

NEW RECORD OF DAMSELFLY *LESTES BARBARUS* IN THE SOUTH OF LITHUANIA (ODONATA: LESTIDAE)

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Introduction

Dragonflies and damselflies of the Lithuanian fauna have been recently check-listed by A. Stanionytė (1993). The latest adjustments have been done by R. Bernard (2002) and his colleagues (Bernard & Samolag, 2002; Bernard & Ivinskis, 2004). According to their (partly unpublished) data, the check-list of Odonata of the Lithuanian fauna includes 61 species. *Lestes barbarus* has not been included into it.

In 1952, J. Prüffer has published a brief note on some highlights of his studies of the odonate fauna of the Vilnius region carried out in the years 1927–43 (Prüffer, 1952). In this note, *L. barbarus* is mentioned for the locality of Gulbiny (now Gulbinai, 54°47'N, 25°17–18'E, a part of the Vilnius city). No other data on this species are available to us since then.

Lestes barbarus is widespread in central and southern Europe, reaching Mongolia and India. In the northern Europe, its populations are more scattered. The species is known from Belgium, the Netherlands, Denmark and Poland (Askew, 1988). The recent records show that *L. barbarus* is spreading northwards during the last few decades (Dijkstra, 2006). Therefore, increasing range and abundance of populations, possibly due to climate change, may be expected at its northern distribution limit, including Lithuania.

Material and methods

The damselflies were collected using entomological net in the environs of Puvočiai village (Southern Lithuania). They were identified using characters given by Askew (1988) and Dijkstra (2006). The specimens are preserved in the collection of the Institute of Ecology of Vilnius University.

Results

Lestes barbarus (Fabricius, 1798)

Varėna distr., Puvočiai (54°07'00"N, 24°18'20"E), 1♂ (damaged specimen without explicit collection data); 17 07 2007, 1♀ (coll. R. Ladanauskaitė, A. Norkutė, T. Braziulis). The latter specimen has weakly sclerotized eyes, deformed while drying, thus proving that it is freshly emerged and certainly has a local origin.

Discussion

Two specimens of Southern Emerald Damselfly (*L. barbarus*) were found in the

comparative collection of insects of the Vilnius University field station in Puvočiai. The male has no data label, but most probably has been collected in the environs of the field station by biology students before the year 2000. A freshly emerged female of *L. barbarus* was captured by students in 2007 at small ponds southwards of the confluence of the rivers Grūda and Merkys at the edge of Puvočiai village.

L. barbarus seems to be slightly larger than most of other *Lestes*. Among the European congeners, it shares a yellow underside of back of the head with *L. virens*, however *L. barbarus* is easily distinguished by comparatively pale and contrastingly bicoloured yellow-brown pterostigma (Fig. 1) and by more extensive pale markings, especially much wider pale-yellow antehumeral stripes of thorax (Fig. 2). This species is also characterized by obtuse sheath of ovipositor in female and the form of abdominal appendages in male.

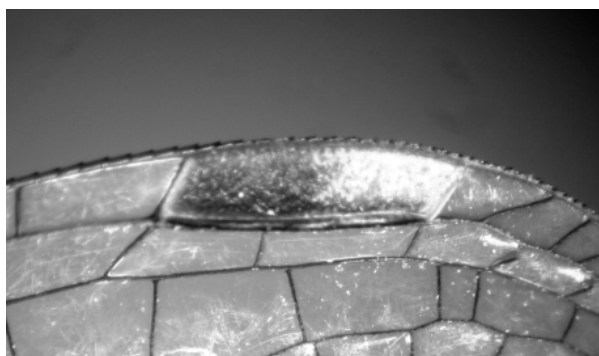


Figure 1. Pterostigma of *Lestes barbarus*.



Figure 2. Thorax of *Lestes barbarus*, anterolateral aspect.

Although exuviae or larvae of *L. barbarus* were not found in Lithuania up to now, the capture of a recently emerged female implies the presence of permanent population of the species in the South of Lithuania with high probability. This suggestion is supported by observations that adults of *L. barbarus* tend to return for breeding to the same pond where they have emerged (Corbet, 2004).

Including *L. barbarus*, 62 dragonflies and damselflies have been recorded in Lithuania. One of these species, *Sympetrum eroticum* (Selys, 1883), collected by A. Stanionytė in 1988 (Stanionytė, 1989), most probably has been accidentally introduced to Lithuania from the Amur river basin together with grass carp fry. Obviously, it did not establish, as it was never found here later. Therefore, *S. eroticum* must be removed from the check-list of Odonata of the Lithuanian fauna. Currently, the latter should include 61 species.

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Pietinė žaliuji strėlikė (*Lestes barbarus*) – pietų Lietuvoje naujai aptikta strėlikių (Odonata: Lestidae) rūšis

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Santrauka

Pateikiami duomenys apie 2007 metais Puvočių (Varėnos raj.) apylinkėse naujai aptiktą žaliųjų stėlikių (Lestidae) rūšį - pietinę žaliają strėlikę (*Lestes barbarus* (Fabricius, 1798)), kuri nebuvo aptinkama nuo tarpukario laikų. Nurodoma sugavimo vieta ir kiti duomenys, aptariamieji pagrindiniai šios rūšies skiriamieji bruožai. Įskaitant šią rūšį ir išbraukus, matyt, atsitiktinai introdukuotą Amūro upės baseino ir vėliau išnykusią skėtę *Sympetrum eroticum*, Lietuvos faunos žirgelių sąrašą dabar sudaro 61 rūšis.

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