

SHORT COMMUNICATION

hppt/ urn:lsid:zoobank.org:pub: 1F810954-E476-4078-B536-F343C632C210

N. M. Paramonov¹⁾, L. E. Lobkova²⁾. NEW HOST PLANTS FOR LARVAE OF *CYLINDROTOMA DISTINCTISSIMA DISTINCTISSIMA* (MEIGEN, 1818) (DIPTERA: CYLINDROTOMIDAE). – *Far Eastern Entomologist*. 2013. N 258: 6-8.

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 europaea* 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, Cyindrotomidae, *Cylindrotoma distinctissima*, host plants, Kamchatka, Russian Far East.

Н. М. Парамонов, Л. Е. Лобкова. Новые кормовые растения для личинок *Cylindrotoma distinctissima distinctissima* (Meigen, 1818) (Diptera: Cyindrotomidae) // Дальневосточный энтомолог. 2013. N 258. С. 6-8.

Резюме. Впервые отмечено питание личинок комаров *Cylindrotoma distinctissima* на *Saussurea pseudo-tilesii* Lipsch., *Cirsium kamtschaticum* Ledeb. ex DC. (Asteraceae), *Trientalis europaea* L. ssp. *arctica* (Fisch. ex Hook.) Hult. (Primulaceae), а *Maianthemum dilatatum* (Wood) Nels. et Macbr. (Liliaceae) впервые указан в качестве кормового растения для номинативного подвида.

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 Cyindrotomidae, 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 (1918), 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, Nachikskoe 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 kamschaticum* (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 kamschaticum 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).

ACKNOWLEDGEMENTS

We appreciate Jukka Salmela from Zoological Museum of Turku (Finland) for remarks and comments to the English version of the manuscript. The study of N.M. Paramonov was supported by the Ministry of Education and Science of the Russian Federation (grant No. 16.518.11.7070) and by the Russian Foundation for Basic Research (grant No. 11-04-00185).

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Author's addresses:

- 1) Zoological Institute, Russian Academy of Sciences,
Universitetskaya nab. 1, St.Petersburg 199034 Russia.
E-mail: param@zin.ru
- 2) Kronotsky State Nature Biosphere Reserve,
Ryabikova str., 48, Yelizovo 684010, Russia.
E-mail: lel47@mail.ru

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E-mail: entomol@ibss.dvo.ru web-site: <http://www.biosoil.ru/fee>