

Taxonomic revision of the *Hydroporus bodemeyeri* species complex (Coleoptera: Dytiscidae) with a geometric morphometric analysis of body shape within the group

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The eastern Mediterranean *Hydroporus bodemeyeri* species complex, which so far includes three species, *H. bodemeyeri* Ganglbauer, 1900, *Hydroporus anatolicus* J. Balfour-Browne, 1963 and *Hydroporus cuprescens* Fery and Miller, 1995, is revised. Three new taxa are described: *H. anatolicus koksali* ssp. nov. from north-eastern Turkey, *H. bodemeyeri cariaensis* ssp. nov. from south-western Turkey and Rhodes, and *Hydroporus kurdistanicus* sp. nov. from south-eastern Turkey. *Hydroporus guignoti* Gschwendtner, 1935 described from Albania and Greece and previously regarded as a synonym of *H. bodemeyeri*, is treated as a distinct subspecies *H. bodemeyeri guignoti* stat. nov. A geometric morphometric analysis of body shape within the complex is presented, which confirms the separate status of all recognized taxa, with considerable overlapping between the subspecies of *H. anatolicus* and *H. bodemeyeri*. We provide an initial hypothesis on the origin of the contemporary distribution of *H. bodemeyeri* and *H. cuprescens*, assuming their vicariant diversification from an Anatolian ancestor.

Keywords: *Hydroporus longulus* species group; vicariance; new taxa; distribution; Eastern Mediterranean

Introduction

The Holarctic genus *Hydroporus* Clairville, 1806 represents the most speciose genus within the tribe Hydroporini. Nilsson (2009) reports 137 species from the Palaearctic Region, of which seven are polytypic. Another nine new species have been described recently from eastern Turkey, Armenia and Iran (Fery 2009; Fery and Erman 2009).

The genus *Hydroporus* has historically been divided into numerous subgenera by previous authors. Most of these have been elevated to genera during the last century, and all remaining subgenera were synonymized by Nilsson (1989) based on the study of larval morphology. At present, rather than subgenera, species groups are widely used to better understand the diversity of this large genus. These species groups were first defined by Zimmermann (1931), and then adapted and redefined by subsequent authors (Guignot 1947; Franciscolo 1979; Nilsson and Holmen 1995). For the most recent classification, see Nilsson (2001).

Hydroporus anatolicus J. Balfour-Browne, 1963, *Hydroporus bodemeyeri* Ganglbauer, 1900 and *Hydroporus cuprescens* Miller and Fery, 1995 belong to the

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