

REMARKABLE RECORD OF *DAPSA DENTICOLLIS* (COLEOPTERA: ENDOMYCHIDAE) IN NORTHERN SLOVAKIA

VALERIÁN FRANC – VLADIMÍR HEMALA

V. Franc, V. Hemala: Pozoruhodný nález *Dapsa denticollis* (Coleoptera: Endomychidae) na severnom Slovensku

Abstrakt: Autori tu opisujú okolnosti nečakaného a prekvapujúceho nálezu vzácného chrobáka *Dapsa denticollis* na Liptove. Tento teplomilný druh je známy zo sporadických nálezov v prírodne zachovalejších biotopoch južného Slovenska. Príspevok obsahuje aj rekapituláciu dostupných nálezov *Dapsa denticollis* na Slovensku, ako i poznámky o rozšírení, ekológii a miere ohrozenia tohto druhu.

Kľúčové slová: *Dapsa denticollis*, Endomychidae, Liptov, Chočské vrchy

INTRODUCTION AND METHODS

Endomychidae is a little-known family of beetles, having more-or-less clear relation to fungi (in English usually named Handsome Fungus Beetles). They are living under the bark and in rotten wood of older trees, in wooden debris and leaf litter infected by mycelium; one of the rarest species (*Pleganophorus bispinosus* Hampe, 1855) is even myrmecophilous. Endomychidae are often variegated, the species of temperate zone are lesser, but some tropical ones are larger. *Dapsa denticollis* (Germar, 1817) is considered to be a rare species, known from sporadic records from southern Slovakia.

In autumn 2013 we dealt with research of arthropods of the foothill of the Chočské vrchy Mts. Current sampling methods were used, including individual collecting and sifting of leaf litter especially; and there we found one specimen of *Dapsa denticollis* as well. The material is deposited in the first author's collection.

THE RESULTS AND DISCUSSION

Dapsa denticollis is a rare species of xerothermic grassland, edges and forest steppe habitats on both rocky and sandy substrata, formerly had been considered to be very rare.

Accessible recent records from Slovakia in chronologic order (if the source of information allows it) are listed below:

The SE slope above the Nature Reserve (later only NR) Turické dubiny (49° 06' 25.5" N 19° 23' 33" E, 659 m a. s. l.), sieved from the detritus at the edge of a meadow grove, October 31, 2013.

Ostrôžky Mts – Lysec (48° 20' 54" N – 19° 27' 39.5" E, 648 m a. s. l.) March 21, 2007 (FRANC, 2010).

NR Jurský Šúr (48° 13' 12.5" N – 17° 13' 23" E, 130 m a. s. l.), salt meadow on the SE edge of the NR May 2008 or 2009 (MAJZLAN, 2010).

NR Ostrov Kopáč (48° 05' 45" N – 17° 09' 33" E, 133 m a. s. l.), July 2005 or 2006 (MAJZLAN, 2007).

Surroundings of the Domica cave (48° 28' 52" N – 20° 28' 1.5" E, ± 400 m a. s. l.), open xerothermic oak forests and edges, spring 2003, trapping method, 18 specimens! (MAJZLAN, 2005).

Štiavnické vrchy Mts – a slope above the Kisyhýbel Arboretum (48° 27' 2.30" N 18° 56' 7.55" E, 582 m a. s. l.), open oak forest with admixed fir, swept from the vegetation during evening, June 13, 2004, M. Wiezik lgt. et coll. (unpublished).

Ostrôžky Mts – Nedelište (48° 23' 31" N – 19° 25' 08" E, 446 m a. s. l.) April 22, 2000 (FRANC, 2010).

NR Kňazi vrch (48° 39' 51" N – 17° 55' 45" E, ± 450 m a. s. l.), xerothermic oak forests and edges, spring 2000 (MAJZLAN, FEDOR, 2001).

NR Vrchná hora near the Stupava town (48° 15' 40" N – 17° 02' 44.5" E, ± 250 m a. s. l.), May 1999 or 2000, 2 specimens (MAJZLAN, GAJDOŠ, FEDOR, 2000).

Medovarce village (48° 14' 15.5" N – 18° 59' 19" E, 265 m a. s. l.), sieved from the detritus at the foot of a solitary oak in the forest steppe, April 25, 1998 (FRANC, 1999).

Mužla village – Jurský Chlm (47° 48' 03" N – 18° 31' 42.5" E, ± 115 m a. s. l.), sandy grassland, September 1997 (MAJZLAN, 1998).

Slovenský kras Mts – Kečovo village (48° 30' 17" N – 20° 29' 05" E, 390 m a. s. l.), xerothermic pasture, May 1979, 1985 or 1988 (year is not specified) (MAJZLAN, RYCHLÍK, 1993).

NR Čenkovská step (47° 46' 07" N – 18° 31' 19.5" E, 110 m a. s. l.), xerothermic sandy grassland, the date is not specified (MAJZLAN, RYCHLÍK & DEVÁN 1999).

Ecology and phenology

Dapsa denticollis occurs sporadically in warmer habitats from downlands up to submountain areas. It prefers well-preserved habitats ranking among indicators of high biodiversity sites (MAJZLAN, FEDOR, 2001); nevertheless KOCH (1989) surprisingly ranks it among eurytopic species. Usually found (observed) during spring months, despite it need not be a rule. Finally, several records listed above approve it; our record from Turické dubiny (October 31, 2013) is the latest till now. This species of hidden way of life is generally found accidentally; it may be sieved from the leaf litter and wooden debris (infected by mycelium especially), sparsely swept from the vegetation or pitfall trapped.

Distribution: Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Italy, Poland, Romania, Serbia & Montenegro, Slovakia, Slovenia, Ukraine (SHOCKLEY, TOMASZEWSKA, MCHUGH, 2009). Note: In Poland, at the northern border of its range, it obviously occurs utmost rarely.

Ecosozological status

Dapsa denticollis is mentioned in several Red Lists of European countries, including the Red List of Slovakia (HOLECOVÁ, FRANC, 2001), Poland (PAWŁOWSKI, KUBISZ, MAZUR, 2002), Germany (GEISER et al., 1998), Czech Republic (JELÍNEK, 2005) and Austria (JÄCH, 1994); see tab. 1. Its ecosozological status may be sometimes debatable. In Germany it is considered to be a regionally extinct species, despite occurs in neighbouring countries (in Austria and Czech Republic it ranks among vulnerable species). Perhaps it survives

somewhere in Southern Germany (Bavaria), anyway it should be very rare and highly threatened. The situation in Poland is unclear, being considered to be a data deficient species, despite it apparently occurs very rarely here, on the northern boundary of its range. Its ecosozological status in Poland probably ought to be higher, at least vulnerable.

One way or another, *Dapsa denticollis* deserves more attention of entomologists and conservationists. The distribution, ecology and human impacts to its habitats ought to be studied more particularly.

Tab. 1. Ecosozological status of *Dapsa denticollis*

Country	Ecosozological status	
	Published	Real assessment
Slovakia	VU	NT
Poland	DD	VU – EN?
Germany	RE	EN (if it survives)
Czech Republic	VU	VU
Austria	VU	VU

DD data deficient, NT near threatened, VU vulnerable, EN endangered, RE regionally extinct

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Address of the author:

Doc. PaedDr. Valerián Franc, CSc. Department of Biology and Ecology, Faculty of Natural Sciences, Matthias Belius University, Tajovského 40, 97401 Banská Bystrica, Slovakia, e-mail: valerian.franc@umb.sk

Vladimír Hemala, Department of Biology and Ecology, Faculty of Natural Sciences, Matthias Belius University, Tajovského 40, 97401 Banská Bystrica, Slovakia