Ann. Naturhist. Mus. Wien	94/95	B	491–494	Wien, 1993

Trixoscelis curvata sp. n.: a new trixoscelidid species from Spain (Diptera)

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(With 4 Figures)

Manuscript submitted October 13th, 1992

Zusammenfassung

Eine neue Art von Trixoscelididae, *Trixoscelis curvata*, wird aus Spanien beschrieben.

Summary

A new species of Trixoscelididae, *Trixoscelis curvata*, is described from Spain.

Introduction

Continuing with the study of Spanish Trixoscelididae (CARLES-TOLRÁ, 1990, 1992) the author has examined new material of the genus *Trixoscelis* RONDANI, 1856. Among the various species that have been identified, one is considered here to be new for science.

The new species described below comes from the flies collected by Mr. JAVIER BLASCO-ZUMETA in a very arid region of the northeast of Spain called Monegros, concretely in a zone named Retuerta de Pina (Zaragoza, Pina de Ebro).

I am very grateful to Mr. JAVIER BLASCO-ZUMETA (Zaragoza, Pina de Ebro) for the shipment of that very interesting dipterological material for study.

Trixoscelis curvata sp. n.

Diagnosis:

A general colour grey species with yellowish to dark brown coloured legs, and characterized by the curved gonite (male) and the distinct anteromedian desclerotization on the sternite 7 (female).

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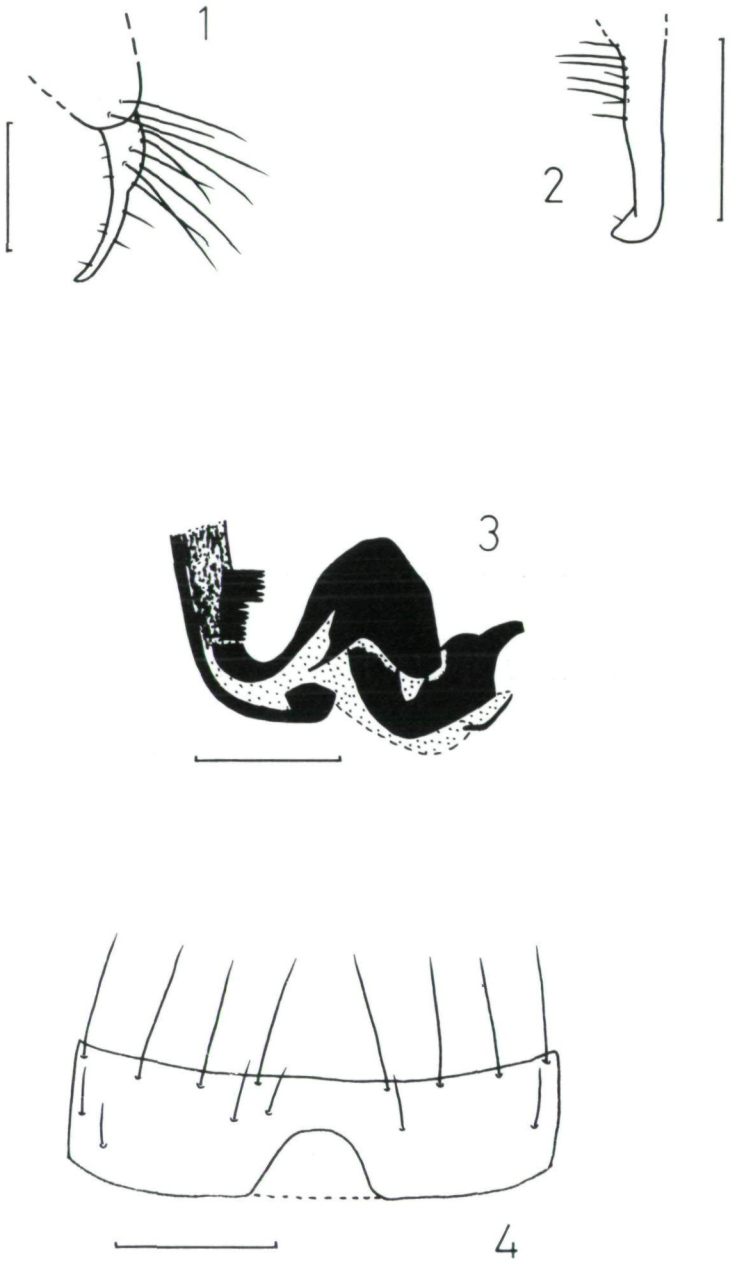

Figs. 1–4. – *Trixoscelis curvata* sp.n.:
1 – surstylus in lateral view, 2 – gonite in lateral view, 3 – aedeagus in ventrocaudal view, 4 – female sternite 7. Scales = 0.1 mm

Description (male):

Head: frontal triangle, vertex, occiput and postgena grey. Frons orange. Face, gena, parafacial and palpus yellow whitish. Antenna orangish, 3rd joint partially brownish; arista barown pubescent. Chaetotaxy: 2 ors, 2 oc, vte, vti.

Thorax: mesonotum grey, whitish dusted, with brownish longitudinal stripes inside the dorsocentral row and along the intraalar row. Mesopleura grey, brownish dorsoposteriorly. Sternopleura and scutellum grey. Chaetotaxy: 1+4 dc, 1 mp, 2 st, 2sc.

Fore leg: coxa yellowish, brownish basally; trochanter yellowish; femur dark brown; tibia dark brown, yellow basally; tarsus: joint 1 brown, joints 2–5 brownish, clearer to the apex.

Mid leg: coxa (grey basally), trochanter, femur and tibia yellowish; tarsus: joint 1 dilated, brown, joints 2–5 brown-yellowish.

Hind leg: coxa grey; trochanter brownish; femur brownish, dark brown dorsal and ventrally; tibia brownish, somewhat dark brown dorsally; tarsus: joint 1 very dilated, joints 1–3 dark brown, joints 4–5 brownish.

Wing and veins yellowish. Haltere pale yellow, whitish.

Abdomen: brown, grey laterally, shiny.

Male genitalia: surstylus (Fig.1) long, filiform, dilated basally, with long basal hairs. Gonite (Fig.2) curved apically, haired basally. Aedeagus (Fig.3) E-shaped, base with numerous dense spines grouped into two groups, most basal ones clearly longer; apex not forked.

Female. Fore leg: coxa and trochanter yellowish; femur, tibia and tarsus dark brown, last tarsal joints clearer. Mid leg: yellowish; coxa grey. Hind leg: coxa grey; femur yellowish, brownish dorsal and ventrally; tibia yellowish, somewhat brownish dorsally; tarsus yellowish. Remaining characters as in the male.

Female genitalia: sternite 7 (Fig.4) with a distinct median semicircular desclerotization on its anterior margin.

Total body length: male: 1.8–2.9 mm, female: 2.2–3.2 mm.

Locus typicus: holotype ♂: Spain, Zaragoza, Pina de Ebro (Retuerta de Pina) 10. 5. 1992, Wilkening trap, BLASCO leg.

Other type material: Paratypes (locality data as holotype): 14. 9. 1990 1♀ (light lamp), 18. 9. 1990 6♂ 11♀ (Malaise trap), 17. 10. 1990 2♀ (Malaise trap), 11. 11. 1990 1♀ (Malaise trap), 7. 5. 1991 2♂ 3♀ (Moericke trap), 7. 5. 1991 1♂ 2♀ (coloured plate), 20. 5. 1991 5 ♂ 18♀ (Moericke trap), 20. 5. 1991 1♂ 2♀ (sweeping on vegetation), 26. 5. 1991 2♀ (sweeping on vegetation), 7. 6. 1991 1♀ (Malaise trap), 25. 8. 1991 2♀ (liver of pig), 5. 9. 1991 3♀ (liver of pig), 22. 9. 1991 2♂ 3♀ (liver of pig), 10. 10. 1991 9♂ 5♀ (liver of pig), 26. 10. 1991 1♀ (coloured plate), 10. 11. 1991 1♀ (liver of pig), 25. 4. 1992 1♂ 1♀ (Wilkening trap), 2. 5. 1992 1♀ (sweeping on vegetation), 10. 5. 1992 4♂ 1♀ (liver of pig), 10. 5. 1992 2♂ (Wilkening trap), 25. 5. 1992 1♀ (Wilkening trap), 28. 6. 1992 3♀ (liver of pig), 8. 7. 1992 1♀ (sweeping on vegetation), 8. 7. 1992 2♂ (liver of pig), 14. 7. 1992 1♀ (Wilkening trap); all BLASCO leg.

Holotype and 1♂ and 2♀ paratypes deposited in the Naturhistorisches Museum, Wien; 1♂ and 1♀ paratypes deposited in the collector's collection; remaining paratypes deposited in the author's collection.

Discussion:

Trixocelis curvata sp. n. is closely related to *Trixoscelis frontalis* (FALLÉN, 1823) and *Trixoscelis similis* HACKMAN, 1970. The males of *T. curvata* and *T. frontalis* can be easily separated by genital characters, as *T. frontalis* has a short surstylus, the gonite not curved apically, and the aedeagus clearly forked apically and with all the basal spines equal in length. By the other hand, *T. similis* has also a long surstylus as well as the most basal spines longer than the others, but the gonite not curved apically and the aedeagal apex slightly forked; furthermore both species clearly differ on the colour of the legs. Respecting the females, HACKMAN (1970: 134) did not find differences among the females of *T. frontalis* and *T. similis*, instead the females of *T. curvata* have a distinct median desclerotized zone on the anterior margin of the sternite 7. The desclerotization in the two former species is very slight and arrives until the posterior margin.

Biology: the specimens were collected by means of various collecting methods: trap with liver of pig (35 exemplars), Moericke trap (28 ex.), Malaise trap (21 ex.), sweeping on vegetation (7 ex.), Wilkening trap (7 ex.), coloured plates (4 ex.) and light lamp (1 ex.). Although its biology is unknown, we can suppose that *Trixoscelis curvata* could be a saprophagous species.

Distribution: hitherto known only from Spain.

Etymology: the specific name refers to the curved apex of the gonite.

Literature

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