

First record of *Sympecma gobica* (Odonata: Lestidae) from Iran

První nález šidlatky *Sympecma gobica* (Odonata: Lestidae) z Iránu

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Abstract. The species *Sympecma gobica* Förster, 1900 is recorded for the first time from Iran, collected from Khorasan Razni province. Details of the habitat are provided. All three species of the genus *Sympecma* are now known from Iran.

INTRODUCTION

The genus *Sympecma* Burmeister, 1839 includes only three species (Schorr & Paulson 2012) and its distribution is exclusively Palaearctic. It contains the following species: *Sympecma fusca* (Vander Linden, 1820), *Sympecma gobica* Förster, 1900 and *Sympecma paedisca* (Brauer, 1877). The status of *Sympecma gobica* as a distinct species has been confirmed by Dumont & Borisov (1993a). Larvae of *S. gobica* was described by Dumont & Borisov (1993b). The genus *Sympecma* includes only species that overwinter as adults, and after emergence adults are often found away from water in open areas, resting on grasses and in bushes (Jödicke 1997).

The species *S. gobica* was described as a subspecies of *S. annulata* Selys, 1887 (valid name *S. paedisca* (Brauer, 1877) (Schorr & Paulson 2012)) by Foerster (1900) from material collected by Dr. J. Holderer during his 1897–1899 expedition to Central Asia. Type material (syntypes) of *S. gobica* is deposited in the type collection of the University of Michigan Museum of Zoology (UMMZ), Ann Arbor, Michigan (Garrison et al. 2003). The type locality of the species is Chami (Foerster 1900, Garrison et al. 2003) in Xinjiang autonomous region, northwest China, in the center of the Eurasian continent. Chami was one of the oases situated between the Taklamakan desert and the Gobi desert, and was part of the Silk Road along the Tian Shan from the Mediterranean to the center of China (Synek 2008).

MATERIAL AND METHODS

All the specimens were identified by the author using Dumont & Borisov (1993a) and Kalkman (2006). All the material was collected using an entomological net and stored in alcohol. Authors' additional remarks are given in square brackets.

RESULTS AND DISCUSSION

Sympecma gobica Förster, 1900

Material examined. Iran, Khorasan Razni prov., stream 5 km S Mina, 37°18.1'N 58°58.5'E, 1060 m, 22.v.2006, 1 ♀ [adult]; stream W Amir Abad, 36°34.1'N 59°59.7'E, 1250 m, 22.v.2006,



Fig. 1. Map with locations of *Sympecma gobica* Förster, 1900 in Iran.

Obr. 1. Mapa s lokalitami *Sympecma gobica* Förster, 1900 v Íránu.

1 ♂ [adult], both Pavel Chvojka leg., Petr Jeziorski det., coll. National Museum, Prague, Czech Republic.

The dragonfly fauna of Iran was studied in detail for the first time by Schmidt (1954) and only a few papers have been published subsequently (e.g. Blom 1992, Lohmann 1990, 1992, 1993a,b, Dumont & Heidari 1996, Dumont 1998). Heidari & Dumont (2002) published an annotated checklist of the odonatofauna of Iran summarizing records of 95 species and sub-species. Heidari & Dumont (2002), Kalkman (2006) and later published papers (e.g. Ebrahimi et al. 2009, Ghahari et al. 2009, Kiany & Minaei 2009, Sadeghi & Mohammadalizadeh 2009, Sakenin et al. 2011), did not include *S. gobica* as part of the Iranian dragonfly fauna. Kalkman (2006) predicted the occurrence of *S. gobica* in northeastern Iran, where it has now been found (Fig. 1). First record of this species for Iran.

Both specimens of *S. gobica* were collected near streams in open mountainous landscape. The two streams are very similar, shallow and rocky, with slowly flowing water and a width of about 1 m. While the banks of the stream near Amir Abad were almost without vegetation,

the second stream near Mina had banks with well developed riparian vegetation. In both cases adults were found. While these may have been some distance from their place of emergence, is also not excluded that the species was breeding in these localities. All three species of the genus *Sympecma* frequently occur syntopically and synchronically in Central Asia, without visible interbreeding or hybridisation (Dumont & Borisov 1993a). However, at both the locations where *S. gobica* was found, neither of the other species was recorded.

Sympecma gobica is recorded only from Asia. Known from China (Foerster 1900), Russia (Ketenchiev & Haritonov 1998), Kazakhstan (Chaplina et al. 2007), Kyrgyzstan (Borisov & Haritonov 2007), Tadzhikistan, Turkmenistan and Uzbekistan (Schoorl 2000), the present article formally extends its distribution to Iran. It is not yet reported from Armenia, Azerbaijan, Georgia (Kalkman 2006), Mongolia (Dumont 2003), Turkey (Kalkman et al. 2003) or Pakistan (Zia et al. 2011).

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SOUHRN

Rod *Sympecma* Burmeister, 1839 zahrnuje pouze tři druhy (Schorr & Paulson 2012) a je výhradně palearktický. Jde o následující druhy: *Sympecma fusca* (Vander Linden, 1820), *Sympecma gobica* Förster, 1900 a *Sympecma paedisca* (Brauer, 1877). Oprávněnost *S. gobica* jako samostatného druhu potvrdili ve své práci Dumont & Borisov (1993a). Šídlatka *S. gobica* byla popsána z materiálu vážek shromážděných Dr. J. Holdererem během expedice do střední Asie v letech 1897–1899 (Foerster 1900). Typová lokalita druhu je Chami (Foerster 1900, Garrison et al. 2003) ležící v provincii Sin-t'iang v severozápadní Číně. Lokalita Chami byla jedna z oáz ležících mezi poušti Taklamakan a poušti Gobi a byla součástí Hedvábné stezky podél pohoří Ťan-šan ze Středozemí do Číny. Šídlatka *S. gobica* je rozšířena pouze v Asii. Je známa z Číny (Foerster 1900), Ruska (Ketenchiev & Haritonov 1998), Kazachstánu (Chaplina et al. 2007), Kyrgyzstánu (Borisov & Haritonov 2007), Tádžikistánu, Turkmenistánu, Uzbekistánu (Schoorl 2000) a v této práci ji prvně uvádím z Iránu.