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## A new species of genus *Schizopelex* McLachlan (Trichoptera, Sericostomatidae), from the southern Iberian Peninsula

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The West Palearctic genus *Schizopelex* McLachlan 1876 is represented by eleven recognized species. The center of its distribution area is in Turkey, where seven species have been reported (Malicky 2004; Sipahiler 2005, 2012; Oláh 2010; Sipahiler & Pauls 2012). These 7 species are *S. anatolica* Schmid 1964, *S. rhamnes* Malicky 1976, *S. sinopica* Sipahiler 2012, *S. yenicensis* Sipahiler & Pauls 2012, *S. boluensis* Sipahiler 2012 (in Sipahiler & Pauls 2012), *S. cachetica* Martynov 1913a, *S. pontica* Martynov 1913b. *Schizopelex cachetica* and *S. pontica* have also been reported from the Caucasus and the Transcaucasia, respectively (Martynov 1913a, 1913b; Ivanov 2011). In addition, two species (*S. huettingeri* Malicky 1974 and *S. persica* Schmid 1964) are known from the Balkans and Iran, respectively. The two remaining species are distributed in the southwestern West Palearctic region (southwestern Europe): *Schizopelex furcifera* McLachlan 1880 has been reported from the northeastern Iberian Peninsula and the Pyrenees (González et al. 1992; Martínez-Menéndez & González 2010); *Schizopelex festiva* (Rambur 1842) is distributed throughout most of the Iberian Peninsula and the Maghreb (González et al. 1992; González & Martínez 2011).

In this paper is described and illustrated for the first time a new species of *Schizopelex* from the southern Iberian Peninsula.

### *Schizopelex genalica* Ruiz-García, sp. n.

(Figs. A–H)

**Material examined.** Holotype male SPAIN: Málaga Province, Júzcar (36°37'10"N, 005°09'13.9"W), Vado del Genal, Río Genal, Serranía de Ronda, 521 m., 23-vi-2012. Two Paratypes male SPAIN: Málaga Province, Parauta (36°38'45' N, 005°07'27.8' W), Arroyo del Nacimiento, Río Genal, Serranía de Ronda, 692 m., 16-v-2014, all at black light trap, leg. A. Ruiz-García. The specimens are preserved in 70% ethanol. The holotype and paratypes have been deposited in the Museo Nacional de Ciencias Naturales de Madrid.

In addition, 10 males of *Schizopelex festiva* were examined for comparison with the holotype of the new species.

**Description.** Head and thorax dark brown. Compound eyes with small setae between ommatidia; ocelli absent. Antennae brown, scapus long, broad, subquadrangular, and extended backward (Fig. A); ratio of scapus width/eye diameter 0.80; pedicellus insertion facing forward and outward; first 6 flagellar segments annulated subapically; maxillary palps brown, curved upwards, each with third segment pale, broad, lanceolate, with pointed end and covered with dense pilosity; labial palps 3-segmented on its palpiger; legs with coxae and femora dark brown, tibiae and tarsal segments yellowish-brown; spur formula: 2, 2, 4; length of each forewing 9.2 mm, R1 very dark, reaching subapical tip of wing, membrane pale, area near pterostigma darker with some white spots; length of each hind wing 7.0 mm; abdomen dorsally and ventrally brown, intersegmental areas nearly white.

**Male genitalia** (Figs. B–H). Abdominal segment IX in lateral view short and rounded dorsally and ventrally, with conspicuous lobe at its anterolateral margin on each side projecting anterad, and posterolateral margin sinuous, concave in dorsal 2/3rds (Fig. B); in ventral view, anterior and posterior margins concave, posterior margin with small central posterior lobe in concavity; lobes located above posterior edge elongate, subtriangular, basal half broader and directed mesad, distal half narrower and curved laterad, apex triangular and lacking setae and spines (Fig. C), narrowing towards apex and slightly curved upwards in lateral view (Fig. B). Segment X elongate, subrectangular in lateral view (Fig. B); in dorsal view, median part of segment X elongate-triangular, narrowing towards rounded apex; lateral lobes small, not sclerotized, and setose, not reaching end of median part of segment X (Fig. D). Preanal appendages elongate with

posterior ends rounded and setose (Figs. B, D). In lateral view, dorsal branch of each inferior appendage broadly dilated posteriorly, posterior edge showing V-shaped notch dividing branch into two lobes, with dorsal lobe broader than ventral; upper edge of dorsal branch nearly straight along its length (Fig. B), with strongly sclerotized, longitudinal, and setose lobe on its inner surface in dorsal and ventral views (Figs. C, D); distally curved inwards and with strongly sclerotized apex; two groups of strong black setae covering outer surface, one group on upper lobe and one near lower edge of lower lobe. Phallic apparatus long, narrow, and curved at basal third in lateral view, distally uniformly straight with slightly enlarged ventral end; distal part with small rounded lobe at posterior end in ventral and lateral views (Figs. E, F), sclerotized lateral bands of phallobase lanceolate and pointed apically.

A comparison of the holotype and paratypes shows a high degree of uniformity in the male genitalia, except in the posteroventral lobes of abdominal segment IX. It seems that these structures exhibit high variability, as they are different in each specimen examined (Figs. C, G, H). In paratypes they have a laminar, subrectangular shape, they are partially fused or not, and the posterior edge is irregularly toothed, without strong black spines.

Female, pupa, larva, and egg unknown.

**Remarks.** The eastern Mediterranean species are easily distinguishable from western ones by the morphology of abdominal segment X and the inferior appendages. In eastern species abdominal segment X has lateral and/or ventral projections that are sclerotized and well developed; inferior appendages each have upper and lower branches merged into a single structure, the lower branch is strongly sclerotized and directed backwards and upwards, and is forked or not.

*Schizopelex genalica* sp. n. resembles the western species *S. furcifera* and *S. festiva*, which can be differentiated as follows. *Schizopelex furcifera* can be distinguished from the other two species by the possession of lateral projections of abdominal segment X that are long and slender, surpassing the posterior end of the medial part of segment X; by the presence on the internal face of the basal third of the dorsal branch of each inferior appendage of a chitinous lobe that is pointed and downwardly directed; by the distal end of the dorsal branch of each inferior appendage being bifurcate and inwardly directed in ventral view; and by the posterior edges of abdominal segment IX each being protracted in a bifurcated lobe in ventral view.

*Schizopelex genalica* closely resembles *S. festiva*, but may be distinguished by following features:

a) *S. festiva* shows greater pilosity in the body and a darker color, almost black; b) the ratio of the scapus width/eye diameter is 0.8 in *S. genalica* and 1.59 in *S. festiva* (see Figs. A, D); c) in lateral view, abdominal segment IX is rounded dorsally in *S. genalica* and more protuberant in *S. festiva* (Malicky, 2004, p. 289); d) the apices of the posteroventral lobes of abdominal segment IX are devoid of strong black spines in *S. genalica*, and with strong black spines in *S. festiva*; e) the distal part of the phallus is of a different shape, showing two sclerotized lanceolate lateral bands in *S. genalica*.

As suggested by Morse (personal communication), we think that the posteroventral lobes of abdominal segment IX could be homologous with the ventral branches of the inferior appendages cited by Schmid (1964) in his description of *S. persica*.

**Etymology.** The species name refers to the Genal River (Málaga, South Spain) where this species was collected.

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