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## A review of the genus *Drymeia* Meigen, 1826 (Diptera: Muscidae) in Russia

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## Abstract

A key is provided to the 26 species of the genus *Drymeia* Meigen, 1826 known from Russia and four additional species that may be found in Russia (*D. brumalis* (Rondani, 1866), *D. cantabrigensis* (Huckett, 1965), *D. gymnophthalma* (Hennig, 1963), *D. similis* (Malloch, 1918)). The key includes the 10 new species here described from the mountains of South Siberia (*D. acrostichalis* sp. nov., *D. aristata* sp. nov., *D. cilitarsis* sp. nov., *D. glabra* sp. nov., *D. grandis* sp. nov., *D. grisea* sp. nov., *D. longiseta* sp. nov., *D. phaonina* sp. nov., *D. puchokana* sp. nov., *D. trisetata* sp. nov.) and other two new species from the Russian Arctic (*D. cristata* sp. nov., *D. taymyrensis* sp. nov.). Five species (*D. fasciculata* (Stein, 1916), *D. firthiana* (Huckett, 1965), *D. groenlandica* (Lundbeck, 1901), *D. quadrisetosa* (Malloch, 1919), *D. neoborealis* (Snyder, 1949)) are newly recorded from Russia. Three new synonymies are proposed: *D. pribilofensis* (Malloch, 1921) (syn: *D. inaequalis* (Malloch, 1922)), *D. setibasis* (Huckett, 1965) (syn: *D. gymnophthalma sibirica* (Lavčiev, 1971, unavailable junior secondary homonym) and *D. quadrisetosa* (Malloch, 1919) (syn: *D. amurensis* (Lavčiev, 1971)). The male terminalia and the female ovipositors of the new species are illustrated. New faunistic data are given for some previously described species of Russian *Drymeia*.

**Key words:** Palaearctic, Asian mountains, high altitudes, Altai Mountains, Taymyr Peninsula

## Introduction

Flies of the genus *Drymeia* Meigen, 1826 are known from four biogeographic regions but it is a mainly Holarctic genus. Including the new species described in this paper, some 130 *Drymeia* species are known in the world fauna, (Huckett 1965a, b, 1966; Pont 1986; Fan 2008; Xue *et al.* 2008, 2009; unpubl. data). The greatest numbers of species are found in the Palaearctic (88 species: Pont 1986; Fan 2008; Xue *et al.* 2008, 2009) and Oriental (34 species, mostly Sichuan and Yunnan: Fan 2008; Xue *et al.* 2008, 2009) Regions. In the Nearctic Region 21 species are known (Huckett 1965a, b, 1966) and only one species (*D. aterrima* (Wulp, 1896)) in the Neotropical Region.

The greatest diversity of the genus is in the Asian mountains, especially at high altitudes (Xue *et al.* 2007, 2009; Michelsen 2011; Sorokina 2012), where the adults feed on both nectar and pollen and play a substantial role as pollinators of flowering plants (pers. obs.). Unfortunately there is little information about the *Drymeia* fauna of many different mountain systems because of difficulties of access to many of these localities. At present the greatest numbers of species (56) are found in the Qinghai-Xizang (Tibetan) Plateau (Xue *et al.* 2008, 2009); 12 species are found in the Himalaya-Karakorum Mts (Pont 1981; Shinonaga & Singh 1994; Shinonaga 2007), 8 species in the European Alps (Michelsen 2011), and 6 species in the Caucasus Mts (Pont, unpublished). Only individual species are known from other mountain systems. In addition to their upland distribution, *Drymeia* species occur abundantly in arctic landscapes where several species are very abundant (Sorokina & Khruleva 2012). Ten species are known from arctic North America, from Northern Canada, Alaska and Greenland (Huckett 1965 a, b; Danks 1981)

Knowledge of the *Drymeia* fauna and the distribution patterns of this genus in Russia could be significantly enhanced through field research in the Arctic and in the far north. Unfortunately, these Russian territories have scarcely been studied since Becker *et al.* (1915). Prior to the present work, only 12 species of *Drymeia* had been recorded from Russia (Hennig 1962 a, b; Pont 1986; Sorokina 2012): *D. alpicola* (Rondani, 1871), *D. amurensis* (Lavčiev, 1971), *D. chillcotti* (Huckett, 1965), *D. gymnophthalma* ssp. *sibirica* (Lavčiev, 1971), *D. hamata* (Fallén, 1823), *D. inaequalis* (Malloch, 1922), *D. pribilofensis* (Malloch, 1921), *D. segnis* (Holmgren, 1883), *D. setibasis* (Huckett, 1965), *D. sibirica* (Hennig, 1962), *D. tetra* (Meigen, 1826) and *D. vicana* (Harris, 1780). Expeditions since 2005 to different areas of Siberia by members of the Institute of Systematics and Ecology of Animals, Novosibirsk, have collected a large quantity of Diptera, and considerable numbers of *Drymeia* have been found in this material from the mountains (Altai-Sayan region) and from the Russian Arctic (Wrangel Island, Taymyr Peninsula, Chukotka Autonomous Okrug). *Drymeia chillcotti* (Huckett, 1965), *D. pribilofensis* (Malloch, 1921) and *D. setibasis* (Huckett, 1965) were recorded as new for Russia (Sorokina 2012).

The present paper records 26 species from Russia, of which five species are new records for Russia and 12 species are new for science. A key to males of the *Drymeia* species currently known from Russia, and also to females where known, is given below.