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Source: Florida Entomologist, 94(4) : 859-862
Published By: Florida Entomological Society
URL: https://doi.org/10.1653/024.094.0420
NEW DATA ABOUT XYLOMYA SPECIES FROM TURKEY
(DIPTERA: XYLOMYIDAE)

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ABSTRACT

The Xylomya species found in Turkey are summarized and illustrated in this work. Xylomya ciscaucasica (Pleske 1928) and Xylomya mlokosiewiczi (Pleske 1925), previously only known from the Caucasus, are recorded from Turkey for the first time in this study. The male genitalia of X. ciscaucasica and the female genitalia of X. mlokosiewiczi and X. maculata (Meigen 1804) are illustrated for first time. The distribution of these species is briefly discussed and a key to Turkish species is given. Also a key to Turkish genera of Xylomyidae is given.

Key Words: Xylomyidae, Xylomya, new records, distribution, Turkey

RESUMEN

Se informa y se ilustran las especies de Xylomya en Turquía en este trabajo. Anteriormente, sólo se conocían Xylomya ciscaucasica (Pleske 1928) y Xylomya mlokosiewiczi (Pleske 1925) en la región del Cáucaso, pero se registran las dos especies en Turquía por primera vez en este estudio. Se ilustran por primera vez los genitales del macho de X. ciscaucasica y los genitales las hembras de X. mlokosiewiczi y de X. maculata (Meigen 1804). Se discute la distribución de estas especies brevemente y se provee una clave de las especies de Xylomya en Turquía. También, se provee una clave de los géneros de Xylomyidae en Turquía.

The family of Xylomyidae has 4 genera in the world: Arthropeina Lindner 1949, Coenomyiodes Brunetti 1920, Solva Walker 1859 and Xylomya Rondani 1861 (Woodley 2011). Adult xylomyids are generally found in wooded areas and tropical forest (Krivosheina 1976; Woodley 2011). This small family includes 33 species in Solva and 23 species in Xylomya in the Palaearctic Region (Krivosheina 1988, 1999a, 1999b; Woodley 2011). Only 2 species, Solva marginata (Meigen 1820) and Xylomya maculata (Meigen 1804), are known from Turkey (Üstüner & Kalyoncu 2005; Üstüner and Öztürk 2002).

The specimens examined in the present work are deposited in the Zoological Museum of Gazi University (ZMGU).

KEY TO GENERA OF XYLOMYIDAE FROM TURKEY

1. Hind femora distinctly thickened with tubercles or spinules on ventral surface; m-cu very short. Solva Walker 1859
— Hind femora not noticeably thicker than two anterior pairs, without ventral tubercles or spinules; m-cu is well developed. Xylomya Rondani 1861

Xylomya Rondani 1861
Xylomya includes large species (11-15 mm). The ground-color of Turkish species is black with yellow spots and stripes on the mesonotum and abdomen. The flagellum consists of 8 flagellomeres and is sharply pointed at the apex. The scutellum is unarmored. The middle and hind tibiae bear a pair of spurs. Wings with brown and reddish brown veins, cell M₁ closed.

KEY TO SPECIES OF XYLOMYA KNOWN FROM TURKEY

1. Mesopleuron and pteropleuron with yellow spots along pleural suture. Mesonotum with distinct yellow spots on transverse suture. Hind tibia blackish on more than apical 1/3. 2
— Mesopleuron and pteropleuron without yellow spots along pleural suture. Mesonotum with indistinct yellow spots on transverse suture. Hind tibia lighter, black only at extreme apex. Abdomen black, with small rect-
angular yellow spots on tergite 2. Tergites 3 - 6 with pale posterior margins.  

Xylomya ciscaucasica (Pleske 1928) (Figs. 1, 2, 7, 8, 9, 10, 11 and 19)

Material Examined: Turkey: Ankara, Çubuk, Kuruçay Village, elev.1100 m, 25 May 1996, 2 male, A. Hasbenli leg (Figs. 1-2 and 19).

Mesonotum with indistinct yellow spots on transverse suture, scutellum yellow laterally and apically but black dorsally in basal half. Tibia lighter, black only at extreme apex. Abdomen black, with small rectangular yellow spots on tergite 2. Tergites 3-6 with pale posterior margins. This species has been previously recorded only from Vladikavkaz and Alagir in North Ossetia. It is recorded here for the first time from Turkey.

Male Genitalia: Epandrium almost oval. Surstyli of epandrium rather slender and about 2/3 as long as epandrium as well as paraproct. Synsternite large and oval. Distisyles about 1/3 as long as height of synsternite and about as large as parameres. Aedeagus smooth, parameres large, sharp at apex and relatively longer than distisyles (Figs. 7-11).

Xylomya maculata (Meigen 1804) (Figs. 5, 6, 12, 13, 14, 15 and 19)

Material Examined: Turkey: Antalya, Alanya, Gevne Village, elev. 1500 m, 17 VII 1999, 1 female, T. Üstüner leg (Figs. 5-6 and 19).

Mesonotum with longitudinal yellow stripes interrupted at middle and connected to yellow humeral spots. Yellow pleural spot extending over upper mesopleura and on the part of pteropleura. Legs predominantly yellow, but all coxae black and apical third of hind femora and tibia, and also fore tarsal segments black. Abdomen with yellow spots on posterior corners of tergites 3-7. Female terminalia: Cercus with elongate-ovale shape, two - segmented, segment 1 much larger than segment 2. Tergum 9 N-shaped. Genital furca strongly sclerotized, Y-shaped, rounded at proximal apex and median aperture a transparent membrane in distal part. The female genitalia are illustrated here for the first time (Figs. 16, 17 and 18).

Distribution. Three species of Xylomya are known from Turkey: X. ciscaucasica (Pleske 1928), X. maculata (Meigen 1804) and X. mlokosiewiczi (Pleske 1925). X. ciscaucasica (Pleske, 1928) and X. mlokosiewiczi (Pleske 1925) are recorded for the first time as fauna of Turkey. The former is known from Vladikavkaz and Alagir in North Ossetia. The latter is known from Lagodekhi in Georgia. Also X. mlokosiewiczi, described by Pleske in 1925, had not been recorded for 86 years. It was redescribed by N. P. Krivosheina in 1999 on the basis of the female type specimen (Krivosheina 1999). The type specimen had been collected by M. Mlokosiewicz in Lagodekhi (Lagodechi), a small town and district in the Kakheti region of the eastern Georgia. Most species of this family are rarely collected, and therefore it is surprising that these species are newly discovered for the fauna of Turkey.
Figs. 1-18. 1-2 Xylomya ciscaucasica: 1 - Male, dorsal view, 2—Male, lateral view; 3-4 Xylomya mlokosiewiczi: 3—Female, dorsal view, 4—Female, lateral view (scale bar: 1 mm); 5-6 Xylomya maculata: 5—Female, dorsal view, 6—Female, lateral view (scale bar: 1 mm); 7-11 Male Genitalia of Xylomya ciscaucasica: 7—Dorsal part in dorsal view, 8—Dorsal part in ventral view, 9—Ventral part in dorsal view, 10—Ventral part in ventral view, 11—Sternite 8; 12-15 Female Genitalia of Xylomya maculata: 12—Female terminalia in dorsal view, 13—Female terminalia in ventral view, 14—Genital furca, 15—Female terminalia complex in lateral view; 16-18 Female Genitalia of Xylomya mlokosiewiczi: 16—Female terminalia in dorsal view, 17—Genital furca, 18—Female terminalia complex in lateral view.
The Xylomyidae are considered to be endangered because of the loss of old growth forests in Turkey.

The finding in the East Mediterranean Region of *X. ciscaucasica* and *X. mlokosiewiczi* is rather remarkable, because this species had never before been found outside of the old growth forest of the Caucasus.

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