

Kontyû, 32 (2) : 211-213. 1964

A NEW GENUS AND A NEW SPECIES OF HYDROPTILIDAE FROM JAPAN (Trichoptera)

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Three genera of the family Hydroptilidae have hitherto been reported from East Asia, of which *Hydroptila* Dalman (1880) and *Oxyethira* Eaton (1880) were known from Japan, and *Uenotrichia* Tsuda (1942) from Korea. Several specimens not coniferable to any of the known genera of the family were collected by Mr. N. Gyotoku from Yoshii-machi, Ukiha-gun, Fukuoka Prefecture, in 1957. The feature characteristic of the new form were compared carefully with those of the three known genera, and it was concluded that this should be regarded as a distinct genus. The specimens here described were kindly presented to me by Mr. N. Gyotoku, to whom my cordial thanks are due.

Key to genera of Hydroptilidae

- 1a. Spurs of posterior leg 4 2
- 1b. Spurs of posterior leg 3 3
- 2a. Spurs 0, 2, 4 1. *Hydroptila*
- 2b. Spurs 0, 3, 4 2. *Oxyethira*
- 3a. Spurs 0, 4, 3 3. *Uenotrichia*
- 3b. Spurs 2, 4, 3 4. *Tsukushitrichia* gen. nov.

Tsukushitrichia gen. nov.

Spurs 2, 4, 3. Ocelli absent. Head above very hairy. Antennae stout, shorter than the length of anterior wing. Basal joint not so long as the head, covered with long hairs. The second joint as long as the basal joint. Other joints thinner and longer than the basal joint.

Maxillary palpi five-jointed, slender, covered with light-coloured white hairs, with the first and second joints very short; the fifth joint flexible, much longer than the other joints.

Labial palpi three-jointed, much slender; the first and second joints shorter and thicker than the terminal joint.

Anterior wing lanceolate, densely pubescent, furnished with numerous semi-erect hairs, the apex not greatly produced.

Posterior wing narrower and shorter than the anterior wing. Fringes of the posterior wing much longer than the greatest width of that wing. Neuration rather obscure in both wings, but in the anterior wing forks nos. 1 and 3 appear to be present, while in the posterior wing there is a very small fork no. 3 and other apical forks. In the fifth abdominal segment there are a pair of processes arising from lateral side of the sternal plates.

The present new genus can be distinguished from all of the known genera of

Hydroptilidae by the spur-formula, the structure of the fifth segment, and from the neurulation of the wing.

The generic name *Tsukushitrichia* given to this new form is based of the name of the locality.

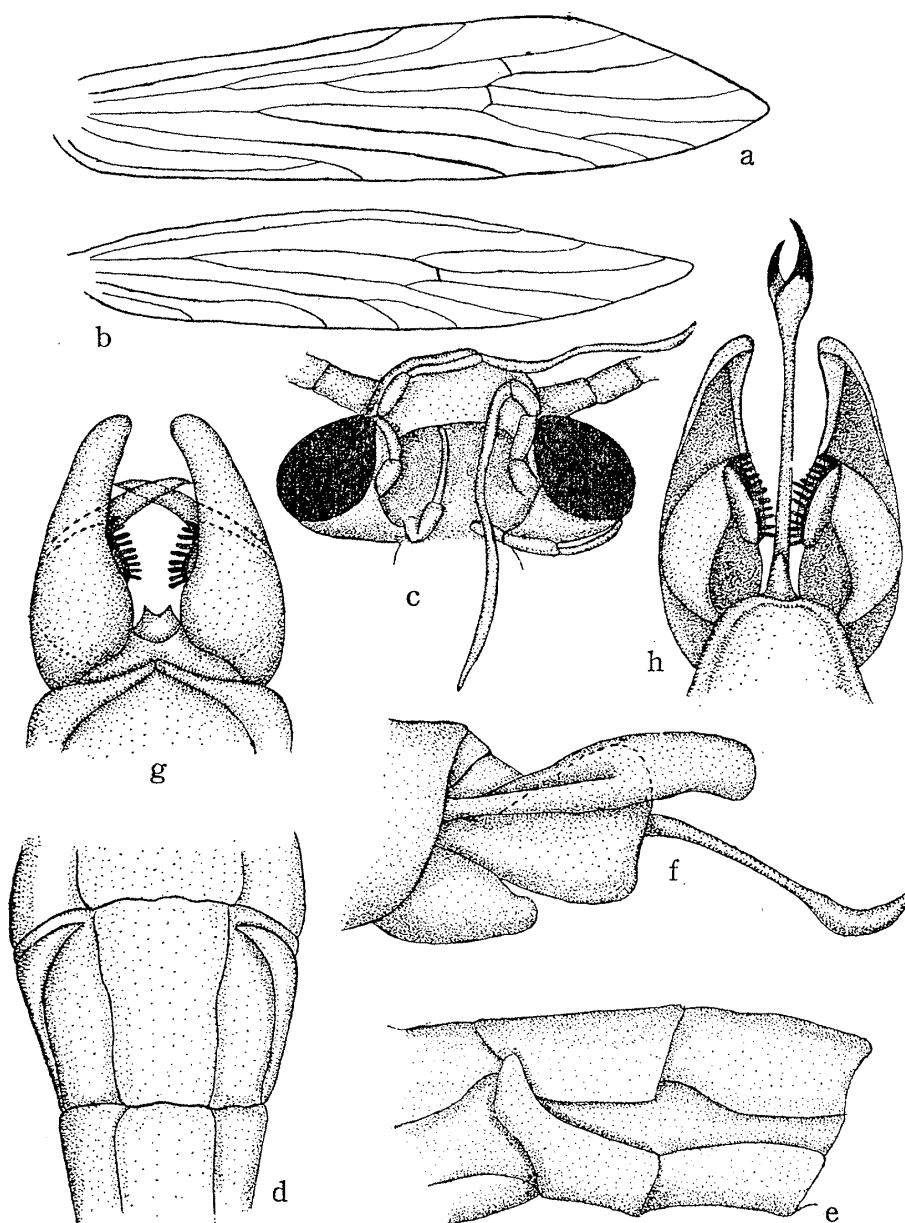


Fig. 1. *Tsukushitrichia forficula* sp. nov. a: Anterior wing, b: Posterior wing, c: Front of head, d: Fifth segment; dorsal view, e: Fifth segment; lateral view, f: Genitalia; lateral view, g: Do; dorsal view, h: Do; ventral view

Tsukushitrichia forficula sp. nov.

Head dark brown, above very hairy; face brown. Warts egg-shaped, covered with dark brown hairs. Ocelli absent. Antennae brown, stout, shorter than the length of anterior wing; basal joint thick, longer than the second joint, covered with dark hairs. The second, third and fourth joints shorter than the other joints.

Maxillary palpi five-jointed, much slender, covered with light-coloured white hairs. The first and second joints pale brown, very short. The second joint longer than the first, the third joint as long as the second, the fourth joint about twice the length of the second. The fifth joint very slender, much longer than the other joints.

Labial palpi three-jointed, very thin, covered with light-coloured white hairs. The first joint thicker and shorter than the other joints, very slender and flexible.

Pronotum dark brown, pubescent above. Metanotum dark brown above, without hairs.

Legs in the whole pale yellowish brown, and clothed with short yellowish brown hairs, but coxa is dark brown in colour. Spurs pale yellowish brown, clothed with short hairs. Spur-formula 2, 4, 3. Apical spurs of anterior leg short; the inner spur as long as the outer spur. The inner spurs of median leg about twice the length of outer spurs. Tibia and tarsus of posterior legs clothed with short darkish brown hairs; inner spur of preapical tibial spur slightly longer than the outer spurs; apical spur single, thicker and longer than the other spurs.

Anterior wing narrow, lanceolate, greyish brown, densely covered with greyish brown pubescent hairs, furnished with numerous semi-erect dark hairs. Fringes shorter than the greatest width of that wing. Neuration obscure; apical forks nos. 1 and 3 present. Discoidal cell closed, long.

Posterior wing pale greyish brown, densely covered with greyish brown pubescent hairs; in the middle portion with a few white scales. Fringes much longer than the greatest width of that wing. Neuration thick; apical fork nos. 1 and 3 to be present.

In the abdomen there is a pair of processes arising from the sternum of the fifth segment.

Genitalia: Ninth segment very short, deeply excised above. Superior appendage long, flat and translucent, directed slightly upward; seen in profile basal part narrower than the apical part; the apex rounded. Penis sheath crossed to each other, acute at apex seen from above, much exerted and bearing a strong, blackened tooth toward the apex. Inferior appendage short, thicker, armed at their inside each with short, blunt, black bristles.

Measurement: Body 5.3 mm, anterior wing 6.0 mm, posterior wing 4.5 mm. (holotype).

Holotype; Male (M. 1228) in alcohol and partly mounted on slides. Yoshii-machi, Ukiha-gun, Fukuoka Pref., Japan; May 21, 1957; collected by N. Gytoku.

Paratypes: Males (M. 1226, 1229, 1230, 1234) in alcohol and partly mounted on slides, date of collection same as the holotype.

All the specimens of the type-series are preserved in the National Science Museum, Tokyo, Japan.

The specific name *forficula* is given to the conspicuous array of scissors-like processes in the terminal portion of the penis of the male.