



# Article

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## *Rhaphium* Meigen (Diptera, Dolichopodidae) from the Taimyr Peninsula (Russia), with description of a new species

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### Abstract

Eight species of *Rhaphium* Mg. are recorded from the southern tundra of the Taimyr Peninsula (Russia), including the description of a new species, *Rhaphium borisovi* Negrobov, Barkalov & Selivanova **sp. nov.** The new species is similar to *Rhaphium gruniniani* Negrobov and differs from it by yellow fore coxa, equal length of hind tarsomeres 1–2 and broader inner lobe of cercus. The female of *Rhaphium beringiense* Negrobov & Vockeroth is described. A key to Siberian species (exclusive of Far East species) of the genus *Rhaphium* is presented and morphological characters of all species are illustrated.

**Key words:** *Rhaphium*, Dolichopodidae, new species, southern tundra, key to species

### Introduction

Negrobov (1979) revised the genus *Rhaphium* Meigen, 1803 and treated *Porphyrops* Meigen, 1824 and *Xiphandrium* Loew, 1857 as *Rhaphium* (s.lat.). He transferred 11 Palearctic species from the genera *Porphyrops* and *Xiphandrium* to *Rhaphium*. Following this revision 13 new species and 1 subspecies of *Rhaphium* were published subsequently from different regions of the Palearctic (Negrobov 1986; Negrobov & Onischenko 1991; Yang 1998; Wang *et al.* 2005; Negrobov & Grichanov 2010; Negrobov *et al.* 2011). To date there are nearly 200 species of *Rhaphium* known worldwide, 89 of them are distributed in the Palearctic Region.

A comparatively large number of specimens of Dolichopodidae were collected in the Taimyr Peninsula (Russia) during an expedition conducted by the Institute of Systematics and Ecology of Animals of Russian Academy of Sciences (Novosibirsk) in 2011–2012. This paper represents the second article devoted to the fauna of Dolichopodidae of the southern tundra of Taimyr. In the first paper (Selivanova *et al.* 2012) a new species of *Dolichopus* was described. The present study lists eight species of *Rhaphium*, with a key to Siberian species of the genus and the description of a new species.

### Material and methods

The material was collected in the southern tundra and forest-tundra of Taimyr Peninsula (Russia) at three locations (Fig. 8)—1. Ary-Mas field station of Taimyr Reserve, 72.5°N, 101.94°E (Fig. 1A); one of the most northern forest areas of the world (Wood Island). 2. Bank of the river Zakharova Rassokha, 72.7°N, 101.08°E (Fig. 1C); the forest-tundra zone. 3. Left bank of river Kotuj, 114 km from Khatanga settlement, 71.4°N, 103°E (Fig. 1B); the southern tundra zone. In all locations insects were collected by three methods—individual catching, sweep netting and yellow pans traps. The large and diverse material was collected in the tundra by