

A new species of *Hydropsyche* from Italy.

By

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My friend Mr. Einar Klefbeck has kindly presented me with a lot of *Trichoptera* collected by him in Italy. Among the specimens I have found a small series of a species of *Hydropsyche*, closely allied to *H. instabilis* Curt. but distinctly different and apparently hitherto undescribed. I have submitted figures of the species to my friend Mr. Martin E. Mosely, London, for consideration and he has informed me that the species is quite unknown to him. I have much pleasure in naming the species in honour of its collector.

Hydropsyche klefbecki n. sp.

♂. Head yellowish brown, also the warts, and clothed with pale yellowish hairs; the warts also with some black hairs laterally; palpi

brownish; antennae yellowish with very narrow dark oblique lines, which are distinct only on the 3rd—7th segments.

Prothorax brownish with very long and dense yellowish hairiness. Mesonotum blackish brown, in the middle reddish brown and there yellowish haired. Mesoscutellum dark brown with brownish and blackish hairs. Postnotum brownish; its scutellum yellowish. Legs yellowish with yellowish spurs.

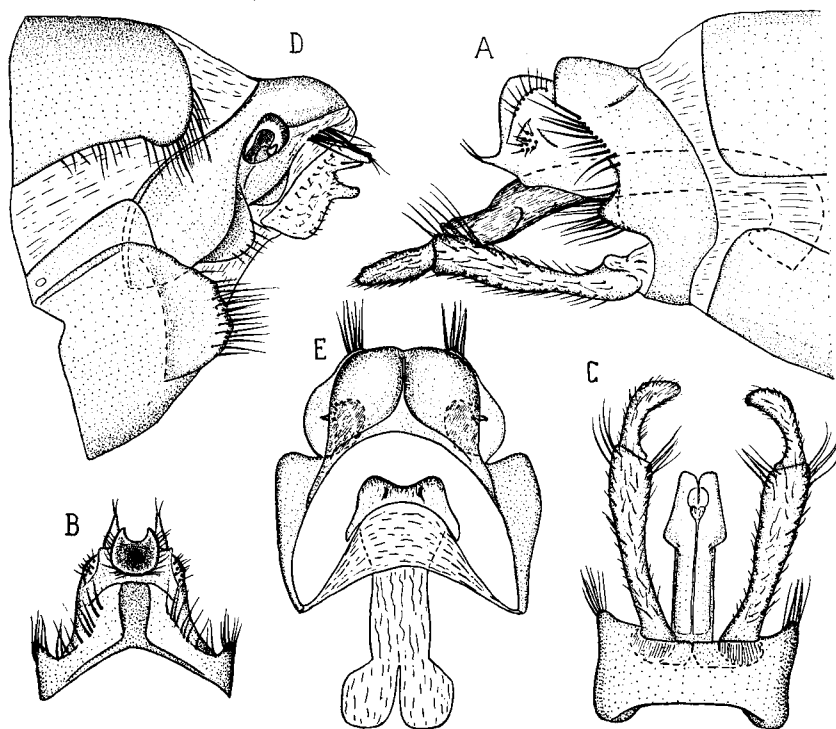


Fig. 1. *Hydropsyche klefbecki* n. sp. A, genitalia, ♂, lateral. B, genitalia, ♂, dorsal. C, genitalia, ♂, ventral. D, genitalia, ♀, lateral. E, last abdominal segment and internal apparatus, ♀, dorsal.

Anterior wing greyish, clothed with a dense pubescence, which is grey with distinct pale yellow interruptions, which affords to the wing an irrorated appearance. The outer wing margin is distinctly darker. Somewhat larger yellow spots are present in the cellula thyridii and on the hind margin before the arculus. Fringes grey with a few yellow interruptions. Posterior wing greyish, the apex slightly darker.

Abdomen yellowish brown. The 10th tergite, seen from side, with the apex smoothly and broadly rounded. Arising on each side from the lower hind angle of the tergite there is a slender process, which is very

acute and topped with two long hairs. These processes are directed backward-upward. Cercal callus not very distinct, somewhat elongate, bearing a small number of trichobothria. Centre portion of 10th tergite, from above, broadly rounded and distally deeply emarginated. Basal segment of the inferior appendages long, gradually dilating towards the apex; apical segment, from below, dilated in the apical portion, which is abruptly inward curved. A small, almost tooth-like dilatation on its inner basal margin. Penis, from side, strongly curved in its proximal part, straight in the middle part, and abruptly downward bent in the apical part before the straight apex. The apex is obliquely truncate and is directed straightly backward. Seen from below the apex appears incised. A pair of latero-ventral, large angular projections before the apex is present.

Length of body, appr. 7,5 mm., of anterior wing 10 mm., of posterior wing 8 mm.

The ♀ is closely similar to the male. All colour characteristics are exactly the same. Concerning the shape of the abdominal end I refer to the figures D and E, showing the apex from side and the last segment with the internal apparatus from above.

Length of body (allotype and paratype) 9 mm., of anterior wing 12 mm., of posterior wing 9,5 mm.

Habitat: Italy, Amalfi (on the Sorrento Peninsula), 2. VII. 1934 holotype ♂, allotype ♀, and one paratype ♀, leg. et don. Einar Klefbeck (my collection). Mr. Klefbeck has informed me that he captured the specimens on a torrent on rocky ground just where the torrent passed through a cleft in the rocks.

The species is closely allied to *H. instabilis* Curt. but appears somewhat darker than that species. There are also several differences in the ♂ genitalia. The most obvious characteristic by which the two species are easily distinguished is the shape of the penis. Its lateral projections are in *H. klefbecki* n. sp. very large and angular; in *H. instabilis* Curt. only very faintly indicated. *H. klefbecki* n. sp. is also allied to *H. jordanensis* m. from Palestine. This is, however, a much smaller species with yellowish brown wings, with backward-downward directed processes of the 10th tergite, topped with a tuft of short hairs, and with an almost straight penis, the angular projections of which are large though somewhat differently shaped.

It should further be noted, that in *H. instabilis* Curt. and *H. jordanensis* m. the apical dorsal portion of the basal segment of the inferior appendages is distinctly dark-coloured, which is not the case in *H. klefbecki* n. sp.
