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Description of *Helicoconis tatricus* sp. n. (Neuroptera, Coniopterygidae) from Slovakia (Central Europe) and key for determination of all Palaearctic species of subgenus *Helicoconis*

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Abstract

A new species of dustywings, *Helicoconis tatricus* sp. n., is described from the foothills of the Tatra Mountains in Slovakia. The new species differs from other species of the subgenus *Helicoconis* by structure of male genitalia—unfurcated styli and wide and short apophyses. The key for determination of all Palaearctic species of the subgenus *Helicoconis* is added and the distribution of Palaearctic species is discussed.

Key words: neuropterans, dustywings, Aleuropteryginae, Fontenelleini, Palaearctic region, new species

Introduction

Only 13 species are listed for the territory of Slovakia in the west Palaearctic catalogue of Neuropteroidea (Aspöck *et al.* 2001). Due to this limited number of species, a new checklist of Neuroptera was published (Jedlička *et al.* 2004). The authors, following literature data, reported 91 species from Slovakia. Later, seven other species were found in this territory (Vidlička 2010, 2011). From all of these 98 species, only 21 species are included in the family Coniopterygidae, and only two in the genus *Helicoconis* (*H. lutea* and *H. pseudolutea*).

Neuropteran genus *Helicoconis* (Coniopterygidae) was described by Enderlein (1905) based on the form of the *CuP* vein on the forewings and location of a cross-vein between *R-Rs* on the hindwings. As type species of the genus, *Coniopteryx lutea*, previously described by Wallengren (1871) from the Swedish island Gotland, was assigned.

On the basis of differences in the male genitalia, Ohm (1965) divided the species of the genus *Helicoconis* into four species groups (*lutea*-group, *pseudolutea*-group, *maroccana*-group and *capensis*-group). These species groups were elevated by Kis (1970) and Meinander (1972) to subgenus rank—nominated subgenus *Helicoconis* Enderlein, 1905 s. str. (= *lutea*-group) and subgenera *Fontenellea* Carpentier & Lestage, 1928 (= *maroccana*-group; = sg. *Parahelicoconis* Kis, 1970), *Ohmopteryx* Kis, 1970 (= *pseudolutea*-group) and *Capoconis* Meinander, 1972 (= *capensis*-group). Subgenera are different due to form of hypandrium, presence or absence of apophysis on styli, and a subapical dorsal hook on the paramere. Nowadays, the genus includes 25 species (*Helicoconis* with eight sp.; *Ohmopteryx* with three sp.; *Fontenellea* with 11 sp.; *Capoconis* with two sp.; one (*H. aptera*) is unfiled into subgenus) (Sziráki 2011).

Species of the subgenus *Helicoconis* have Holarctic distribution. Three species (*H. similis* Meinander, 1972; *H. walshi* (Banks, 1906); *H. californica* Meinander, 1972) inhabit the Nearctic region (North America) and another five Palaearctic regions, from which two (*H. lutea* (Wallengren, 1871); *H. hirtinervis* Tjeder, 1960) live in Eurasia, two (*H. sengonca* Rausch, Aspöck & Aspöck, 1978; *H. premnata* Rausch, Aspöck & Aspöck, 1981) live in Asia and one (*H. eglini* Ohm, 1965) is found only in Central Europe (Fig. 1a).

supported by a drawing of the genitalia of Chinese exemplars (Fig. 1 in Liu & Yang 1998) which is not similar to European exemplars (Fig. 2b).

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