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Descriptions of two new species of the genus Hydropsyche and some unknown females of Trichoptera (Rhyacophilidae, Hydropsychidae)

#### Füsun SIPAHILER

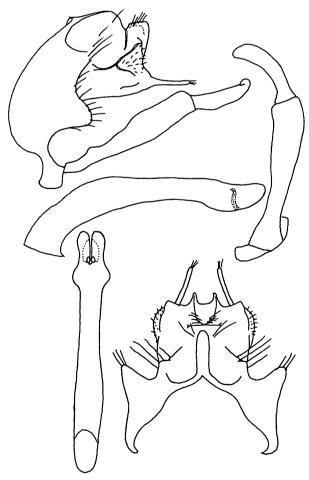
Abstract: In this study, two new species of the genus Hydropsyche, H. saimbeyli sp.n, (Turkey) and H alarensis sp.n. (Turkey) belonging to the instabilis-group and the pellucidula-group respectively, are described and illustrated. The descriptions and the illustrations of the unknown females of the following species are given: Rhyacophila borcka SIPAHILER, 1996 (Turkey), R. arhaviensis SIPAHILER, 1986 (Turkey), R. bacurianica LEPNEVA, 1961 (Georgia, Turkey), R. martynovi MOSELY, 1930 (Spain).

Key words. Hydropsyche, new species, Rhyacophila, female descriptions, taxonomy, distribution.

#### Descriptions of the new species

# Hydropsyche saimbeyli sp.n. (Hydropsychidae)

The antennae, palps and legs are yellowish; wings pale brown; the length of the anterior wing of male is 9 mm. Male genitalia (Figs.1-5): The dorsal keel of segment 9 is narrow; the apex is rounded; segment 10 is short; in lateral view, the dorsal margin is smooth and narrow; ventral part is elongated continuing with the digitiform appendages, which are very long and thin; in dorsal view, the apical margin of segment 10 protrudes pointed projections on each side. The harpago of the inferior appendages is long, curving inside; it is slightly dilated through the rounded apex; the lateral projections of the phallus are very large and almost rounded.



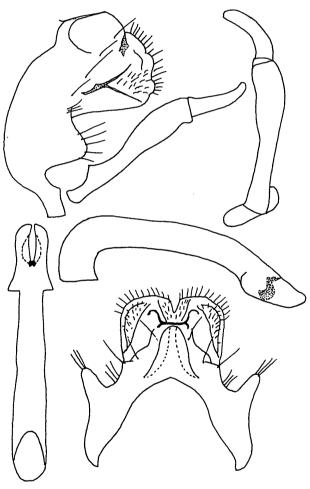
Hydropsyche saimbeyli

Holotype male: Turkey, Adana, Saimbeyli, direction to Feke, Pagnik Köyü (Kizilagac Köyü), (37° 56′ N, 36° 07′ E), 4.7.1990, leg. and coll. Sipahiler.

Hydropsyche saimbeyli sp.n. differs from the other species of the instabilis-group (MALICKY, 2001) by the many part of the male genitalia, especially by the shape of segment 10, which is short and the digitiform appendages are very long; the lateral appendages of the phallus are large and rounded. Close relationship is not evident.

#### Hydropsyche alarensis sp.n. (Hydropsychidae)

A pale brown species; the antennae, palps, legs, wings, thorax and head are pale brown; the tergites of the abdomen with darker brown spotted, especially on the margins. The length of the anterior wing of males 9-10 mm; of females 10.5-12 mm. Male genitalia (Figs. 5-10): Dorsal keel of segment 9 is rather broad; segment 10 in lateral view, is very narrow on the dorsal part, directing ventrally; the posterior margin is roundly dilated and sinuate, forming small rounded lobes on the dorsal and ventral portions; in dorsal view; the median part of segment 10 is covered with longer hairs; the apical margin is shortly excised medially. The harpago of the inferior appendages is curved inside; almost equal in breadth both at the base and at the apex; the apex is rounded. The lateroapical projections of the phallus are large; triangular in shape, connecting with right angle to the shaft; the apex is somewhat larger than the shaft.



Hydropsyche alarensis

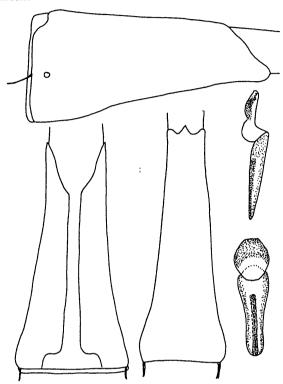
Holotype male and paratypes (32 males, 209 females): Turkey, Antalya, Gündogmus, Güneycik Köyü, Alara Çayı, Ali Köprüsü, (at light), (36° 46′ N, 31° 56′ E), leg. and coll. Sipahiler

Hydropsyche alarensis sp.n., belonging to the pellucidula-group, differs from the other species of the group (MALICKY, 1999) by the shape of the large dorsal keel of segment 9, and the shape of segment 10, of which the dorsal part is short and the apical margin is sinuate, possessing a small lobe located on the dorsal and ventral part. The pale color and the relative small body size are also evident.

#### Descriptions of unknown females

# Rhyacophila borcka SIPAHILER, 1996 (Rhyacophilidae)

The antennae and wings are dark brown; palps brown; legs pale brown; tarsi and spurs are dark brown; the length of the anterior wing of females 11-12 mm. Female genitalia (Fig. 11-15): The sclerotized collar of segment 8 is long; in lateral view, the dorsal edge is shorter than the ventral edge; the posterior edge is diagonal; in dorsal view, the median part is scarcely sclerotized forming a narrow band; in ventral view, the apical edge forms a triangular projection in the middle.





Material examined: Turkey, Artvin, Borçka, Camili, direction to Gorgit yaylasi 1000 m, 26.10.1995, 1 male, 1 female; same place Düzenli Köyü, direction to Borcka, 1350 m, 29.10.1997, 2 females; Camili, Ugurkoy, direction to Mereta yaylasi, 850 m, 26.10.1997, 1 male; same place and date, 1000 m, 14 males; leg. and coll. Sipahiler.

Rhyacophila borcka, belonging to the tristis group, was described based on the male collected from Camili, near the state border to Georgia (SIPAHILER, 1996). Later, this species was collected from several places in the same region.

### Rhyacophila arhaviensis SIPAHILER, 1986 (Rhyacophilidae)

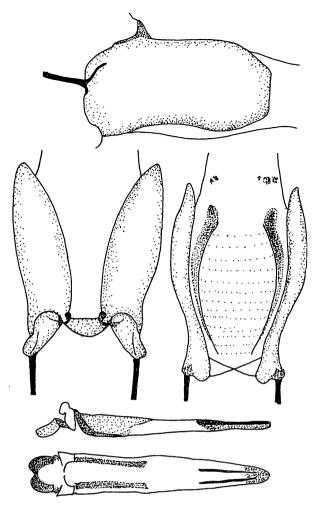
A dark brown species; the antennae, palps and legs are brown; thorax and head dorsal dark brown-blackish; wings dark brown with brown spotted; the length of the anterior wing of females 12-14 mm. Female genitalia (Figs. 16-20): The valves of the collar of segment 8 is long, in lateral view, almost quadrangular in shape; somewhat narrowing through the posterior margin; the posterior margin is straight; in dorsal view, the basal part is thin; in ventral view, the rounded area between the valves is thickened, of which the sides are folded, forming a groove on each side.

Material examined: Turkey, Artvin, Borçka, Camili, Uğurköy, 6.8.1995, 6 males, 6 females; Camili, Uğurköy, direction to Mereta, 1050 m, 5.8.1995, 1 male; same place, 850 m, 26.10.1997, 1 female; leg. and coll. Sipahiler.

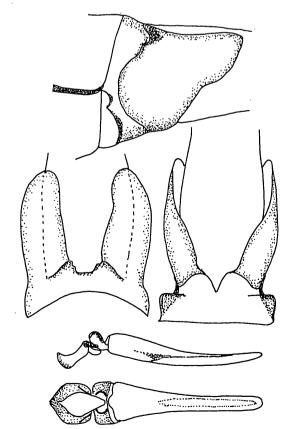
Rhyacophila arhaviensis which belongs to the vulgaris group, was described from northeastern Turkey, from Arhavi in Rize province (Sipahiler, 1986).

### Rhyacophila bacurianica LEPNEVA, 1961 (Rhyacophilidae)

The antennae, palps and the wings are yellowish; wings pale brownyellowish; scarcely darker spotted; abdomen and thorax dorsally with Rhyacophila bacurianica



Rhyacophila arhaviensis



small black spotted; the length of the anterior wing of female 12-14 References mm. Female genitalia (Figs. 21-25): The collar of segment 8 is dorsally U-shaped excised; the basal part is narrow; in ventral view, the excision of the valves of the collar is broad, almost V-shaped; the base is broader than the dorsal part; less sclerotized; in lateral view, it is almost triangular in shape; the ventral margin is sinuate.

Material examined: Turkey, Artvin, Borcka, Camili, Gorgit yaylası, 1600 m, 7 males; same place and date, 1800 m, 1 male; same place, 2200 m, 28.9.1994; 1 male, 2 females, 28.9.1994, leg. and coll. Sinahiler.

Rhyacophila bacurianica was described from the village Bakuriani in Georgia (LEPNEVA, 1961). In Turkey, the specimens were collected below the summit of the Karchal Mountains between the altitudes 1600-2200 m, near the state border to Georgia.

#### Rhyacophila martynovi MOSELY, 1930 (Rhyacophilidae)

The antennae, palps and legs are pale brown; wings brown, apical parts dark brown spotted; the length of the anterior wing of the females is 13-13.5 mm. Female genitalia (Figs. 26-30): In lateral view, the collar of segment 8 is broad, narrowing and pointing posteriorly; the collar is ventrally and dorsally deeply excised; the sides of segment 8 are strongly sclerotized beneath the valves of the collar; in ventral view, the area between the valves possesses almost oval, somewhat thickened sclerotized part.

Material examined: Spain, Asturias, Cordillera Cantabrica, South Oviedo, Puerto de la Cubilla, 1500 m, 12.10. 1994, 5 males, 2 TR-06532 Beytepe, Ankara, Turkey females, leg. Vinçon, coll. Sipahiler.

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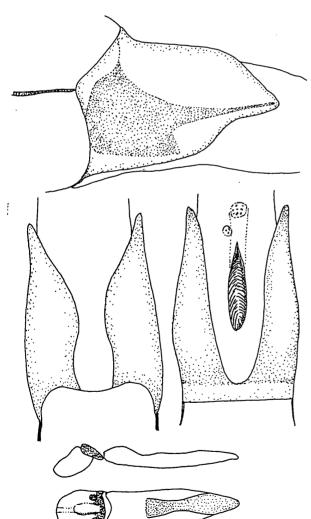
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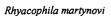
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## European Conference on Trichoptera faunistics: Preliminary announcement

We have the plan to organise a conference on faunistics and zoogeography of Trichoptera in Europe. The final goal is to establish a system to produce true and detailed distribution maps in Europe, with the assistance of the many already existing databanks.

The conference is intended to be held in Luxembourg on 2 - 4 September 2005.

Contributions are welcome. Information from:

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