

## A new species of the gall midge genus *Coniophora* from Pskov Province of Russia (Diptera: Cecidomyiidae)

B.M. Mamaev & A.A. Przhiboro

Mamaev, B.M. & Przhiboro, A.A. 2001. A new species of the gall midge genus *Coniophora* from Pskov Province of Russia (Diptera: Cecidomyiidae). *Zoosystematica Rossica*, 9(1), 2000: 235-236.

*Coniophora semimarina* sp. n. is described from semiaquatic habitat in Pskov Province.

B.M. Mamaev, All-Russian Institute of Continuous Education in Forestry, Institutskaya 17, Pushkino 141200, Russia.

A.A. Przhiboro, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia.

### *Coniophora semimarina* sp. n. (Figs 1-4)

**Holotype.** ♂, Russia, Pskov Prov., Sebezh Distr., shore of Lake Anninskoe near village Anninskoe, imago reared 3.VI.1998 from larva collected 15.V.1998 (A. Przhiboro).

**Paratypes.** 1 ♀, same data; 3 ♀, same place, imagines reared 6.VI.1998 (2 ♀) and 3.VII.1998 (1 ♀) from larvae collected 15.V.1998; 4 ♀, same place, imagines reared 3.II.1998 (1 ♀), 8.II.1998 (1 ♀), and 15.II.1998 (2 ♀) from larvae collected 10.IX.1998 (A. Przhiboro).

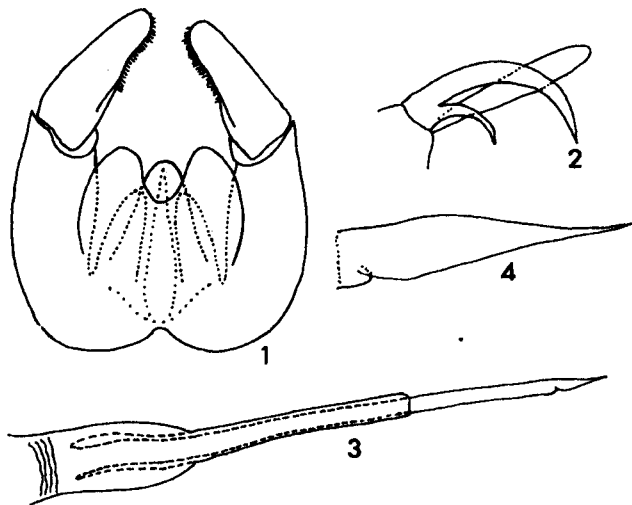
The holotype and 5 paratypes are deposited in B. Mamaev collection (Moscow), 3 paratypes – in A. Przhiboro collection (St. Petersburg).

**Description.** Male. Light brown. Flagellar segments with stem as long as basal enlargement; ring-shaped sensoria very thin. Palpi 4-segmented. Length of wing 2.5 mm. Wing vein  $R_5$  joining  $C$  well anterior of wing apex. Tarsal claws with strong basal tooth; empodium distinctly longer than claw. Gonocoxite long, with nearly parallel sides and deep basal incision separating medio-basal lobes. Gonostyle 0.8 times as long as gonocoxite, with long row of short bristles on ventral surface. 9th abdominal sternite (hypoproct) somewhat shorter, without apical incision. Aedeagus needle-shaped, expanding in basal part.

Female. Antennae with 2+15(16) sessile segments. Ovipositor very long, protractile, with acute, needle-

shaped terminal part. Similar to male in other respects.

**Biology.** The larvae were collected in the ground layer of a shore marsh (zone of water line of eutrophic lake) being 5-20 m wide to water depth of 20 cm and abounding in mounds. The breeding site is completely protected from wave action and covered densely with semiaquatic vegetation; *Thelypteris palustris* and *Acorus calamus* predominated, *Carex rostrata*, *C. omskiana*, *Calla palustris*, *Scolochloa festuacea*, *Equisetum fluviatile*, *Comarum palustre*, *Ranunculus lingua*, *Galium*



Figs 1-4. *Coniophora semimarina* sp. n.: 1, male genitalia, dorsal view; 2, tarsal claw; 3, ovipositor; 4, terminal lamella of ovipositor.

*palustre* were abundant; total cover 70-100%. Bottom substrate was represented only by detritus and plant remains (herbaceous vegetation, leaves of trees, wood of willow). *C. semimarina* sp. n. seems to be the most abundant of Cecidomyiidae in this habitat; density of larvae of this species was  $5 \pm 1.7 \text{ ex./0.05 m}^2$ , their biomass  $0.010 \pm 0.004 \text{ g/0.05 m}^2$  (15.V.1998; 5 samples). Both in autumn and in spring, most of the larvae collected were in semitransparent oval cocoons pasted all over with remains of plants. In September, some larvae were found under the coating leaves of decaying rhizome of *Carex* (not in cocoons). The imagines from larvae collected in September were reared after three month hibernation in laboratory nearly at 10 °C. Probably, the species is univoltine; adults emerge in early summer.

**Remarks.** The genus *Coniophora* was described by Nijveldt (1959), who bred adults from larvae developing in flowers of *Phalaroides arundinacea*. Hitherto 4 species of this genus were known: *C. acutissima* Mam., *C. autumnalis* (Mam.), *C. graminicola* Nijv., and *C. nijveldti* Dimitr. (Dimitrova, 1992; Mamaev, 1998). Two other similar genera of this group with piercing ovipositor, *Procystiphora* Felt and *Sterrhaulus* Rübs., were described earlier (Felt, 1915; Rübsaamen, 1915), but we include the new species in the genus *Coniophora* according to the morphology of

gonostyle covered with numerous short bristles (cf. Nijveldt, 1959). The new species differs from its congeners in the structure of the male genitalia (gonostyle without apical dent and with long row of short bristles).

#### Acknowledgements

The work of A.A. Przhiboro was supported by the Russian Foundation for Basic Research, grant No. 96-15-97875.

#### References

- Dimitrova, B.D. 1992. *Coniophora nijveldti* sp. n. (Diptera, Cecidomyiidae) from Bulgaria. *Acta zool. bulg.*, **44**: 79-81.
- Felt, E.P. 1915. Appendix: a study of gall midges, 2. *Bull. N. Y. St. Mus.*, **175**: 79-213.
- Mamaev, B.M. 1998. New species of gall midges of different taxonomic groups (Diptera, Cecidomyiidae). *All-Russian Institute of Continuous Education in Forestry*, publ. **13**: 1-10.
- Nijveldt, W. 1959. On two new gall midges (Diptera, Cecidomyiidae) from the Netherlands. *Entomol. Berichten* (Amsterdam), **19**: 78-104.
- Rübsaamen, E.H. 1915. Cecidomyidenstudien IV. Revision der deutschen Oligotropharien und Lasiopterarien nebst Beschreibung neuer Arten. *Sber. Ges. naturf. Freunde Berl.*, **1915**: 485-567.

Received 1 July 1999