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A NEW SPECIES OF THE GENUS HIMALPOSYCHE BANKS, 1940 (TRICHOPTERA: RHYACOPHILIDAE) FROM CHINA

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Abstract. <u>Himalopsyche trifurcula</u> sp.n. is described from southwestern China. It is a member of the <u>navasi</u> group, obviously the sister species of <u>H.navasi</u> Banks 1940 from SE and SC China.

Up to now, about 40 species of the genus <u>Himalopsyche</u> have been found in the world, of which 19 are found in the western and south-western regions of China. Schmid (1966) divided <u>Himalopsyche</u> into 5 groups, presently known Chinese species belong to <u>kuldschensis</u> group (6 spp.), <u>tibetana</u> group (6 spp.), <u>anomala</u> group (5 spp.) and <u>navasi</u> group (2 spp.). The <u>angnorbui</u> group has not been found in China so far. Type specimens of the new species are deposited in the collections of the Department of Plant Protection, Nanjing Agricultural University. The terminology for male genitalia used in this paper follows that of Schmid (1966).

Himalopsyche trifurcula n.sp.

Male (in alcohol): Body length 12 mm, forewing length 15 mm. Head light yellowish, antennae and palpi almost pale. Meso- and metanotum brown, legs brown, tibia and tarsus with black brown spines, arranged in a line on mid-tibia. Forewing pale yellowish, translucent, with irregular brown spots near each end of vein, base of anterior margin and anal region brown. Hindwing pale, translucent. Abdomen brown to yellowish above and light yellowish beneath, with black spots dorsally. - Male genitalia: Segment 9 rectangular in lateral view. Segment 10 membranous. Pre-anal appendages paired long processes, shortly connected at the base, strongly curved ventrad in lateral view. Anal sclerite heavily sclerotized, slightly tapered, 2 times as long as wide, with apex hooked down and backward. The basal joint of inferior appendages large and stout, 2 times as long as high, deeply excised distally, with apico-ventral ends produced in broad lobes, each with apical margin serrated. The second segment of inferior appendages much smaller, its apex densely covered with short, dark spines. Phallus complex: aedeagus plate-like, with two fine and pointed lateral lobes viewed dorsally. A pair of parameres heavily sclerotized, strongly curved dorsad in 90 degrees. Female unknown.

Holotype d: Yunnan, Yuan-yang county, E-zha-xiang, a stream 10 km W of Ha-bo-cun (village), 1000m, 24.7.1990, leg.Ke Xing. Paratype d: same data as holotype.

Diagnosis: This species is very similar to H.navasi Banks, especially in the shape of the pre-anal appendages, which Ross (1956) termed as "lateral lobes of 10 tergite", and in that of the inferior appendages. It differs from the latter in: 1. the lateral lobes of aedeagus at most 2 times as long as the median process (i.e. ejaculatory duct), rather than at least 3 times as in <u>navasi</u>; 2. parameres broadly fused at base, with distal half (Fig. 2), parameres not fused at base, and with distal half only curved upward at 60 degrees.

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Fig. 1. Male genitalia of <u>Himalopsyche trifurcula</u> sp. nov. A. lateral view; B. ventral view; C. dorsal view; D. left inferior appendage, lateral view; E-F. aedeagus: E. dorsal view; F. ventral view.



Fig. 2. Aedeagus of <u>Himalopsyche navasi</u> Banks A. lateral view; B. dorsal view; C. ventral view.

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