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## New species of the genus *Phaonia* R.-D., 1830 (Diptera, Muscidae) from Central Asia

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### Abstract

A list of species of *Phaonia* Robineau-Desvoidy, 1830 of Central Asia is given, and four new species of *Phaonia* are described from Tajikistan, Uzbekistan and Turkmenistan (*P. babarabica* sp. nov., *P. juglans* sp. nov., *P. modesta* sp. nov. and *P. ninae* sp. nov.). The male terminalia of all species and ovipositors of *P. ninae* sp. nov. and *P. modesta* sp. nov. are figured. Previous literature on the genus *Phaonia* in Central Asia is reviewed.

**Key words:** Muscidae, *Phaonia*, flies, new species, Tajikistan, Turkmenistan, Uzbekistan.

### Introduction

Many years ago, larval and puparial material of Muscidae was collected by N.P. Krivosheina (Moscow) in Central Asia, particularly from Tajikistan and Turkmenistan. The bred imagines from these puparia belong to the genus *Phaonia* Robineau-Desvoidy, 1830 and were kindly entrusted to me for identification recently. According to Hennig's key to Palaearctic *Phaonia* (1963) and Chinese keys to *Phaonia* (Ma *et al.*, 2002), these flies do not belong to any of the known species and do not fully agree with descriptions of similar species.

*Phaonia* Robineau-Desvoidy, 1830 is one of the largest genera of the Muscidae and contains about 650 species (Pape & Thompson 2010). The species are found in every biogeographic region but the greatest diversity of the genus is in the Palaearctic (302 species) and Oriental (170) regions. Although the genus *Phaonia* is speciose in the Palaearctic, many parts of this region are almost completely unworked. The European fauna (Hennig 1963; Gregor *et al.* 2002) and the Chinese fauna (Ma *et al.*, 2002, Xue *et al.*, 2006, Xue *et al.*, 2009, Xue & Zhang 2013 a, 2013 b) are very well known, and the fauna of Mongolia and the Russian Far East (Zinoviev 1980 a, b, 1981, 1990) is also relatively well known. The *Phaonia* fauna of other areas of the Palaearctic is very under-investigated, and this applies particularly to areas such as Russian Siberia, West Asia and Central Asia.

Central Asia is the core region of the Asian continent and stretches from the Caspian Sea in the west to China in the east and from Afghanistan in the south to Russia in the north. In modern contexts, all definitions of Central Asia include these five republics of the former Soviet Union: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan ([http://en.wikipedia.org/wiki/Central\\_Asia](http://en.wikipedia.org/wiki/Central_Asia)). Central Asia is an extremely large region of varied geography, including high passes and mountains (Tian Shan, Kopet Dag, Pamir, Dzungarian Alatau, Saur, Tarbagatai), vast deserts (Kara Kum, Kyzyl Kum, Taklamakan), and, in particular, treeless, grassy steppes. Such a variety of ground features has given rise to a unique fauna of *Phaonia* in this region, with many endemic species. However, information about this fauna is restricted to Hennig's monographs (1963) and the papers of Zinoviev (1983), Sychevskaya (1966, 1970, 1972) and Malyanov (1993). The muscid material collected by the staff of the Zoological Museum (St Petersburg) in Central Asia and Mongolia during the Soviet period was the basis for these papers. Zinoviev (1983) studied the greater part of this material, including the material processed by Hennig, and recorded 25 species of *Phaonia* for Central Asia. Later Malyanov described two species, one from Kyrgyzstan (*Phaonia kirghizorum* Malyanov, 1993) and one from Kazakhstan (*Phaonia zinovjevi* Malyanov, 1993). About 50 percent of these species have not been found outside Central Asia.