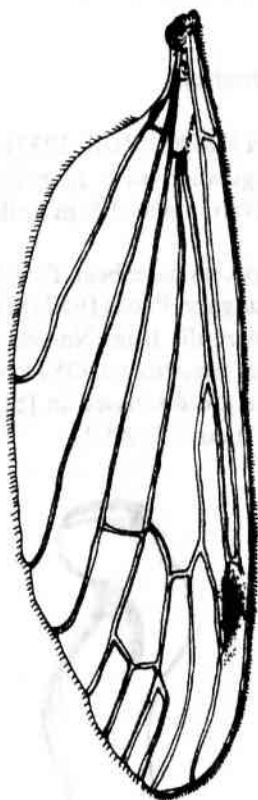


THE FAMILY CYLINDROTOMIDAE NEW TO THE ROMANIAN FAUNA  
(DIPTERA, TIPULOIDEA)

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**SUMMARY.** - *Cylindrotoma distinctissima* (MEIGEN, 1818) belonging to the family Cylindrotomidae, is recorded in Romania for the first time. Apart from the species also the family is new for the country because up to now, members of this family were not known from the country. A short characterization of the family is presented, together with drawings of the wing and genitalia of *C. distinctissima*.



Cylindrotomidae are a small families of tipuloid crane flies with about 70 described species worldwide, only six of which, in four genera are known to occur in Europe [4]. Up to now no species of the family have been reported from Romania. The first author started to study Romanian crane flies in 1998, and collected among others four specimens of *Cylindrotoma distinctissima* (MEIGEN) around marshy habitats in the Eastern Carpathians.

Adults of Cylindrotomidae are most resembling Tipulidae, with relative large body (about 11-16 mm) and can be separated from the other families of Tipuloidea by the particular wing venation with Sc1 atrophied distally, ending freely in the wing membrane, Sc-R crossvein present, vein CuA2 strongly bent toward wing margin beyond branch leading to discal cell, vein M1+2 combined, not branched into M1 and M2, crossvein R-M joining Rs at or before fork, with discal cell usually present (fig. 1). Antenna with 16 segments. Rostrum short, nasus absent. Mesonotal suture distinct only in the median third of the thorax, fading out laterally. Males possess a bipartite (*Diogma*) or tripartite aedeagus and a single pair of gonostyli; females have broad and short cerci.

Fig. 1. Wing venation of *Cylindrotoma distinctissima* (MEIGEN, 1818).

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Larvae are hemicephalic and metapneustic, and very unusual in appearance, with rows of longer or shorter filiform processes along the body (except *Cylindrotoma*). They are phitophagous, living free on mosses or herbaceous plants, not in a substrate as those of other Tipuloidea. Larvae of *Cylindrotoma* live freely, like caterpillars, on the leaves of phanerogamic plants in marshy woodland habitats. Larvae of *Diogma* feed on terrestrial mosses, whereas those of *Triogma* and *Phalacrocera* are fully aquatic on mosses in stagnant and slowly moving waters of bogs, fens, acid pools, moors and other marshy places.

Adult are found at rest on the vegetation or flying around slowly in the vicinity of their breeding sites. They are not frequently encountered but can be very common locally at marshy or other fairly wet habitats.

Important references for the family are [1] (larvae, pupae), [2] (aquatic, general), [3] (general, Nearctic), [4] (larvae, pupae, phylogeny), [5] (excellent review of all stages, distribution, and taxonomy), [6] (catalogue), [7], [8] (general, central Europe), [9] (Limnofauna Europea).

### New species of Cylindrotomidae for the fauna of Romania

*Cylindrotoma distinctissima* (MEIGEN, 1818)

(syns. *brevicornis* (ZETTERSTEDT, 1838), *tenebrarum* KROGERUS, 1937).

Material: 4 ♀; Sântimbru Băi, Eastern Carpathians, from vegetation in a marshy spruce-fir forest, 2001.VI.12, leg. Ujvarosi L. (2 ♀ in coll. Ujvarosi and 2 ♀ in coll. Zoological Museum, Amsterdam).

The species is distributed in the Holarctic and four subspecies have been found throughout temperate Europe and is for example known from Hungary. Peus (1952) [5] established the subspecies *alpestris* from northern Italy and *borealis* from Norway. The species is represented in the Nearctic by the subspecies *americana* OSTEN SACHEN. All life stages as well as the biology of the species are discussed in [5]. Details of the wing venation and male genitalis are presented in figures 1 and 2.

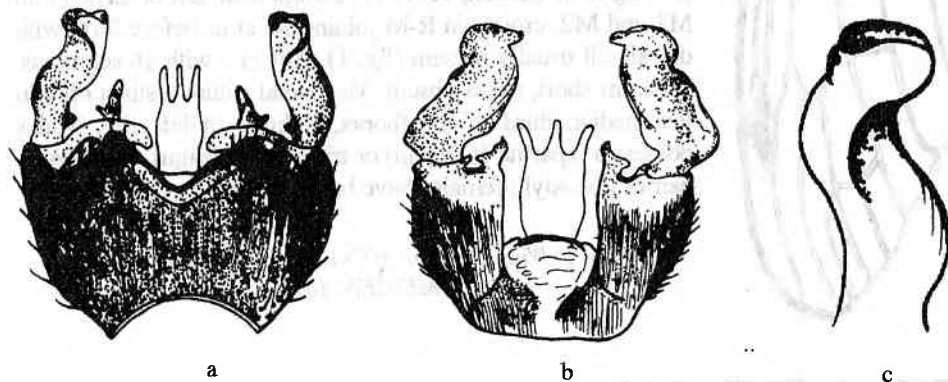


Fig. 2. Male genitalia of *Cylindrotoma distinctissima* (MEIGEN, 1818), general view, dorsal (a); the same, ventral (b); forceps, detail, dorsal (c).

Besides this species, representatives of the other three westpaleartic genera of *Cylindrotomidae* (*Diogma* EDWARDS, 1936; *Phalacocera* SCHINER, 1863; *Triogma* SCHINER, 1863) can also be expected to occur in Romania.

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