A NEW SPECIES OF *PSEUDONEURECLIPSIS* FROM NORTH EASTERN TURKEY (THRICOPTERA, POLYCENTROPODIDAE)

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ABSTRACT: A new species of Trichoptera, *Pseudoneureclipsis kelkitensis* sp. n., (Polycentropodidae) discovered from northeastern Turkey is described and illustrated. It is related to *P. iranicus* Malicky, 1982 and *P. gudulensis* Çakın, 1983. The taxonomy of the genus *Pseudoneureclipsis* Ulmer, 1913 is discussed.

KEY WORDS: Trichoptera, new species, taxonomy, *Pseudoneureclipsis*, Polycentropodidae, northeastern Turkey.

The genus *Pseudoneureclipsis* Ulmer, 1913 is represented in the west Palaearctic Region by eight species, which are found in the Mediterranean Region and Iran. Most of the species of the genus are found in the Oriental Region. In Turkey, three species are known. *P. gudulensis* Çakın, 1983 (in Çakın & Malicky, 1983) was described from Kirmir Stream in central Anatolia; the second species is *P. graograman* Malicky, 1987, found in Botan Stream in southeastern Turkey. The third species, *P. kelkitensis* sp. n., is found in the north eastern Turkey. These three species are only known from the type places and they are not closely related to each other.

MATERIALS AND METHODS

Specimens were collected by light trap with blacklight tube (6 Watt), which was set up near the Kelkit Stream. The collected material was preserved in 75% ethyl alcohol and deposited in my collection in Hacettepe University Department of Biology Education. The figures were drawn using a Zeiss Stemi SV 6 microscope.

Pseudoneureclipsis kelkitensis sp. n.

(Figs. 1-8)

Material. Holotype ♂and paratypes 60 ♂, 161 ♀: Turkey, Tokat, Reşadiye, 10 km east of Reşadiye, Kelkit River, 6.8.2007, 40° 23 N, 37° 15 E, (at light), (Code of depository: E-187) leg. and coll. Sipahiler.

Antennae yellowish, annulated with brown; the head and the thorax are dorsally dark brown; wings brown; the anterior wing scarcely spotted near margin; the legs are pale brown; the length of the anterior wing of males is 4.5-5.5 mm, of females 5.5- 6 mm.

Male genitalia (Figs.1-5). In lateral view, the ventral portion of segment IX is triangular; the dorsal portion is very narrow; the preanal appendages are broad and short; the ventral portion is broadly triangle. The dorsal complex is composed

of one pair of side lobes, one median lobe and a large membranous thin lobe beneath it; the side lobes are rounded apically; the ventral surface and the apical margin have short and thick bristles; the ventral portions are elongated forming rather thin bands that connect to the phallic apparatus; there is a transversal sclerite bridge between the connection places, located on the ventral surface of the phallic apparatus; the median lobe is rounded on the sides; narrow in the middle; its median part is without hairs; the median lobe is connected to the lateral lobes via membranous parts; the third lobe is membranous; located beneath the median lobe; longer than it; the apical margin is roundly excised medially. In lateral view, the first segment of the inferior appendages is broad, the posterior edge is rounded; the basal-dorsal segment has a broad basal portion, of which the surroundings is strongly sclerotized, connected to the first segment via intersegmental membrane; its distal portion is finger-shaped; in ventral view, the first segments are directed on the sides; the inner surface has a hairy area on the inner margin. The phallic apparatus is thick at the base, slender in the middle, dilating on the distal portion, which is mostly membranous with one pair of sclerotized spines at the apex and one pair located subdistally; the locations of these spines vary on the macerated specimens.

Female genitalia (Figs. 6-8). Sternite VIII is divided into three lobes; the lateral lobes are oval; the half of the inner margins is strongly sclerotized; the distal margin of the median part is V-shaped excised, forming side projections, of which the distal edges are broad; rather smooth; sclerotized. Segment IX is narrower; the dorsomedian portion is sclerotized; the sides are weakly sclerotized; the anterior edge is sclerotized on the sides; roundly and largely excised in ventral view; segment X has three pairs of digitiform appendages.

Remarks: The genus *Pseudoneureclipsis* Ulmer, 1913 belongs to the subfamily Pseudoneureclipsinae established by Ulmer (1951) within Polycentropodidae with the other subfamilies Hyalopsychinae Lestage, 1925, Polycentropodinae Ulmer, 1903 and Dipseudopsinae Ulmer, 1904. The latter of these was considered a family by Ross (1967). The subfamily Pseudoneureclepsinae was transferred from Polycentropodidae to the family Dipseudopsidae (Li et al., 2001) based mainly on the synapomorphic character of the female sternum VIII, which is as single plate in both females of *Dipseudopsis* Walker, 1852 (Weaver & Malicky, 1994) and *Pseudoneureclipsis palmonii* Flint, 1967.

The new species of the genus *Pseudoneureclipsis* differs in many features from the generic description given by Li et al. (2001). In the male genitalia the dorsal complex has four lobes; the lateral lobes are connected to the phallic apparatus, corresponding to a “subphallic process”, which is found in some species as sclerotized side projections of the phallic apparatus. The “basodorsal process of the inferior appendages” (Li et al., 2001) of this species is connected via a thin membrane to the first segment, and so it could be regarded as the second segment of the inferior appendages (Malicky, 2001). In the paper by Li et al (2001), the description of the female genitalia was given according to the figure of *P. palmonii* Filint, 1967 (Botosaneanu, 1992), in which sternum VIII is undivided. In the new species sternum VIII is divided into a pair of lateral lobes, resembling those of the females of the species belonging to the subfamily Polycentropodinae (Malicky, 2004). Therefore, *P. kelkitensis* sp. n. is placed in the family Polycentropodidae.

Pseudoneureclipsis kelkitensis sp. n., is well characterized by many features of male and female genitalia. In the male genitalia the connections between the lobes of the dorsal complex and the phallic apparatus, and the connection of the

second segment of the inferior appendages via an intersegmental membrane to the first segment are the primitive characters of this species. It is related to *P. iranicus* Malicky, 1982 described from southern Iran (Malicky, 1982), but differs from this species by the following features: In *P. iranicus* the phallic apparatus is without side lobes connected with the dorsal complex; the dorsal complex has three lobes; the preanal appendages are basally narrow. In *P. kelkitensis* sp. n., the phallic apparatus has side connections; the dorsal complex with four lobes; the preanal appendages basally broad. It is also related to *P. gudulensis* Çakın, 1983 (Çakın & Malicky, 1983), described from Ankara, which has a simple phallic apparatus without sclerites and the side lobes.

Etymology: This species is named after the river from which the type specimens were collected.

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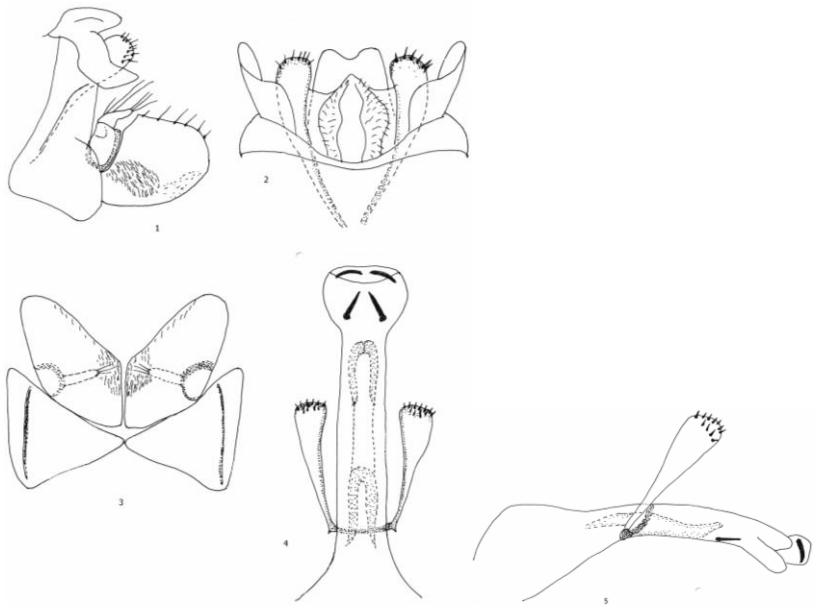
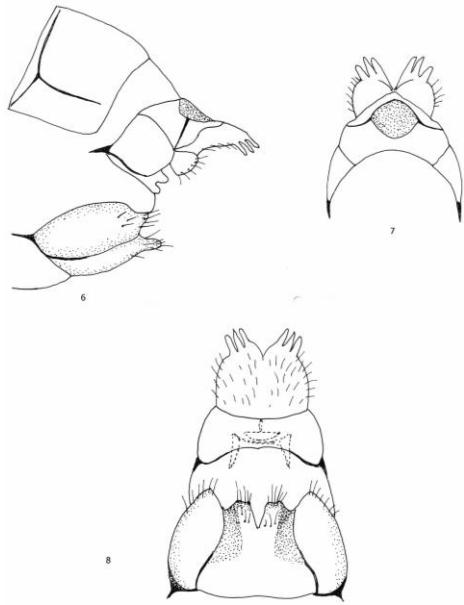


Figures 1-5: *Pseudoneureclipsis kelkitensis* sp. n. Male genitalia in 1. lateral, 2. dorsal, 3. ventral view, 4. phallic apparatus dorsal, 5. phallic apparatus, lateral view.



Figures 6-8: *Pseudoneureclipsis kelkitensis* sp. n. Female genitalia in 6. lateral, 7. dorsal, 8. ventral view.