https://www.doi.org/10.33910/2686-9519-2022-14-4-616-619
http://zoobank.org/References/B1999F24-68B1-4A72-85D2-E870D796AB0B

UDC 595.733

The first record of *Orthetrum sabina* (Drury, 1770) (Odonata: Libellulidae) in Russian Federation

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Abstract. The paper reports the results of the odonatological examination of ponds in the Natural Ornithological Park in the Imeretinskaya Lowland in Adler (43°24′1″N; 39°58′22″E) carried out on 22 July 2020. In total, we found 12 Odonata species, including *Orthetrum sabina* (Drury, 1770) that was recorded on the Russian territory for the first time. The found specimens correspond exactly to the subspecies *Orthetrum sabina nigrescens* (Bartenev 1929; Bartenev 1930) described by Bartenev from Lake Inkit. The current status of the subspecies is discussed. Including this discovery, the dragonfly fauna of the Russian Federation comprises 157 species.

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Keywords: Russia, new country record, Caucasus, Black Sea coast, Krasnodarsky Region, Odonata, dragonflies, *Orthetrum sabina*

Первая находка *Orthetrum sabina* (Drury, 1770) (Odonata: Libellulidae) на территории Российской Федерации

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Аннотация. Представлены результаты одонатологического обследования г. Адлер: пруды в Природном орнитологическом парке в Имеретинской низменности (43°24′1″N; 39°58′22″E) 22 июля 2020 года. Всего было обнаружено 12 видов стрекоз, среди которых *Orthetrum sabina* (Drury, 1770) впервые достоверно приводится для территории Российской Федерации. Найденные экземпляры в точности соответствуют описанному Бартеневым с озера Инкит подвиду *Orthetrum sabina nigrescens* (Bartenev 1929; Bartenev 1930). Обсуждается проблема современного статуса подвида. С учетом данной находки фауна стрекоз Российской Федерации насчитывает 157 видов.

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Ключевые слова: Россия, новая находка для страны, Кавказ, Черноморское побережье, Краснодарский край, Odonata, стрекозы, *Orthetrum sabina*

Orthetrum sabina is a ubiquitous yet rare species found in the Caucasus (Ketenchiev, Haritonov 1998). At the same time, the authors do not provide actual data on the distribution of the species in the region or any specific localities. As for the territory of Russia, the species distribution there is not proved. However, there are reports of this species from Lake Inkit (Pitsunda, Abkhazia) close to the Russian border (Bartenev 1930), where I. Voinov and V. Onishko also observed *Orthetrum sabina* in large numbers on 08.07.2018 during an odonatological survey of the Pitsunda Region. Modern publications, namely *The guide of the dragonflies of Eastern Europe and Caucasus* (Skvortsov 2010) and *Atlas of the dragonflies and damselflies of Europe* (Boudot, Kalkman 2015), state that the species is absent in Russia. *The check-list of Odonata of the Russian Federation* (Malikova, Kosterin 2019) also does not include *Orthetrum sabina*.

On 22 July 2020 we discovered a small population of *Orthetrum sabina* in Adler — this is the first documented finding of this species in Russia. Photos and information about the ecology of the species were submitted for publication in the book *Dragonflies of Russia. An illustrated photo guide* (Onishko, Kosterin 2021). Taking into account the latest published data, the dragonfly fauna of Russia has 157 species, including the new discovery (Onishko et al. 2021).

Material: Adler, Sochi Park, 22.07.2020, ponds in the Imeretinskaya Lowland, 2♂, Voinov I. O.

Habitat and observation. The visited ponds are located in the center of Sochi Park between the Mzymta and the Rsou Rivers to the south of the Sukhumi Highway. These are artificial ponds in the Natural Ornithological Park in the Imeretinskaya Lowland (43°24′1″N; 39°58′22″E), located less than 500 meters away from the Black Sea coast and surrounded by an urban area (Fig. 1: *1*). The territory adjacent to the ponds is regularly maintained by the park staff; only a narrow (10–20m) strip of vegetation along the coast remains untouched. Access to the water is limited by blackberry bushes and other dense thickets. The ponds are surrounded by a stand of trees, mainly willows, which often come close to the shore. Aquatic vegetation is sparse and represented mainly by reeds and cattail.

On 22 July from 11:00 till 15:00 only three males of *Orthetrum sabina* were recorded. Two of them were observed on the water surface, one — on a clearing near the pond (Figs. 1: *2, 3*). Dragonflies observed near the water shared a niche with *Orthetrum albistylum* Selys, 1848, *Orthetrum cancellatum* Linnaeus, 1758, and *Crocothemis erythrea* Brulle, 1832 and held shore sections of about 20 meters. They flew around the pond along the shore and often perched on sticking dry stalks of grass. No aggression towards representatives of other species was observed. The male encountered on the clearing flew around in the shade of trees and perched on blackberry bushes; there were no other dragonflies nearby. Furthermore, eight more species of dragonflies were noticed nearby on the same day: *Erythromma viridulum* Charpentier, 1840, *Ischnura elegans* Vander Linden, 1820, *Anax imperator* Leach, 1815, *Anax parthenope* Selys, 1839, *Orthetrum coerulescens anceps* Schneider, 1845, *Sympetrum fonscolombii* Selys, 1840, *Selysiothemis nigra* Vander Linden, 1825, and *Pantala flavescents* Fabricius, 1798.

Discussion. *Orthetrum sabina* is a South Asian species with a wide range and profound geographic variability. Previously, the subspecies *Orthetrum sabina nigrescens* (Bartenev 1929; 1930) was described from Lake Inkit. It was distinguished by a darker body color. The external similarity of the dragonflies collected in Adler and the dragonflies we had observed earlier on Lake Inkit as well as the distance of less than 50 km between these points allow us to conclude that *Orthetrum sabina* specimens found in Russia should be attributed precisely to the dark form described by Bartenev. At present, the subspecies *Orthetrum sabina nigrescens* is not recognized as valid; however, it has not been explicitly synonymized to the nominotypical one, and there is, indeed, a no-

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Рис. 1. *Orthetrum sabina: 1* — участок пруда, где встречен первый самец; *2* — первый самец, пойманный на своей территории на пруду; *3* — самец, пойманный на поляне; *4* — самец с озера Инкит, Абахазия, 08.07.2018. Автор фото: В. Онишко; *5* — самец из города Сиемреап, Камбоджа, 29.11.2017

Fig. 1. *Orthetrum sabina: 1* — pond area where the first male was found; *2* — the first male captured on his territory at the pond; *3* — the male captured on a clearing; *4* — the male from Lake Inkit, Abkhazia, 08.07.2018. Photo by V. Onishko; *5* — the male *Orthetrum sabina* from Siem Reap, Cambodia, 29.11.2017

https://www.doi.org/10.33910/2686-9519-2022-14-4-616-619

ticeable difference in color between dragonflies from Transcaucasia and ones from the main range (Figs. 1: *4, 5*). The issue requires further study including larger series of specimens from the entire range of the species.

Acknowledgements

I express my deepest gratitude to V. Onishko (Moscow) and O. Kosterin (Novosibirsk) for consultations and provided literature.

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For citation: Voinov, I. O. (2022) The first record of *Orthetrum sabina* (Drury, 1770) (Odonata: Libellulidae) in Russian Federation. *Amurian Zoological Journal*, vol. XIV, no. 4, pp. 616–619. https://www.doi.org/10.33910/2686-9519-2022-14-4-616-619

Received 8 August 2022; reviewed 6 October 2022; accepted 11 October 2022.

Для цитирования: Войнов, И. О. (2022) Первая находка *Orthetrum sabina* (Drury, 1770) (Odonata: Libellulidae) на территории Российской Федерации. *Амурский зоологический журнал*, т. XIV, № 4, с. 616–619. https://www.doi.org/10.33910/2686-9519-2022-14-4-616-619

Получена 8 августа 2022; прошла рецензирование 6 октября 2022; принята 11 октября 2022.