 1835); *R. auctum* LOEW, 1857; *R. penicillatum* LOEW, 1850; and *R. lanceolatum* LOEW, 1850. All species are listed along with their geographic distribution. An updated key to the Iranian species of *Rhaphium* MEIGEN is given.

Key words

Dolichopodidae, *Rhaphium*, Palaearctic Region, Iran, new records, key

Zusammenfassung

Die Gattung *Rhaphium* MEIGEN, 1803 (Diptera: Dolichopodidae) wurde im Iran auf der Basis von Exemplaren untersucht, die 2013 mit dem Netzkescher gesammelt worden sind. Von den sechs identifizierten Arten erwiesen sich vier als neu für die iranische Fauna: *Rhaphium antennatum* (CARLIER, 1835); *R. auctum* LOEW, 1857; *R. penicillatum* LOEW, 1850; und *R. lanceolatum* LOEW, 1850. Alle Arten werden mit ihrer geographischen Verbreitung aufgelistet. Ein aktualisierter Bestimmungsschlüssel für die iranischen Arten von *Rhaphium* MEIGEN wird vorgelegt.

Stichwörter

Dolichopodidae, *Rhaphium*, paläarktische Region, Iran, neue Nachweise, Bestimmungsschlüssel

Introduction

The genus *Rhaphium* MEIGEN, 1803 belongs to the subfamily Rhamphinae, comprising about 200 described species in the world, 90 of which are known from the Palaearctic Region (GRICHANOV et al. 2011). Species of *Rhaphium* range from 1.5 to 5.7 mm. The species of this genus differ from other genera by the following characters: upper part of proepisternum in front of anterior spiracle with long hairs; postpedicel triangular, and usually much longer than basal width; arista-like stylus strictly apical; hypopygium sessile, cercus often elongate; veins M and R₄₊₅ often slightly converging (GRICHANOV et al. 2011).

Recently NEGROBOV (1986) published a key to the Palaearctic and Nearctic species of the *nasutum* species group, WANG et al. (2005) provided a key to the Palaearctic and Oriental *Rhaphium* species found in mainland China, NAGLIS (2009) published a key to the Palaearctic species of the *albifrons* species group, and NEGROBOV & GRICHANOV (2010) published a key to the Palaearctic species of the *crassipes* group.

As is well known, many species of dolichopodid flies may be observed in the surroundings of water. Some genera seem to have more intense binding to moisture than others, and species of the genus *Rhaphium* belong to this ecological group. These flies are often collected with a sweep net over moist ground, by muddy puddles, at the swampy edges of rivulets or brooks, and in damp grassland. The dolichopodid fauna of Iran has been poorly studied so far and only two species of this genus have been recorded (NEGROBOV & MATILE 1974, GRICHANOV et al. 2010). The objective of this study is to provide a faunistic contribution to the *Rhaphium* species of Iran.