FIVE NEW SPECIES OF TRICHOPTERA WITH THE FAUNISTIC LIST OF SİNOP AND SAMSUN PROVINCES IN TURKEY (GLOSSOSOMATIDAE, PHILOPOTAMIDAE, HYDROPSYCHIDAE, SERICOSTOMATIDAE)

Füsun Sipahiler*

*Hacettepe Üniversitesi, Eğitim Fakültesi, OFMA Eğitimi Bölümü, TR-06800 Beytepe, Ankara, TÜRKİYE. E-Mail: fusunsip@hacettepe.edu.tr

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ABSTRACT: In the present paper the following new species are described and illustrated: *Agapetus sinopicus* sp. n. (central part of northern Turkey), *Wormaldia mahiri* sp. n. (north eastern Turkey), *W. erzincanica* sp. n. (eastern Turkey), *Hydropsyche taskalensis* sp. n. (southern Turkey) and *Schizopelex sinopica* sp. n. (central part of northern Turkey). The faunistic list of Trichoptera for Sinop and Samsun provinces located central part of northern Anatolia is given, a sketch map for the locations is provided.

KEY WORDS: Trichoptera, taxonomy, new species, *Agapetus, Wormaldia, Hydropsyche, Schizopelex*, Sinop, Samsun, faunistic list, Turkey.

The Trichoptera fauna of two provinces in the central part of northern Turkey, namely Sinop and Samsun provinces, are listed. They were poorly known prior to this study, with only seven species recorded (Sipahiler & Malicky, 1987; Sipahiler, 2004 and 2007). Most of the listed specimens were collected from the mountains. In the region, in Sinop province, two mountain ranges, the Küre and Ilgaz Mountains, run parallel to the coast, separated from each other by a large plain; the mountains become lower through Samsun province. In this area, 59 species were found belonging to 18 families; of these, 50 species are recorded for the first time in the region (Fig. 1).

The Trichoptera fauna of Sinop and Samsun provinces is composed of 17 endemic species (29%), of which five species are found only in Sinop province, including the new species *Agapetus sinopicus* sp.n. and *Schzopelex sinopica* sp.n. described below. Thirty-two species (54%) that occur in the region have western type distribution, of which 19 species (32%) are found in Europe or western Turkey; the rest of the species (13 species) are widely distributed. Only ten species are also found in the Caucasus (17%).

The new species *Wormaldia mahiri* sp. n. and *W. erzincanica* sp. n. are found in northeastern and eastern Turkey, respectively. *Hydropsyche taskalensis* sp. n. belongs to the *instabilis* species group and occurs in southern Turkey.

MATERIALS AND METHODS

specimens were collected by hand net and light trap with a blacklight tube (6 W), which was set up near rivers and streams. The list of species includes those collected in 2009, formerly recorded species and new species, described in this paper. The pupae and some known larvae are also included in the list. The species of the genus *Dinarthrum* and of the *Hydropsyche pellucidula* species group, which need revision, are not listed. A sketch map of the distribution of the species is provided (Fig.). In the faunistic list, the number in parentheses shows the locations on the map. For the code of the depository the abbreviation CD is used.

Unless otherwise stated, the specimens were collected by the author and deposited in her collection in the Biology Education Department at Hacettepe University.

DESCRIPTIONS

Agapetus sinopicus sp. n.

(Figs. 2-6)

Material: Holotype male: Turkey, Sinop, Ayancık, Tarakçı, Gebelit Köprüsü,CD: F-356, 20 m, 41° 56′ N, 34° 46′ E, 16.7.2009 1 male, leg. and coll. Sipahiler.

Antennae, maxillary palps and wings brown, legs pale brown; head dorsal and thorax dark brown; the length of the anterior wing of male is 4 mm.

Male genitalia (Figs. 2-6): In lateral view, anterioventral part of segment IX is slightly protruding anteriorly. Segment X is somewhat shorter than the inferior appendage; in lateral view, a strongly sclerotized band, beginning from the dorsal part of segment X continues on the ventral margin; above the ventral margin a short and thin sclerotized band is present on the basal half of segment X; in dorsal view, the apical margin is excised medially, forming rounded lobes on each side. The inferior appendage is laterally oval, rather broad, ventral and the dorsal margins dilated, narrowing towards the apex; the apex has a small lobe on the dorsal corner, the ventral portion of the apical margin is smooth; in ventral view, the inner margin is gradually rounded, possesses two small projections near the base, two larger projections medially and two projections at the apex. The phallic apparatus is rather broad at the base, narrow at the subdistal part, the apex is deeply excised medially, bilobed, the aedeagus is located between them; the median portion of the phallic apparatus is sclerotized; dorsally, a Y-shaped sclerotized band is located on the basal half, the paramere is shorter, slightly curved to the right side.

The female is unknown.

Remarks: Agapetus sinopicus sp. n. is closely related to A. caucasicus Martynov, 1913 (Malicky, 2004) by having a relatively narrow segment IX and the shape of segment X with rounded lobes apically. It differs from the related species by the following characters: In A. caucasicus segment X has only a long sclerotized band near the ventral margin, while in the new species it is short but the margin has a long sclerotized band, beginning from the dorsolateral part of segment X; the inferior appendage of A. caucasicus is narrow, the apex is pointed, ventrally, the inner margin of the basal part forms a corner subdistally; the median projections are located on the broad dilatation, the apex is without projections; in A. sinopicus sp.n., the inferior appendage is oval, the apex is broad, with a small lobe and it possesses two small projections at the tip; the phallic apparatus of A. caucasicus is simple, it possesses only the paramere, while in the new species the paramere and a Y-shaped sclerotized band are found.

Etymology: This species is named after the place around where the specimens were collected.

Wormaldia mahiri sp. n.

(Figs. 7-11)

Material: Holotype male: Turkey, Ordu, Koyulhisar, Mesudiye direction, Arpaalan 1610 m, CD: C-485, 40° 21' N, 37° 52' E, 5.7.2007; paratypes: Ordu, Ünye direction, 5 km north of Esentepe, 3.7.2007 1 male; Ordu, Niksar-Akkuş

direction, 10 km south of Akkuş, 1300 m CD: C-491, 3.7.2007, 1 male, 1 female; Giresun, Bektaş yaylası, 2010 m, CD: C-496, 40° 39' N, 38° 14' E, 9.8.2007, 1 male; Tokat, Niksar, Çamiçi Yaylası, 1200 m, CD: C-497, 2.7.2007, 1 male; Giresun, Kümbet yaylası, 1630 m, CD: C-499, 40° 32' N, 38° 26' E, 10.8.2007, 1 male; same place, Çıkrıkkapı, 1871 m, CD: C-508, 2.10.2008, 5 males, 1 female; same place and date, 1786 m, CD: C-507, 40° 32' N, 38° 32' E, 2 males, 1 female; same place , Yağlıdere direction, 17.8.2008, 1035 m, CD: C-529, 40° 36' N, 38° 36' E, 5 males, 3 females; Gümüşhane, Zigana village, Limni Lake direction, 11.8.2007, 1230 m, CD: C-504, 1 male; leg. and coll. Sipahiler.

Antennal segments are brown; with narrow pale yellowish annulations; head and thorax dorsal dark brown; wings pale brown; legs pale brown yellowish; the length of the anterior wing of males is 5.5-6 mm.

Male genitalia (Figs. 7-11): Tergite VIII is deeply excised on the median portion, forming narrow and rounded lobes on the apical margin; the side edges of the excision are sinuate; in lateral view, the sides of segment IX are broadly and rather roundly dilated on the anterior margin. Segment X is broad on the basal part; in lateral view, the distal portion is short and rounded. The preanal appendages are narrower at the base; dorsal and ventral edges are almost parallel to each other; the posterior margin is smooth. In dorsal view, the apex of the preanal appendage is rounded. The segments of the inferior appendages are almost equal in length; in lateral view, the coxopodite is roundly dilated on the ventral margin; the dorsal margin is smooth; the harpago is slender and rounded at the apex. The phallic apparatus possesses two long and thin spines and an apical spine, which is stout, and numerous thin spines, forming together a rounded shape, located between the thin spines.

Etymology: This new species is named in memory of the author's father, Mahir Sipahiler (1919-1974).

Wormaldia erzincanica sp. n.

(Figs.12-16)

Material: Holotype male pupa: Turkey, Erzincan, Sivas direction, 115 km west of Erzincan, 2100 m, a small mountain spring, CD: C-520, 39° 43′ N, 38° 06′ E, 12.7.2008, leg. and coll. Sipahiler.

Antennal segments are pale brown-yellowish; head and thorax dorsal brown; wings pale brown-yellowish; legs yellow. The length of the pupa is 6 mm.

Male genitalia (Figs. 12-16): Tergite VIII is deeply and roundly excised on the median portion, forming broadly triangular lobes on the apical margin. Segment IX is rather narrow, in lateral view, the anterior margin is broadly dilated on the dorsal half, and the ventral edge is rather broad. Laterally the preanal appendage is rather broad, almost quadrangular; its ventroapical corner is dilated in a triangular manner towards ventral part. In dorsal view, the apex of the preanal appendage is pointed. In lateral view, the basal portion of segment X is straight, roundly excised on the median part, forming a small projection dorsally; the distal portion is short, apically rounded. The dorsal and ventral edge of the coxopodite of the inferior appendages is dilated dorsally and ventrally; the harpago is slightly shorter than the coxopodite, the ventral edge is dilated ventrally, becoming narrower on the subdistal portion, the apex is rounded. The phallic apparatus possesses six long and thin spines, which are located on the distal portion; behind

them, five shorter and thinner spines and smaller spines are found; on the basal portion, one short and thick spine is found.

Remarks: Wormaldia erzincanica sp. n. and W. mahiri sp. n. are closely related to each other by having a deep excision on the median part of tergite VIII and a straight basal part and a short and rounded distal portion of segment X. The differences are seen in many parts of the genitalia, especially the spines of the phallic apparatus, which are composed of three long spines and numerous small spines in W. mahiri sp. n., while in W. erzincanica sp. n. six long and thin spines and one thick spine and also smaller spines are found. In addition, the shape of segment IX (which is narrower in W. erzincanica sp. n., while it is broad in W. mahiri sp. n.) and the preanal appendage (of which the ventral edge is dilated ventrally in W. erzincanica sp. n., while it is narrower in W. mahiri sp. n.) separates these species.

Both new species are also related to *W. balcanica* Kumanski, 1979 (Kumanski, 1979), described from Bulgaria, by having a similar shape of segment X. It differs from the new species by the following features: in *W. balcanica* tergite VIII is nearly smooth on the apical margin; in both new species, tergite VIII is deeply excised medially; in *W. balcanica* the subdistal portion of segment X has a small pointed projection and the apex of the preanal appendages is dorsally pointed, curving inwards, while in *W. mahiri* sp. n. and *W. erzincanica* sp. n. the subdistal part of segment X is rounded in both new species and the apex of the preanal appendages is rounded in *W. mahiri* sp. n. and pointed in *W. erzincanica* sp. n., but not curving inside; in *W. balcanica*, the phallic apparatus possesses apically three small spines and numerous short and thin spines, which are located at the basal portion, forming together a long cylindrical structure, while in both new species the spines are different in shape and quantity.

Etymology: This species is named after the place around where the specimens were collected.

Hydropsyche taskalensis sp. n.

(Figs. 17-21)

Material: Holotype male (pupa) and paratype 1 male (pupa): Turkey, Karaman, Taşkale, İbrala Stream, CD: H-842, 37° 10'N, 33° 29' E, 6.7.2010, leg. F. Erk'akan, coll. Sipahiler.

Antennae, palps and legs pale brown-yellowish; head, thorax and abdomen dorsally brown, length of the pupa is 10 mm.

Male genitalia (Figs. 17-21): Cavity IX and X are moderately deep; dorsal keel of segment IX is broad and oval, the base is large. In lateral view, the dorsal stripe of segment X has a basal lobe, which is almost quadrangular and bears dense long hairs; the apical portion of the dorsal stripe protrudes as a large and rounded lobe; the ventral portion of the posterior margin of segment X is nearly straight; the digitiform appendages are rather short and thick. The dorsomedian area of segment X is almost as broad as the dorsal keel, oval, with a lobe on each side of the base, possessing dense hairs; the apical margin is U-shaped excised. The harpago of the inferior appendage is almost equal in breadth, gradually curved inside, the apex is pointed. In lateral view, the phallic apparatus is somewhat curved at the base; the dorsal edge is slightly sinuate on the distal half; in ventral view, the lateroapical projections are broadly rounded.

Remarks: *Hydropsyche taskalensis* sp. n. is closely related to *H. ayasi* Sipahiler, 2010 (Sipahiler, 2010) described from Erzincan province in Turkey by having

rounded lateroapical projections on the phallic apparatus and differs from this species by the following features: In *H. ayasi* the posterior margin and the dorsal stripe of segment X are laterally straight, the digitiform appendices are rather thin and long; in *H. taskalensis* sp. n. the dorsal stripe of segment X has a quadrangular lobe at the base, the apical lobe is rounded, the digitiform appendages are thick and shorter; in the related species the harpago of the inferior appendages is narrower at the base, curved on the basal portion, the harpago is long, the ratio of harpago/coxopodite is 1/2, while in the new species the harpago is equal in breadth and gradually curved inside, the harpago is short, the ratio of harpago/coxopodite is 1/3.6. In addition to these differences the dorsal keel of segment IX of the new species is larger than that of the related species. The shapes of the dorsomedian area of segment X also separate these species.

Etymology: This species is named after the place around where the specimens were collected.

Schzopelex sinopica sp. n.

(Figs. 22-27)

Material: Holotype male and paratype 1 male: Turkey, Sinop, Dikmen, Durağan direction, CD: U-166, 1015 m, 41° 31' N, 35° 08' E, 13.7.2009, 2 3, leg. and coll. Sipahiler.

Antennae dark brown, scapus is elongated posteriorly (Fig. 22); the first six segment after pedicellus are annulated; the last segment of the labial palpus is dark brown, the rest segments are paler; maxillary palpus is thin, curved upwards, the subdistal portion covered with long pale hairs; wings brown, the anterior wing with two large white spots located on the end of the discoidal cell and the Media, other spots are small and densely found; the posterior wing is sparsely spotted. Discoidal cell of the posterior wing is closed. The length of the anterior wing of males is 12-13 mm.

Male genitalia (Figs.23-27): Segment IX is broad; in lateral view, broadly dilated on the anterior edge; in ventral view, the ventromedian part is weakly sclerotized, protrudes on the posterior margin forming a trapezoidal lobe, curving towards ventral; in dorsal view, the dorsomedian part is roundly dilated on the apical margin. In dorsal view, the median part of segment X is elongated, broadly triangular in shape, narrowing towards the apex; the sides are strongly sclerotized, longer than the median part, rather broad, the apex is rounded apically, curving on the sides, protrudes a triangular long projection; the ventral portion of segment X is broad, shorter than the dorsal part, the apical margin protrudes a long triangular projection on the corner of the ventral margin. The preanal appendage is oval. In lateral view, the dorsal branch of the inferior appendage is rather narrow on the dorsal portion, the ventral margin is elongated, and the apical margin is slightly concave; the ventral branch of the inferior appendage is strongly sclerotized, broad at the base, narrowing towards the apex. The phallic apparatus is long and narrow, somewhat dilated apically. The female is unknown.

Remarks: Schizopelex sinopica sp. n., differs from the all known species by many parts of the genitalia, especially the shape of segment X, of which the sclerotized side projections are apically broad, bird-head shaped, curving on the sides and the upper branch of the inferior appendages, which is long, and not notched on the apical edge. Although the close relationship is not evident, this

new species is closer to *S. anatolica* Schmid 1964 (Schmid, 1964), both have short and weakly sclerotized ventromedian projections on segment IX and rather thin and long maxillary palpus. *S. anatolica* has simple segment X, of which the sclerotized projections are straight and thin and the apical margin of the inferior appendages is notched, in addition the scapus is small.

Etymology: This species is named after the place around where the specimens were collected.

FAUNISTIC LIST OF SINOP AND SAMSUN PROVINCES

RHYACOPHILIDAE

Rhyacophila fasciata fasciata Hagen, 1859

Distribution in Turkey: North western Turkey (Malicky & Sipahiler, 1993), new for Sinop province.

Distribution: Europe.

Localities: Kastamonu, Tosya, Çaybaşı yaylası, Ilgaz Mountains, east part, 1534 m, 41° 08' N, 34° 11' E, 11.7.2009, 1 \circlearrowleft pupa (1); Sinop, Ayancık direction, Çangal Mountains, Akgöl, 340 m, 41° 42' N, 34° 36' E, 13.7.2009, 1 \circlearrowleft , 1 \updownarrow (2); Sinop, Türkeli, 450 m, 11.8.2009, 41 50' N, 34° 18' E, 2 \updownarrow pupae (3); Çorum-Sinop province border, Ilgaz Mountains, Kargı, Pelit yaylası, 24.10.2009, 4 \circlearrowleft (4); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1190 m, 41° 43' N, 34° 40' E, 26.10.2009, 1 \circlearrowleft (5); Sinop, Dikmen, Durağan direction, 917 m, 41° 33' N, 35° 10' E, 25.10. 2009, 2 \circlearrowleft , 2 \updownarrow (6); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1140 m, 41° 42' N, 34° 38' E, 3.10.2009, 1 \circlearrowleft (13).

Rhyacophila osellai Malicky, 1981

Distribution in Turkey: Konya, Sultan Mountains (type), Central, North West and North East Turkey; new for Sinop province.

Distribution: Endemic to Turkey.

Localities: Sinop, Gerze, Dikmen-Durağan direction, Küre Mountains, 1015 m, 13.7.2009, 3 \supsetneq pupae (7); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1190 m, 41° 43' N, 34° 40' E, 9.8. 2009, 2 \circlearrowleft , 1 \circlearrowleft pupa (5).

Rhyacophila clavalis Martynov, 1913

 $Distribution\ in\ Turkey:\ North\ western\ and\ north\ eastern\ Turkey;\ new\ for\ Samsun\ province.$

Distribution: Caucasus, Turkey. Localities: Samsun, Ladik, Tasova direction, Büyükkızoğlu Village, 976 m, 40° 53' N, 35° 55'

Localities: Samsun, Ladik, Taşova direction, Buyukkızoglu Village, 976 m, 40° 53' N, 35° 55 E, 15.7.2009, 1 $\upred{\circ}$ pupa (29).

Rhyacophila zwickorum Malicky, 1972

Distribution in Turkey: North eastern and north western Turkey; new for Samsun province. Distribution: Endemic to Turkey.

Localities: Samsun, Salıpazarı, south direction, 700 m, 40° 01' N, 36° 53' E, 17.8.2009, 3 \circlearrowleft (30); same place, (light) 2.10.2009, 1 \updownarrow .

GLOSSOSOMATIDAE

Agapetus altineri Sipahiler, 1989

Distribution in Turkey: Ankara, (Elmadağ, Eymir direction); Bolu (Aladağlar Mountains), Ordu.

Distribution: Endemic to Turkey.

Localities: Kastamonu, Tosya, Çaybaşı yaylası, Ilgaz Mountains east part, (near Sinop province border), 1534 m, 41° 08' N, 34° 11' E, 11.7.2009, 1 \circlearrowleft pupa (1); Çorum-Sinop province border, Ilgaz Mountains, Kargı, Pelit Yaylası, 1668 m, 41° 10' N, 34° 20' E, 11.7.2009, 14 \circlearrowleft , 3 \circlearrowleft (+ larvae and pupae) (10); Kargı, Pelit Yaylası north direction, 1500 m, 41° 11' N, 34° 20' E, 11.7.2009, 3 \circlearrowleft , 3 \hookrightarrow (+ larvae and pupae) (11), Samsun, Durağan-Vezirköprü, Mezra, Kunduz Mountain direction, 1233 m, 41° 09' N, 35° 02' E, 14.7.2009, 1 \circlearrowleft (31); Sinop, Dikmen, Durağan direction, 1015 m, 41° 31' N, 35° 08' E, 13.7.2009, 1 \circlearrowleft (7).

Agapetus karabagi Çakın, 1983

Distribution in Turkey: Çankırı, İsmetpaşa (type); new for Samsun province.

Distribution: Endemic to Turkey.

Localities: Samsun, Salıpazarı, south direction, Alan Village, Terme Stream, 170 m, 41° 03' N, 36° 46' E, 17.8.2009, 1 \circlearrowleft (40).

Agapetus sinopicus sp. n.

Distribution in Turkey: Sinop.

Distribution: Endemic to Turkey.

Localities: Turkey, Sinop, Ayancık, Tarakçı, Gebelit Köprüsü, 20 m, 41° 56′ N, 34° 46′ E, 16.7.2009 1 male (16).

Synagapetus anatolicus Çakın, 1983

Distribution in Turkey: Bolu, Yedigöller (types); south and north east (Ordu province) Turkey: new for Samsun province.

Distribution: Endemic to Turkey.

Localities: Samsun, Alaçam, Durağan–Kızlan direction, 1235 m, 41° 27' N, 35° 28' E, 14.7.2009, 5 $\stackrel{?}{\circ}$, 7 $\stackrel{?}{\circ}$ (32).

HYDROPTILIDAE

Hydroptila atargatis Malicky, 1997

Distribution in Turkey: Southern, northern and eastern Turkey; new for Sinop and Samsun provinces. Distribution: Libanon, Turkey.

Localities: Samsun, Vezirköprü Çalköy, Tatarkale direction, Kuz stream, (light), 304 m, 41° 08′ N, 35° 33′ E, 14.7.2009, 6 \circlearrowleft (33); Sinop, Boyabat, Gökırmak, 286 m, 41° 30′ N, 34° 45′ E, (light), 12.7.2009, 2 \circlearrowleft , 13 \circlearrowleft (14); Samsun, Salıpazarı, south direction, 700 m, 40° 01′ N, 36° 53′ E, (light) 2.10.2009, 7 \circlearrowleft , 21 \hookrightarrow (30).

Hydroptila angustata Mosely, 1939

Distribution in Turkey: Central, western, southern and eastern Turkey; new for Samsun province.

Distribution: Eigypt, Iran, Cyprus, south and south Eastern Europe, Turkey.

Localities: Samsun, Vezirköprü Çalköy, Tatarkale direction, Kuz stream, (light), 304 m, 41° 08' N, 35° 33' E, 14.7.2009, 3 🖒 (33).

Oxyethira falcata Morton, 1893

Distribution in Turkey: Western and southern Turkey; new for Sinop province.

Distribution: Europe, North Africa, Cyprus, Levante, Iran, Pakistan, Turkey.

Localities: Sinop, Boyabat, Gökırmak, 286 m, 41° 30' N, 34° 45' E, (light), 12.7.2009, 1 \circlearrowleft (14).

PTILOCOLEPHIDAE

Ptilocolepus colchicus Martynov, 1913

Distribution in Turkey: North eastern and north western Turkey; new for Sinop and Samsun provinces.

Distribution: Caucasus, Iran, Turkey.

Localities: Çorum-Sinop province border, Kargı, Pelit Yaylası, north direction, 1446 m, 41° 12' N, 34° 21' E, 11.7.2009, 3 \circlearrowleft , 3 \circlearrowleft (12); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39' N, 34° 39' E, 9.8.2009 4 \circlearrowleft , 2 \circlearrowleft (15), Samsun, Salıpazarı, south direction, 700 m, 41° 01' N, 36° 53' E, 17.8.2009, 2 \circlearrowleft , 1 \circlearrowleft (30); Durağan, Dikmen- Uzunöz direction, 917 m, 41° 31' N, 35° 09' E, 10.8.2009, 7 \circlearrowleft (6); Samsun, Salıpazarı, southern part, Konakören Village, 585 m, 40° 04' N, 36° 54' E, 17.8.2009, 1 \circlearrowleft , 1 \circlearrowleft (38).

Ptilocolepus dilatatus Martynov, 1913

Distribution in Turkey: Northern Turkey; new for Sinop province.

Distribution: Caucasus, Turkey.

Localities: Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39' N, 34° 39' E, 9.8.2009, 2 \circlearrowleft (15); Sinop, Dikmen, Durağan direction, 917 m, 41° 31' N, 35° 09' E, 3.7.2009, 1 \circlearrowleft (17).

PHILOPOTAMIDAE

Philopotamus montanus (Donovan, 1813)

Distribution in Turkey: Marmara region, new for Sinop province.

Distribution: Europe, Turkey.

Localities: Çorum-Sinop province border, Kargı, north of Pelit yaylası, 1500 m, 41° 11′ N, 34° 20′ E, 11.7.2009, 5 Å (11); Sinop, Bürnük, 1146 m, 41° 39′ N, 34° 51′ E, 12.7.2009, 5 Å (18); Sinop, Dikmen, Durağan direction, 917 m, 41° 31′ N, 35° 09′ E, 13.7.2009, 9 Å (17);

Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1140 m, 41° 42' N, 34° 38' E, 9.8.2009, 1 \circlearrowleft , 1 \supsetneq (13); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1190 m, 41° 43' N, 34° 40' E, 9.8.2009, 1 \circlearrowleft (5).

Philopotamus variegatus (Scopoli, 1763)

Distribution in Turkey: Northern Turkey; new for Samsun province.

Distribution: Europe, Turkey.

Localities: Samsun, Durağan- Vezirköprü, Mezra-Kunduz Mountain direction, 1233 m, 41° 09′ N, 35° 02′ E, 14.7.2009, 1 ♂, 1 ♀ (31).

Wormaldia khourmai Schmid, 1959

Distribution in Turkey: Northern Turkey; new for Sinop province.

Distribution: Iran, Turkey.

Localities: Corum- Sinop province border, Ilgaz Mountains, Kargı, Pelit Yaylası, 1668 m, 41° 10' N, 34° 20' E, 11.7.2009, 1 \circlearrowleft , 1 \hookrightarrow (10).

Wormaldia balcanica Kumanski, 1979

Distribution in Turkey: Northern Turkey; new for Sinop province.

Distribution: Bulgaria, Greece, Turkey.

Localities: Çorum- Sinop province border, Ilgaz Mountains, Kargı, Pelit Yaylası, 1668 m, 41° 10′ N, 34° 20′ E, 11.7.2009, 1 \circlearrowleft (10); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39′ N, 34° 39′ E, 9.8.2009, 2 \circlearrowleft (15); Çorum-Sinop province border, Ilgaz Mountains, Kargı, Göktepe Village, 26.10.2009, 1 \circlearrowleft (19); Çorum-Sinop province border, Kargı, Pelit Yaylası, north direction, 1446 m, 41° 12′ N, 34° 21′ E, 24.10.2009, 12 \circlearrowleft , 1 \hookrightarrow (12); same place, 1550 m, 24.10.2009, 9 \circlearrowleft ; Sinop, Hanönü- Ayancık direction, Çangal Mountain, Akgöl, 41° 41′ N, 34° 34′ E, 3. 10. 2009, 5 \circlearrowleft , 1 \hookrightarrow (21); Samsun, Salıpazarı, south direction, Alan Village, Terme Stream, 170 m, 41° 03′ N, 36° 46′ E, 2.10.2009, (light), 2 \circlearrowleft (39).

Wormaldia subnigra McLachlan, 1865

Distribution in Turkey: Northern Turkey; new for Samsun province.

Distribution: Europe, Turkey.

Localities: Samsun, Salıpazarı, south direction, Alan Village, Terme Stream, 170 m, 41° 03' N, 36° 46' E, 2.10.2009, (light), 2 $\stackrel{\wedge}{\circ}$ (39).

POLYCENTROPODIDAE

Polycentropus flavomaculatus (Pictet, 1834)

Distribution in Turkey: Widely distributed in Turkey.

Distribution: Europe, Turkey.

Localities: Sinop, Āyancık, 10 km west, 7.6.2002, 1 &; same place, (light), 41° 52′ N, 34° 37′ E, 116 m, 10.8.2009, 2 & (22); Sinop, Hanönü- Ayancık direction, Çangal Mountain, Akgöl, spring, 1080 m, 41° 41′ N, 34° 35′ E, 9.8.2009, 1 & pupa (23); Sinop, Bürnük, (light), 1146 m, 41° 39′ N, 34° 51′ E, 8.8.2009, 1 & (18).

PSYCHOMYIIDAE

Tinodes dificilis Martynov, 1927

Distribution in Turkey: Known from noth eastern Turkey; new for Samsun prowince.

Distribution: Caucasus, Turkey.

Localities: Samsun, Salipazari, south, 585 m, 40° 01' N, 36° 04' E, 17.8.2009, 1 & (40).

Tinodes popovi Kumanski, 1975

Distribution in Turkey: North western Turkey; new for Sinop province.

Distribution: Bulgaria, Turkey.

Localities: Sinop, Dikmen, Durağan direction, 917 m, 41° 31' N, 35° 09' E, 10.8.2009, 1 \circlearrowleft , 1 \circlearrowleft (17).

Tinodes valvatus Martynov, 1913

Distribution in Turkey: Northern, central and southern Turkey; new for Sinop province. Distribution: Caucasus, Libanon, Turkey.

Localities: Çorum-Sinop province border, Kargı, Pelit Yaylası north, 1446 m, 41° 12' N, 34° 21' E, 11.7.2009, 2 \Diamond (12); Sinop, Dikmen, Durağan direction, 917 m, 41° 31' N, 35° 09' E, 10.8.2009, 1 \Diamond , 1 \Diamond (6).

Psychomyia dadayensis Sipahiler, 2006

Distribution in Turkey: North western, north eastern and south eastern Turkey; new for Samsun province.

Distribution: Endemic to Turkey.

Localities: Samsun, Vezirköprü Çalköy direction, Tatarkale direction, Kuz Stream, (light), 304 m, 41° 08' N, 35° 33' E, 14.7.2009, 76 \circlearrowleft , 10 \circlearrowleft (33); Samsun, Havza, Ladik direction, Tersakan Stream, 770 m, 40° 59' N, 35° 53' E, 16.8.2009, 50 \circlearrowleft , 3 \hookrightarrow (34).

Psychomyia pusilla (Fabricius, 1781)

Distribution in Turkey: Widely distributed in Turkey.

Distribution: Europe, North Africa, Turkey.

Localities: Samsun, Melet, 20.7.1981, 4 \circlearrowleft (Sipahiler & Malicky, 1987), Samsun, Salıpazarı, south direction, Alan Village, Terme Stream, 170 m, 41° 03′ N, 36° 46′ E, 17.8.2009, 4 \circlearrowleft , 1 \updownarrow (40); Samsun, Salıpazarı, south direction, 700 m, 40° 01′ N, 36° 53′ E, (light) 2.10.2009, 87 \circlearrowleft , 28 \updownarrow (30).

Lype phaeorpa (Stephens, 1836)

Distribution in Turkey: Northern Turkey; new for Sinop province.

Distribution: Europe, Iran, Turkey.

Localities: Sinop, Ĥanönü- Ayancık direction, Çangal Mountain, Akgöl, spring, 1080 m, 41° 41′ N, 34° 35′ E, 9.8.2009, 1 Å pupa, (23).

HYDROPSYCHIDAE

Diplectrona atra McLachlan, 1878

Distribution in Turkey: Western and central Turkey; new for Sinop province.

Distribution: Southeastern Europe, south west France, Bosnia, Turkey.

Localities: Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39' N, 34° 39' E, 9.8.2009, 1 \circlearrowleft , 2 \circlearrowleft (15); Sinop, Dikmen, Durağan direction, 1015 m, 41° 31' N, 35° 08' E, 10.8.2009, 1 \circlearrowleft , 1 \circlearrowleft (7); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1140 m, 41° 42' N, 34° 38' E, 9.8.2009, 1 \circlearrowleft (13); same place, 1190 m, 41° 43' N, 34° 40' E, 9.8.2009, 2 \circlearrowleft (5); same place, Akgöl, spring, 1180 m, 41° 41' N, 34° 34' E, 9.8.2009, 1 \circlearrowleft (21); Sinop, Bürnük, (light), 1146 m, 41° 39' N, 34° 51' E, 8.8.2009, 1 \circlearrowleft (18); Sinop, Küre Mountains, 1031 m, Durağan-Dikmen direction, Uzunöz, (Ice cave direction), 41° 31' N, 35° 05' E, 10.8.2009, 2 \circlearrowleft (8).

Hydropsyche botosaneanui Marincovic, 1966

Distribution in Turkey: North western Turkey

Distribution: Central and south Europe, Turkey.

Localities: Sinop, Erfelek, 400 m, (light), 41° 53' N, 34° 54' E, 3.6.2002, 1 \circlearrowleft (Sipahiler, 2007), (20).

Hydropsyche bulbifera McLachlan, 1878

Distribution in Turkey: Widely distributed in Turkey; new for Sinop and Samsun provinces.

Distribution: Europe, Iran, Irak, Turkey.

Localities: Sinop, Boyabat, Gökırmak, 286 m, 41° 30' N, 34° 45' E, (light), 15.7.2009, 7 \circlearrowleft , 6 \circlearrowleft (14); same place, 12.7.2009, 10 \circlearrowleft , 127 \circlearrowleft ; Samsun, Havza, Ladik direction, Tersakan Stream, 770 m, 40° 59' N, 35° 53' E, 16.8.2009, 1 \circlearrowleft , 1 \circlearrowleft (34).

Hydropsyche burnukensis Sipahiler, 2010

Distribution in Turkey: Sinop, Bürnük.

Distribution: Endemic to Turkey.

Localities: Turkey, Sinop, Bürnük, 1146 m, 41° 39' N, 34° 51' E, 12.7.2009, 1 \Diamond , 1 \Diamond (and 1 \Diamond pupa) (18).

Hydropsyche contubernalis McLachlan, 1865

Distribution in Turkey: Except south and west, widely distributed in Turkey.

Distribution: Europe, Iran, Central Asia, Siberia, Turkey.

Localities: Sinop, Boyabat, Gökırmak, 286 m, 41° 30' N, 34° 45' E, (light), 15.7.2009, 1 \Diamond , 1 \Diamond , 1 \Diamond (14); same place, 1 \Diamond .

Hydropsyche cornuta Martynov, 1909

Distribution in Turkey: North east, east and south east Turkey.

Distribution: Caucasus, Syria, Turkey.

Localities: Samsun 10 km NW Havza, 500 m, 40° 58' N, 35° 37' E, 19.5.1975, 1 \circlearrowleft , (Sipahiler & Malicky, 1987) (37).

Hydropsyche delamarei Jacquemart, 1965

Distribution in Turkey: Widely distributed from Askale to Ankara.

Distribution: Endemic to Turkey.

Localities: Çorum, Kargı, İlgaz Mountains, Günyazı Village, 41° o9' N, 34° 21' E, 15.8.2009, 3 \circlearrowleft (24); same place, Pelit yaylası, north, 41° 12' N, 34° 20' E, 15.8.2009, 5 \circlearrowleft (12); same place, 41° 12' N, 34° 21' E, 11.7.2009, 3 \circlearrowleft ; same place, Dağlıca yaylası direction, 41° 14' N, 34° 33' E, 1526 m, 1526

Hydropsyche kebab Malicky, 1974

Distribution in Turkey: Widely distributed in Turkey; new for Sinop and Samsun provinces.

Distribution: Endemic to Turkey.

Localities: Samsun, Ladik, Çakırgümüş Yaylası, 1070 m, 40° 53' N, 35° 57' E, 16.8.2009, 2 $\stackrel{?}{\circ}$ pupae (35); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1140 m, 41° 42' N, 34° 38' E, 9.8.2009, 1 $\stackrel{?}{\circ}$ pupa (13).

Hydropsyche instabilis (Curtis, 1834)

Distribution in Turkey: Widely distributed in Turkey.

Distribution: Europe, Iran, Levant, Turkey.

Localities: Sinop, Gerze, Kabalı direction, 288 m, 41° 47′ N, 35° 00′ E, 13.7.2009, 1 ♂, 6 ♀ pupae (26); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1140 m, 41° 42′ N, 34° 38′ E, 9.8.2009, 1 ♂ (13).

Hydropsyche sinopensis Sipahiler, 2004

Distribution in Turkey: Sinop.

Distribution: Endemic to Turkey.

Localities: Sinop, 10 km west of Ayancık, 3.6.2002, 1 \Im (type), (25); Ayancık, 41° 52′ N, 34° 37′ E, 116 m, 10.8.2009, 10 \Im (22); Sinop, Dikmen, Durağan direction, 666 m, 41° 33′ N, 35° 10′ E, 13.7.2009, 3 \Im pupae (27).

UENOIDAE

Thremma anomalum McLachlan, 1876

Distribution in Turkey: Northern Turkey.

Distribution: South east Europe.

Localities: Kastamonu, Tosya, Çaybaşı Village, Ilgaz Mountains east part, 1534 m, 41° 08' N, 34° 11' E, 11.7.2009, 1 $\stackrel{?}{\circ}$ (1); Sinop, Ayancık direction, Çangal Mountain, Akgöl, 340 m, 41° 42' N, 34° 36' E, 13.7.2009, larva (2); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39' N, 34° 39' E, 9.8.2009, 2 $\stackrel{?}{\circ}$, 1 $\stackrel{?}{\circ}$ (15); same place, 1140 m, 41° 42' N, 34° 38' E, 9.8.2009, 1 $\stackrel{?}{\circ}$ (13); Samsun, Yakakent, Durağan direction, Kızlan, 1235 m, 14.7.2009, 2 $\stackrel{?}{\circ}$ (32); Kastamonu, Tosya, Çaybaşı Village, 1534 m, 11.7.2009, 1 $\stackrel{?}{\circ}$ (1).

GOERIDAE

Lithax musaca Malicky 1972

Distribution in Turkey: North western and southern Turkey; new for Sinop and Samsun provinces.

Distribution: Bulgaria, Turkey.

Localities: Çorum, Ilgaz Mountains, Kargı, Pelit Yaylası, 1668 m, 41° 10' N, 34° 20' E, 11.7.2009, larva (10); Sinop, Ayancık direction, Çangal Mountains, Akgöl, 340 m, 41° 42' N, 34° 36' E, 13.7.2009, larva (2); Çorum-Sinop province border, Kargı, Pelit Yaylası north direction, 1500 m, 41° 11' N, 34° 20' E, 11.7.2009, 1 \circlearrowleft , 1 \hookrightarrow (11); Samsun, Ladik, Taşova, Büyükkızoğlu yaylası direction, 976 m, 40° 53' N, 35° 55' E, 14.7.2009,1 \hookrightarrow (and pupae, larvae) (29).

APATANIIDAE

Apatania subtilis Martynov, 1909

Distribution in Turkey: North east Turkey; new for Samsun province.

Distribution: Caucasus, Turkey.

Localities: Localities: Samsun, Ladik, Taşova, Büyükkızoğlu yaylası direction, 976 m, 40° 53' N, 35° 55' E, 14.7.2009.1 & (29).

LIMNEPHILIDAE

Drusinae

Drusus bauburtii Cakın, 1983

Distribution in Turkey: North east, north west and south Turkey; new for Samsun province. Distribution: Endemic to Turkey.

Localities: Samsun, Ladik, Taşova, Büyükkızoğlu yaylası direction, 976 m, 40° 53' N, 35° 55' E, 14.7.2009, $7 \circlearrowleft , 2 \subsetneq \text{pupae}$ (29).

Limnephilinae

Limnephilini

Grammotaulius nigropunctatus (Retzius, 1783)

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Europe, Turkey.

Localities: Sinop, Dikmen, Durağan direction, 1015 m, 41° 31' N, 35° 08' E, 13.7.2009, 1 \circlearrowleft (7).

Limnephilus ponticus McLachlan, 1898

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Endemic to Turkey.

Localities: Kastamonu, Tosya, Kargı direction, Günyazı Village, Ilgaz Mountains, 41° 09' N, 34° 21' E, 1524 m, 15.8.2009, 3 \circlearrowleft , 2 \circlearrowleft (24); Çorum-Sinop province border, Kargı, Pelit Yaylası, north direction, 1446 m, 41° 12' N, 34° 21' E, 11.7.2009, 2 \circlearrowleft , 1 \circlearrowleft (12); same place, 15.8.2009, 2 \circlearrowleft , 4 \hookrightarrow ; same place, 24.10.2009, 1 \circlearrowleft , 1 \hookrightarrow ; same place, 1500 m, 41° 11' N, 34° 20' E, 1.10.2009, 2 \hookrightarrow (11).

Limnephilus hirsutus (Pictet, 1834)

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Europe, Iran Turkey.

Localities: Kastamonu, Tosya, - Kargı direction, Günyazı Village, Ilgaz Mountains, 41° 09' N, 34° 21' E, 1524 m, 15.8.2009, 1 $^{\circ}$ (24); Sinop, Bürnük, (light), 1146 m, 41° 39' N, 3°4 51' E, 8.8.2009, 2 $^{\circ}$ (18).

Limnephilus sparsus Curtis, 1834

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Europe, Siberia, Turkey.

Localities: Sinop, Bürnük, 1146 m, 41° 39′ N, 34° 51′ E, 2.10.2009, 2 ♂, 1 ♀ (18).

Stenophylacini

Micropterna hatatitla Malicky, 1985

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Bulgaria, Iran, Turkey.

Localities: Çorum-Sinop province border, Kargı, Pelit Yaylası, north, 1446 m, 41° 12' N, 34° 21' E, 24.10.2009, 1 $^{\circ}$ (12).

Potamophylax latipennis (Curtis, 1834)

Distribution in Turkey: North and eastern Turkey; new for Sinop province.

Distribution: Europe, Turkey.

Localities: Sinop, Hanönü- Ayancık direction, Çangal Mountain, 1190 m, 41° 43' N, 34° 40' E, 9.8.2009, 1 \circlearrowleft (and \circlearrowleft , \circlearrowleft pupae (5); Sinop, Hanönü- Ayancık direction, Çangal Mountain, Akgöl, spring, 1080 m, 41° 41' N, 34° 35' E, 9.8.2009, 1 \circlearrowleft , \circlearrowleft \circlearrowleft pupae, (23).

Chaetoptervgini

Chaetopteryx sinopica Sipahiler, 2010

Distribution in Turkey: Sinop.
Distribution: Endemic to Turkey.

Localities: Sinop, Bürnük, 1146 m, 41° 39' N, 34° 51' E, 2.10.2009, 5 \circlearrowleft , 2 \circlearrowleft (18); Sinop, Hanönü- Ayancık direction, Çangal Mountain, 3.10.2009, 1140 m, 3 \circlearrowleft , 2 \circlearrowleft (13); same place, 733 m, 41° 39' N, 34° 39' E, 26.10.2009, 4 \circlearrowleft , 4 \circlearrowleft (15); same place, Akgöl, 1130 m, m, 41° 41' N, 34° 34' E, 3.10.2009, 1 \circlearrowleft , 1 \circlearrowleft (21); Sinop, Dikmen, Duragan direction, 917 m, 41°

31' N, 35° 09' E, 25.10.2009, 2 3, 2 \(\) (17).

Chaetopterux bosniaca Marinkovic, 1955

Distribution in Turkey: Ordu; new for Sinop province.

Distribution: Balkans, Turkey.

Localities: Sinop, Çangal Mountain, Akgöl- Hanönü direction, 1130 m, 41° 41' N, 34° 34' E, 3.10.2009, 1 \circlearrowleft (21); same place, 26.10.2009, 2 \circlearrowleft , 2 \circlearrowleft .

Chaetopteryx akgolensis Sipahiler, 2010

Distribution in Turkey: Sinop. Distribution: Endemic to Turkey.

Localities: Sinop, Çangal Mountain, Akgöl-Hanönü direction, 1130 m, 41° 41' N, 34° 34' E, 3.10.2009, 1 \Im , 1 \Im , same place, 26.10.2009, 1 \Im (21).

SERICOSTOMATIDAE

Sericostoma flavicorne Schneider, 1845

Distribution in Turkey: Widely distributed in Turkey; new for Sinop and Samsun provinces.

Distribution: Europe, Turkey.

Localities: Corum-Sinop province border, Kargı, Pelit Yaylası, north, 1500 m, 41° 11' N, 34° 20' E, 11.7.2009, 1 \Im pupa (11).

Schzopelex anatolica Schmid, 1964

Distribution in Turkey: North and central Turkey; new for Sinop province.

Distribution: Endemic to Turkey.

Localities: Çorum-Sinop province border, Kargı, Pelit Yaylası, north, 1446 m, 41° 12' N, 34° 21' E, 11.7.2009, 15 \circlearrowleft , 1 \circlearrowleft (12); same place, 15.8.2009, 4 \circlearrowleft ; Samsun, Yakakent, Durağan direction, Kızlan, 1235 m, 41° 27' N, 35° 27' E, 14.7.2009, 2 \circlearrowleft , 1 \circlearrowleft (32).

Schzopelex sinopica sp.n.

Distribution in Turkey: Sinop. Distribution: Endemic to Turkey.

Localities: Sinop, Dikmen, Durağan direction, 1015 m, 41° 31' N, 35° 08' E, 13.7.2009, 2 $\stackrel{?}{\circ}$ (7).

LEPTOCERIDAE

Adicella altandroconia Botosaneanu & Novak, 1965

Distribution in Turkey: Western Turkey; new for Sinop province.

Distribution: Bulgaria, south Romania, Greece, Turkey.

Distribution:Sinop, Hanönü- Ayancık direction, Çangal Mountain, 733 m, 41° 39′ N, 34° 39′ E, 9.8.2009, 4 ♂ (15); same place, Çangal Mountain, Akgöl- Hanönü direction, 865 m, 41° 39′ N, 34° 40′ E, 18.8.2009, 1 ♂ (9); same place, Akgöl, spring, 1080 m, 41° 41′ N, 34° 35′ E, 9.8.2009, 1 ♂ (23).

Leptocerus interruptus (Fabricius, 1775)

Distribution in Turkey: Widely distributed in Turkey.

Distribution: Europe, Turkey.

Localities: Samsun, Canik, E Terme, 6.6.1969, 41° 11' N, 37° 00' E, 1 \circlearrowleft (Sipahiler & Malicky, 1987).

Ylodes kawraiskii (Martynov, 1909)

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Europe, Caucasus, Iran, Turkey.

Localities: Sinop, Boyabat, Gökırmak, 286 m, 41° 30 N, 34° 45 E, (light), 12.7.2009 (14).

BERAEIDAE

Beraea walteri Malicky, 1975

Distribution in Turkey: West, south and north east Turkey.

Distribution: Cyprus, Turkey.

Localities: Sinop, Ayancık, 10 km west, 7.6.2002, 1 3 (25); Çorum-Sinop province border, Kargı, Pelit Yaylası, north direction, 1446 m, 41° 12' N, 34° 21' E, 11.7.2009, 1 3 (12).

Ernodes anatolicus Cakın, 1983

Distribution in Turkey: Known only from Ankara; new for Sinop province.

Distribution: Endemic to Turkey.

Localities: Sinop, Küre Mountains, 1161 m, Durağan, Dikmen direction, Uzunöz, (Ice cave direction), 41° 31' N, 35° 05' E, 14.7.2009, 1 $\stackrel{?}{\circ}$, 1 $\stackrel{?}{\circ}$ (8).

ODONTOCERIDAE

Odontocerum hellenicum Malicky, 1973

Distribution in Turkey: Western Turkey (Kazdağlar), Ordu and Giresun provinces; new for Sinop province.

Distribution: Balkans, Turkey,

Localities: Sinop, Hanönü- Áyancık direction, Çangal Mountain, 1190 m, 41° 43′ N, 34° 40′ E, 9.8.2009, 1 Å, pupa (5).

HELICOPSYCHIDAE

Helicopsyche bacesqui Orghidan & Botosaneanu, 1953

Distribution in Turkey: West Turkey; new for Sinop province.

Distribution: South east Europe, Turkey.

Localities: Çorum-Sinop province border, Ilgaz Mountains, Kargı, 1526 m, 41° 14′ N, 34° 33′ E, 8.8.2009, 9 larvae; same place, 1.10.2009, 1 larval case (19).

CALAMOCERATIDAE

Calamoceras illiesi Malicky & Kumanski, 1974

Distribution in Turkey: Widely distributed in Turkey; new for Sinop province.

Distribution: Greece, Bulgaria, Turkey.

Localities: Sinop, Türkeli, south direction, 435 m, 41° 50′ N, 34° 21′ E, 11.8.2009, 1 $\stackrel{\frown}{}$ pupa (28).

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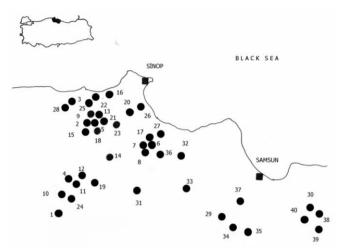
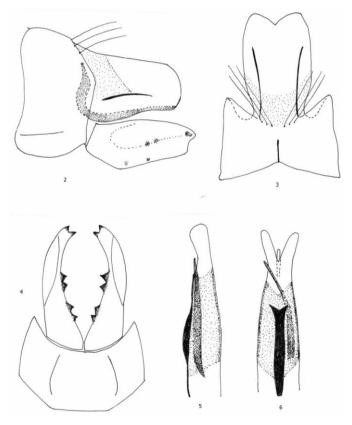
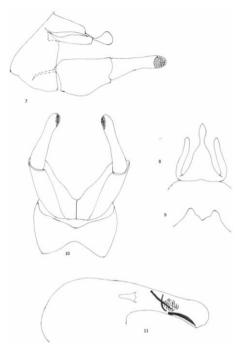


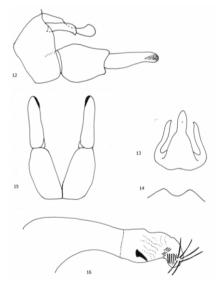
Figure 1. Map of Sinop and Samsun provinces showing the localities.



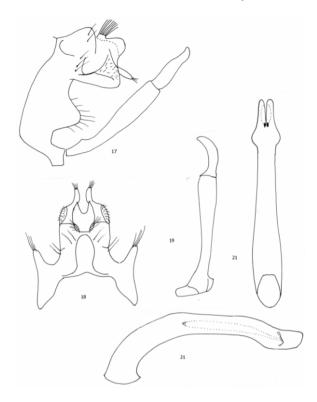
Figures 2-6. Agapetus sinopicus sp. n. Male genitalia, 2, lateral; 3, dorsal; 4, ventral; 5, phallic apparatus, lateral; 6, phallic apparatus, dorsal.



Figures 7-11. Wormaldia mahiri sp. n. Male genitalia, 7, lateral; 8, dorsal; 9, VIII. tergite, dorsal; 10, ventral; 11, phallic apparatus, lateral.



Figures 12-16. Wormaldia erzincanica sp. n. Male genitalia, 12, lateral; 13, dorsal; 14, VIII. tergite, dorsal; 15, ventral; 16, phallic apparatus, lateral.



Figures 17-21. *Hydropsyche taskalensis* sp. n. Male genitalia, 17, lateral; 18, dorsal; 19, inferior appendage, ventral; 20, phallic apparatus, ventral; 21, phallic apparatus, lateral.

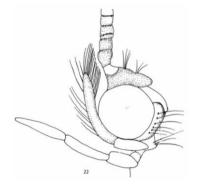
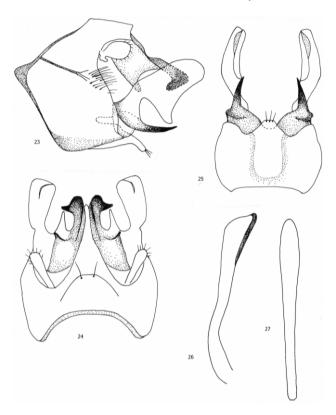


Figure 22. Schzopelex sinopica sp. n., head, lateral.



Figures 23-27. Schzopelex sinopica sp. n. Male genitalia, 23, lateral; 24, dorsal; 25, ventral; 26, phallic apparatus, lateral; 27, phallic apparatus, ventral.