SHORT COMMUNICATION


Summary. The feeding of larvae of the crane fly Cylindrotoma distinctissima is firstly observed on Saussurea pseudo-tilesii Lipsch., Cirsium kamtschaticum Ledeb. ex DC. (Asteraceae), Trientalis europeae L. ssp. arctica (Fisch. ex Hook.) Hult. (Primulaceae) and Maianthemum dilatatum (Wood) Nels. et Macbr. (Liliaceae). is firstly reported as host plant for nominotypical subspecies.

Key words: Diptera, Cylindrotomidae, Cylindrotoma distinctissima, host plants, Kamchatka, Russian Far East.

INTRODUCTION

Cylindrotomidae is a small family of crane flies (Diptera: Tipuloidea). There are 71 described species in nine genera in the world, beside them only 11 species in five genera was recorded from Russia (Oosterbroek, 2012).

In June 1985 the second author studied the larvae of Cylindrotomidae, which feed on plant leaves in the natural environments in Kamchatka Peninsula, Russian Far East. Collected larvae were put in a cage, where they pupated and then adults emerged within two weeks. The last specimen flew out 18 July 1985. All imago was indentified by first author as Cylindrotoma distinctissima (Meigen, 1818). This species is divided into three subspecies: Palearctic C. d. distinctissima (Meigen, 1818), Nearctic C. d. americana Osten-Sacken, 1865, and endemic to the Alps C. d. alpestris Peus, 1952. Wing venation of studied adults corresponds to Cylindrotoma, prescutum is yellow (peculiar to C. distinctissima) instead of black (peculiar to C. nigriventris Loew, 1849), dark longitudinal stripes are separate and not joined together as in C. japonica Alexander, 1919 (Gelhaus et al., 2007). C. d. distinctissima has already been recorded from Kamchatka (Paramonov, 2006).

The larvae of Cylindrotoma are polyphagous feeding both on monocot and dicot plants. C. d. distinctissima feed on Acer, Allium, Anemone, Caltha, Ranunculus, Sanicula, Stellaria, Trollius, Valeriana, Viola as noted by Peus (1952), Tarasova (1981) and (Brinkmann, 1991); C. d. americana on Allium, Anemone, Maianthemum, Stellaria, Trautvetteria, Viola as noted by Cameron (1919), Alexander (1920), Brodo (1967) and Poinar & Gelhaus (2004). Host plant of C. d. alpestris is unknown. In present paper fore vascular plants are firstly recorded as host for larvae of C. d. distinctissima. The names of plants are given according to Yakubov & Chernyagina (2004).
RESULTS

Family Cylindrotomidae

*Cylindrotoma distinctissima distinctissima* (Meigen, 1818)

**MATERIAL. Russia:** Kamchatka, Kronotsky State Nature Biosphere Reserve: Zhupanovo village, Semyachinskoe Lake, 1-6.VII 1985, 4 specimens emerged from larvae with pinned exuvia (leg. L.E. Lobkova); Tikhaya River, 3.VIII 1985, 1 ♀ (leg. L.A. Danilovich); Nachiki, Nachikskeo zerkal'tse Lake, 31.VII 1958, 1 ♀ (leg. Ivliev). All specimens are kept in the Zoological Institute, St.-Petersburg.

**LARVAE.** Mature larvae are light-green, 15-22 mm long, flat at lateral sides, dorsally and frontally sharp, worm-shaped, with numerous short protuberances on dorsal part of each abdominal segment. Larvae feed the same way as lepidopteran larvae, i.e. the flesh of leaves. If abundant the larvae cover host plant leaves, eating it out and causing skeletonization of leaves.

**HOST PLANTS.** Feeding of larvae of *Cylindrotoma d. distinctissima* on *Saussurea pseudo-tilesii* and *Cirsium kamtschaticum* (Asteraceae), *Trientalis europeae arctica* (Primulaceae) and *Maianthemum dilatatum* (Liliaceae) is reported here for the first time. *Saussurea pseudo-tilesii* Lipsch. (Asteraceae) is endemic to Kamchatka and Komandorskiye Islands and occurs at meadows, mountain marsh slopes and around the hot springs, often and abundantly in subalpine zone, more rarely in alpine zone (Yakubov & Chernyagina, 2004). One hundred leaves of this plant were observed, and gnaw marks were traced on all of leaves studied as well as 2-3 larvae were noticed on each plant.

*Cirsium kamtschaticum* Ledeb. ex DC. (Asteraceae) is spread in Kamchatka everywhere: in birch forest, at meadows and tundra, in bushes (Yakubov & Chernyagina, 2004). Twenty leaves of this plant were observed, all the young leaves are damaged, only 10 larvae of *Cylindrotoma distinctissima* were found.

*Trientalis europeae* L. ssp. *arctica* (Fisch. ex Hook.) Hult. (Primulaceae) is spread in Kamchatka everywhere; often it can be found around the sea shores, at meadows, in woods, marshes and bushes (Yakubov & Chernyagina, 2004). Fifteen leaves were observed, all the leaves are damaged, only 5 larvae of *Cylindrotoma distinctissima* were found.

*Maianthemum dilatatum* (Wood) Nels. et Macbr. (Liliaceae) is abundant in Kamchatka everywhere: at meadows, in woods, in the edges of coniferous and deciduous forests (Yakubov & Chernyagina, 2004). Twenty leaves of this plant were observed, all the leaves are damaged, but only six larvae of *Cylindrotoma d. distinctissima* were found. *Maianthemum dilatatum* was also reported as host plant for *C. d. americana* in North America (Poinar & Gelhaus, 2004).

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