Hydroporus sejilashan sp. n., a new diving beetle of the acutangulus-complex from Xizang, China (Qinghai-Tibet Plateau), and notes on other taxa of the genus (Coleoptera, Dytiscidae, Hydroporinae)

FENGLONG JIA1, SHUANG ZHAO2 & HANS FERY3

1 Institute of Entomology, Life Science School, Sun Yat-sen University, Guangdong, China. E-mail: fenglongjia@yahoo.com.cn (1) and topzs@yahoo.com.cn (2)
3 Räuschstr. 73, D-13509 Berlin, Germany. E-mail: hanfry@aol.com

Abstract

Hydroporus sejilashan sp. n. is described from Xizang Autonomous Region (Qinghai-Tibet Plateau), China. It belongs to the acutangulus-complex of the Hydroporus planus-group and can be separated from all four other members of the species complex by the completely distinctly matt surface in both sexes. In addition it can be distinguished from Hydroporus acutangulus Thomson, 1856 and H. polaris Fall, 1923 by the shape of the anterior protarsal claw, which is strongly curved near the base and more straight distally in the latter two species, but evenly curved in the new species and in the other two species of the complex, namely H. tibetanus Zaitzev, 1953 and H. tuvaensis Pederzani, 2001. The habitus of all five members of the complex are provided, along with illustrations of the male and female genitalia of the new species and those of H. tibetanus. The lectotype of H. sumakovi Poppius, 1912, a taxon which until now has been treated as a junior synonym of H. acutangulus, is designated. Preliminary studies reveal that H. sumakovi is probably more closely related to H. polaris than to H. acutangulus. Older, doubtful previous records of Hydroporus nigellus Mannerheim, 1853 from China are confirmed with new records from Qinghai and Sichuan Provinces. Twelve species of the genus Hydroporus Clairville, 1806 are now known from China, only two of which occur in Tibet.

Key words: Coleoptera, Dytiscidae, Hydroporinae, Hydroporus acutangulus-complex, new species, lectotype, first record, China, Tibet

Introduction

In 2009 the senior author collected a series of Hydroporus in Xizang Autonomous Region in western China, which obviously belongs to the acutangulus-complex of the Hydroporus planus-group, and it was impossible to assign it undoubtedly to any known species of the genus. After a careful study of specimens, including most types of all other species of that complex, we decided to describe the species as new under the name Hydroporus sejilashan sp. n.

The genus Hydroporus Clairville, 1806 is distributed in the Nearctic, Neotropical and Palearctic zoogeographical regions. It comprises about 180 species, but only a few are known from China. Nilsson (1995: 52, 53) listed 10 of them for China: Hydroporus acutangulus Thomson, 1856, H. angusi Nilsson, 1990, H. breviusculus Poppius, 1905, H. discretus Fairmaire & Brisout, 1859, H. glasunovi Zaitzev, 1905, H. goldschmidti Gschwendtner, 1923, H. penitus Guignot, 1945, H. submuticus Thomson, 1874, H. tibetanus Zaitzev, 1953, and H. uenoi Nakane, 1963. In the same work Nilsson (1995: 53) doubted records of Hydroporus nigellus Mannerheim, 1853 from China by Feng (1932: 25) and Wu (1937: 209) (in both works given under the name Hydroporus obscuripes (Motschulsky, 1860)). Nilsson recorded also Hygrotus discedens (Sharp, 1882) from China, a taxon shown to belong to the genus Hydroporus by Fery (2000). Due to secondary homonymy with Hydroporus discedens Régimbart, 1877 (a junior subjective synonym of Hydroporus incognitus Sharp, 1869) that name was replaced by Hydroporus hygrotoides Fery, 2000. Since 1995 one new species was described (Hydroporus nanpingensis Toledo & Mazzoldi, 1996), H. pentius proved to be a junior subjective synonym of H. submuticus (see Nilsson et al. 1999: 113), and H. acutangulus is not any more treated as member of the Chinese fauna (Nilsson 2011). Finally we can provide three verified records of H. nigellus from China and, thus, together with H. sejilashan sp. n. we have now a total of 12 Hydroporus known from China, of which only two occur in Tibet (H. tibetanus and the new species).