FIRST CONFIRMED RECORD OF *SYMPETRUM STRIOLATUM* (CHARPENTIER, 1840) IN BELARUS

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Introduction

The study of biological diversity, its structure, dynamics and geographical distribution is one of the priority tasks of fundamental research of the biosphere (Chernov, 1991).

The latest published list of dragonflies in Belarus indicates 60 species (Buczyński *et al.*, 2006). However, in recent years, a revision of this order of insects has made it possible to expand the list to 69 species (Buczynski & Moroz, 2008; Lukashuk, 2009; Kitel *et al*., 2015; Ostrovsky, 2016; Kitel *el al.*, 2017; Piretta & Assandri, 2019; Kitel, 2021). The available list of species is not comprehensive and in the near future it is possible to find new previously unknown species for the fauna of Belarus, for instance *Anax ephipigger*. This is possible, among other things, under the influence of regional climate change.

One of the widely represented genera of dragonflies on the territory of Belarus is *Sympetrum*. 8 species are noted in scientific publications: *S. danae* (Sulzer, 1776), *S. depressiusculum* Allioni, 1766, *S. flaveolum* (Linnaeus, 1758), *S. pedemontanum* Allioni, 1766, *S. sanguineum* (Muller, 1764), *S. vulgatum* (Linnaeus, 1758) (Buczyński *et al.*, 2006), *S. fonscolombii* Selys, 1840 (Kitel *et al.*, 2015), *S. meridionale* Selys, 1841 (Ostrovskij, 2016). For a long time, the status of *Sympetrum striolatum* (Charpentier, 1840) in Belarus remains unclear.

Material and Methods

Photos of the imago (♂) of dragonflies were made by A. Sinchuk in vill. Verkhalesse (Kobryn district, Brest region) on 10 08 2008 (52.082185N, 24.302593E) with the camera Praktica DCZ 8.2. The observation is published on web-site iNaturalist (# observations 42576440) and GBIF (# occurrence 2609164567) (iNaturalist, 2022). The species was identified using specialized keys (Spuris, 1964; Dijkstra, 2010; Smallshire & Swash, 2018; Brock, 2021).

Results and Discussion

Arnold N.M. (1901) mentions *Sympetrum striolatum* under the name of *Libellula striolata* (Charp.) for Magilyou province but does not specify a place of observation. The

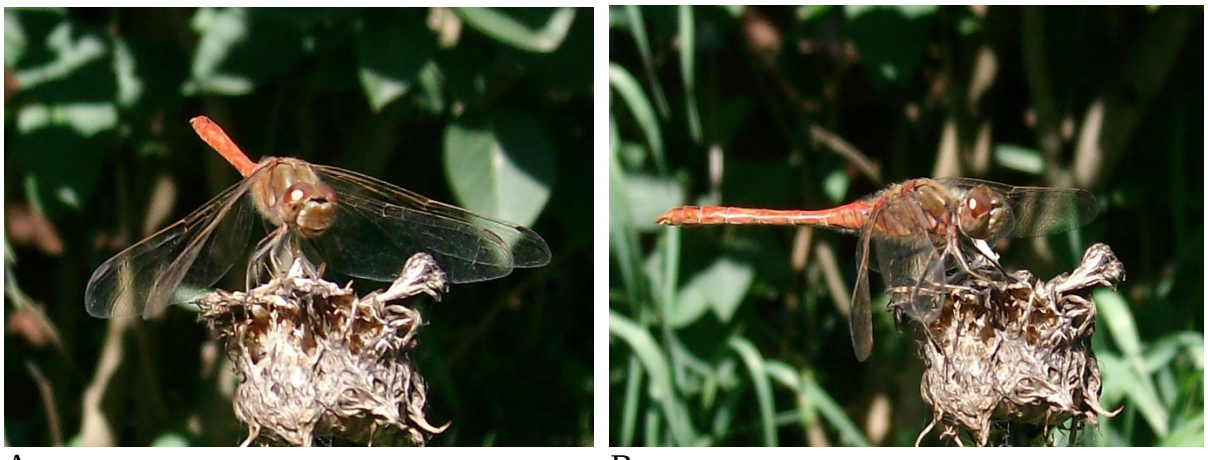
collection specimen was not found at the Zoological Institute of the Russian Academy of Sciences, and it is not possible to confirm the correctness of the identification. Bartenev A.N. (1919) doubts that the identification was correct and assumes it could be confused with *S. vulgatum*.

For the area to the north of Glubokae Znamierowska-Prufferowa M. (1927) writes that on 06 08 1922 one female of the genus *Sympetrum* resembled *S. striolatum* but the lack of more examples and great distance to the then known range of distribution of this species forces her not to add it to the official list; this finding does not have a number in the publication.

This species has been added to the fauna of Berezinskij strict reserve based on the result of the study of zoobenthos in 2001–2002 (Tishchenkov *et al*., 2013). The identification of the larvae of the genus *Sympetrum* needs experience and the data of these authors concerning dragonfly larvae (Tishchikov & Tishchikov, 1999) previously was impunged (Buczynski & Moroz, 2008).

Kvach Yu.Z. (2019) publishes the list of the dragonflies of Lida district (Grodna region) and informs that he took a photo of *S. striolatum* but due to author's doubt it is not mentioned in the final grid with all species. On the request the author sent the photos (taken on 04 07 2017) to us and despite the dragonfly is photographed only from one angle, the full face, due to the black at base of frons does not extend prominently along eyes it resembles *S. striolatum*.

On web-site https://observation.org/ there are two observations (from 2012 and 2015) of this species in Belarus but none of them with photo, hence due to the absence of the proofs it is better not to consider these records until additional data is not available. On web-site https://www.inaturalist.org/ only one observation contains the photos by which is possible to see defining signs. For now, it is the only record confirmed by photos (Fig. 1: A, B).



A B

Fig. 1. *Sympetrum striolatum* (Charpentier, 1840) imago (♂): (A) front view; (B) side view (Photo: A. Sinchuk), vill. Verkhalesse (Kobryn district, Brest region), Belarus

It is assumed that *S. striolatum* can inhabit the entire territory of Belarus, but the species is rare.

Thus, 9 species of the genus *Sympetrum* have been established on the territory of Belarus. Currently, according to published data, 70 species of dragonflies are registered in the fauna of Belarus.

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Pirmasis patvirtintas *Sympetrum striolatum* stebėjimas (Charpentier, 1840) Baltarusijoje

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Publikacijoje pateikiamas pirmas patvirtintas naujos Baltarusijos faunai laumžirgių rūšies – *Sympetrum striolatum* (Charpentier, 1840) stebėjimo faktas. Šiuo metu šalyje užregistruotos 9 *Sympetrum* genties rūšys, o viso, pagal publikuotus duomenis, Baltarusijos faunoje – 70 laumžirgių rūšių.

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