

**THE SECOND CONFIRMED RECORD OF *STICTOTARSUS DUODECIMPUSTULATUS*
(FABRICIUS, 1792) (COLEOPTERA: DYTISCIDAE) IN POLAND**

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ABSTRACT: The paper presents a new locality of *Stictotarsus duodecimpustulatus* (Fabricius, 1792) in Poland. It is the second confirmed occurrence of the species in the country and first reliable record for the Silesia region.

KEY WORDS: Coleoptera, diving beetles, new record, Upper Silesia, SW Poland, faunistics

Introduction

Stictotarsus duodecimpustulatus (Fabricius, 1792) is a one of the three members of the genus *Stictotarsus* Zimmermann, 1919 occurring in Europe (Mazzoldi and Toledo 1998; Nilsson 2012) and the only species of this genus present in Poland (Przewoźny 2011). This is a typical West European species with a range extending from the Iberian Peninsula, Ireland and Great Britain to southern Scandinavia, and towards east to Lithuania, Poland, Slovakia, Austria and Italy (Nilsson and Holmen 1995; Kodada et al. 2003; Foster and Friday 2011; Tamutis et al. 2011). It is also present in North Africa (Burakowski et al. 2000). As for now it was reported from about 20 countries of Europe (Mazzoldi and Toledo 1998; Hajek 2009; Tamutis et al. 2011; Nilsson 2012).

Record details

We found a new locality of *Stictotarsus duodecimpustulatus* during the study on dragonflies and aquatic beetles conducted in Opole region in 2012. Details and circumstances of this record are given below:

Upper Silesia, Protected Ecological Site „Koło” within the Nature and Landscape Protected Area „Mostki” (UTM: CB20, 50°33'06"N, 18°30'49"E) about 2,5 km SW from

Kielcza village near Zawadzkie in the Opole Province, 5 IX 2012 – 1 ex., leg. M. Wolny et P. Zabłocki, det. M. Wolny; coll. Nature Department of Opole Silesia Museum.

We caught only one individual of *Stictotarsus duodecimpustulatus* by use of hydrobiological scoop in the marginal zone of shallow and drying reservoir in the pine forest near a peat bog. It was reported together with other aquatic beetles from three families: Dytiscidae – *Hydroglyphus geminus* (F.), *Hyphydrus ovatus* (L.), *Hydroporus angustatus* STURM, *H. erythrocephalus* (L.), *Agabus sturmii* (Gyll.), *Ilybius ater* (De G.), *I. fenestratus* (F.), *Rhantus frontalis* (Marsh.), *Colymbetes fuscus* (L.), *Graphoderus austriacus* (Sturm), *G. bilineatus* (De G.) – species protected by law in Poland and by Network Nature 2000 (Kubisz 2004), *G. cinereus* (L.), *Acilius canaliculatus* (Nicol.), *A. sulcatus* (L.), *Cybister lateralimarginalis* (De G.), Haliplidae – *Haliplus ruficollis* (De G.), Hydrophilidae – *Helochares obscurus* (Müll.).

Discussion

Our record of *Stictotarsus duodecimpustulatus* is the second confirmed record of the species in Poland after thirty years and the first reliable record in the Silesia region (Borowiec and Majewski 1985; Burakowski et al. 1976). The first information on the presence of this species in Poland can be found in the work of Hildt (1914). The author presents the locality of this beetle in Prószków near Opole, Lower Silesia. Also reports that the species is encountered in Upper Silesia and West Beskid Mts. The same data can be found in the publication of Tenenbaum (1923). However, due to lack of evidence specimens from these locations and western range of the species, Kinel (1936, 1949) excluded it from the list of aquatic beetles inhabiting Poland. Therefore the species was not included in the key and the monograph of diving beetles (Galewski 1971; Galewski and Tranda 1978), and also in the Catalogue of Polish Fauna as species occurring in the country (Burakowski et al. 1976). The first and so far the only confirmed record of this species from Poland gave Borowiec and Majewski (1985). Three specimens of *Stictotarsus duodecimpustulatus* were caught in 1982 about 1 km from the village Zbysławice near Przedszów in the Malopolska Upland (Borowiec and Majewski 1985; Burakowski et al. 2000).

The record from Upper Silesia proves, that the species could have inhabited this region in historic times, and the data contained in publication of Hildt (1914) could be true.

The bottom of the reservoir in which we found the species was muddy and covered with a thick layer of rotting remains of aquatic vegetation. We noticed many traces of the activity of forest animals around the reservoir (mainly Cervidae (deer) and *Sus scrofa* (wild boar), which suggested it had been used by them as a watering and bathing place. In our opinion, this reservoir is not a typical habitat for the species. According to the literature *Stictotarsus duodecimpustulatus* inhabits many clear water bodies with sandy or loamy bottom and with very little or without aquatic vegetation (Borowiec and Majewski 1985; Mazzoldi and Toledo 1998; Burakowski et al. 2000; Boukal et al. 2007). It mostly occurs among submerged vegetation in slowly flowing larger streams (Nilsson and Holmen 1995) as well as in small rivers, oxbows, backwaters, clay pits, sometimes in lakes and ponds (Nilsson and Holmen 1995; Mazzoldi and Toledo 1998; Burakowski et al. 2000). In Italy it was

collected also in ditches with muddy bottom (Mazzoldi and Toledo 1998). Borowiec and Majewski (1985) observed this species in cold and fast-flowing stream with sandy bottom. We think that the new locality of *Stictotarsus duodecimpustulatus* detected by us is rather accidental, because in the total research material collected by tens of samples covering almost all shoreline only one individual of this species was found. We recommend that, new localities of *Stictotarsus duodecimpustulatus* should be sought in Mała Panew river or streams located near the described site.

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