Tipula (s. lato) eva n.sp. from Cretaceous (East Asia) - the oldest representative of the family Tipulidae (Diptera, Polyneura)

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Abstract. The Cretaceous *Tipula* (s. lato) *eva* from Upper Burneya (Khabarovsky Kray, Asia, USSR) is described and illustrated. This is the oldest known representative of the family.

Key: Diptera, Tipulidae, fossil, Cretaceous.

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The family Tipulidae together with Limoniidae and Cylindrotomidae belongs to the superfamily Tipuloidea. Until present the oldest Tipulidae were found in Paleocene and Middle Eocene (HENRIKSEN 1922; KRZEMIŃSKI & KRZEMIŃSKA 1990; FREIWALD 1990) while the superfamily is represented since Upper Triassic (KRZEMIŃSKI, in press). Tipulidae are frequently found in Tertiary faunas, i.e. since ca. 55 Ma, however, till now were never found in older deposits. The described here species comes from the first stage of Upper Cretaceous (probably Cenomanian - personal information from Dr V. ZHERYKHIN from the Paleontological Institute in Moscow).

Recently the family comprises ca. 4000 species of worldwide distribution.

Family: Tipulidae

Genus: *Tipula* LINNAEUS *Tipula* (s. lato) *eva* n.sp.

Description. Only one wing retained, 7.5 mm long, with conspicuous stigma.

Vein Sc very delicate but distinct, escapes in Costa opposite 1/3 of R_1 length; cross-vein sc-r ending one its length before Sc tip; R_1 very short, equal 1/4 of Rb length; R_3 its 1/3

part shorter than R₃₊₄ and equal 1/3 of R₄ length; R₅ strongly curved toward anal part; medial field damaged; A₂ straight and relatively long.

Material examined: Holotype No. 2708/4, sex unknown, coll. D. E. SHCHERBAKOV; type locality: Upper Burneya depression, Khabarovsky Kray (Asiatic USSR), beginning of Upper Cretaceous (probably Cenomanian). Housed in Paleontological Institute, Academy of Sciences, Moscow, USSR.

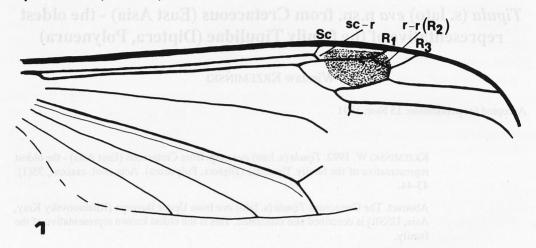


Fig. 1. Tipula eva n.sp. - wing.

Remarks. Although in the specimen examined the vein Sc escapes in the Costa, and its tip is clearly visible, which is characteristic of the family Limoniidae, the overall venation pattern of radial field indicates the family Tipulidae. This character (tip of Sc present) is sometimes retained in the recent Tipulidae.

Origin of name: the new species name is dedicated to my wife.

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