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## TWO SPECIES FROM THE GENUS *Exechia* Winn. (DIPTERA, MYCETOPHILIDAE) NEW TO ESTONIA

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**Abstract.** Two Mycetophilid species, *Exechia repanda* Johannsen and *E. repandoides* Caspers, were found in Estonia for the first time. The second record after the initial description of *E. repandoides* Caspers is presented. The male genitalia for the species and for *E. parva* Lundst. are figured.

**Key words:** Diptera, Mycetophilidae, *Exechia*, Estonia.

*Exechia parva* Lundström, 1909, *E. repanda* Johannsen, 1912, and *E. repandoides* Caspers, 1984 form a morphologically determinate group in the genus *Exechia* Winn. All three species distinctly differ from other species of *Exechia* in the presence of elongated lateroapical parts of the gonocoxit with the wisps of strong setae on the apices. Barendrecht (1938) and Krivosheina et al. (1986) gave good figures of the male genitalia of *E. parva* and *E. repanda*. Väisänen (1981) used the figures of Barendrecht (1938), but he obviously interchanged them. Only Caspers (1984) has figured the male genitalia of *E. repandoides*. Nobody has figured the ventral and medial parts of gonostylus.

*E. parva* (Figs. 1, 2) is the most distinctive among the above-mentioned species. The elongated lateroapical parts of its gonocoxit are setose in the full extent and the dorsal parts of the gonostylus are rounded at basis. The difference between *E. repanda* (Figs. 1, 2; 2, 2, 5) and *E. repandoides* (Figs. 1, 3; 2, 3, 6) can be established especially in dorsal parts of the gonostylus.

*E. parva* and *E. repanda* have been previously recorded on fruit bodies of *Verpa*, *Armillariella*, *Hypoloma*, *Cortinarius*, and *Inocybe* (Hackman & Meinander, 1979; Krivosheina et al., 1986; Kurina, 1991). Väisänen (1981)

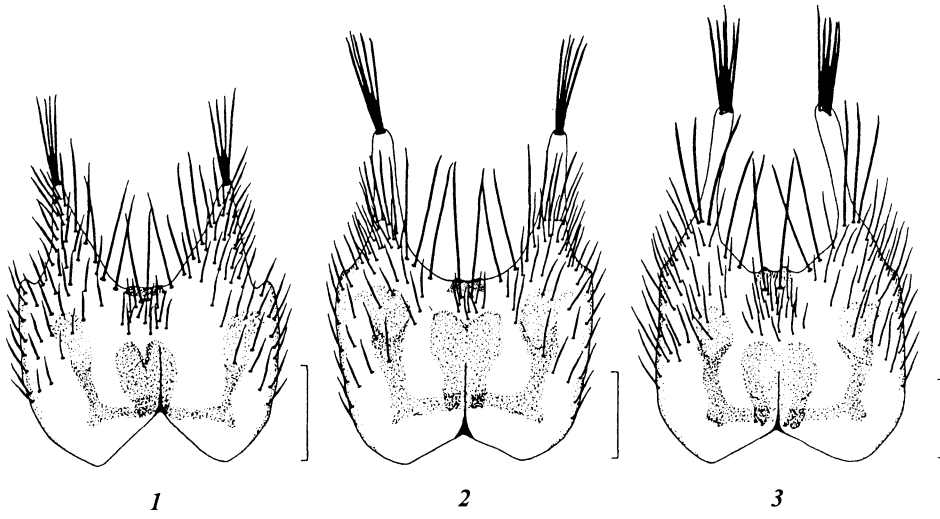


Fig. 1. Ventral view of gonocoxit. 1, *Ezechia parva* Lundst.; 2, *Ezechia repanda* Johannsen; 3, *Ezechia repandoides* Caspers. Scale bar = 0.1 mm.

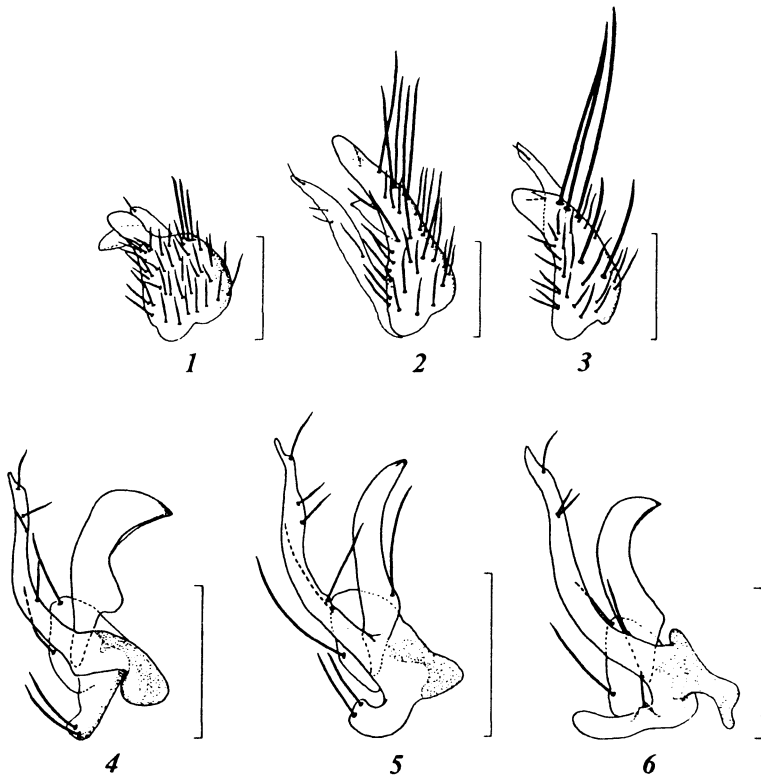


Fig. 2. Dorsal (1, 2, 3) and ventral and medial parts of gonostylus (4, 5, 6). 1, 4, *Ezechia parva* Lundst.; 2, 5, *Ezechia repanda* Johannsen; 3, 6, *Ezechia repandoides* Caspers. Scale bar = 0.1 mm.

studied their overwintering in the broken umbelliferous stems. Nothing is known on the biology of *E. repandoides*.

*E. parva* and *E. repanda* are widely distributed in Europe (Hackman, 1988). Before the current record *E. repandoides* has been found only once, in Austria (Caspers, 1984).

*E. parva* has been previously registered in Estonia (Lackschewitz, 1937; Kurina, 1991). *E. repanda* and *E. repandoides* were found in Estonia for the first time.

The material for the present work was collected by sweep netting and also with an exhaustor from broken umbelliferous stems. The material is deposited at the Institute of Zoology and Botany, Tartu, Estonia.

## MATERIAL

### *Exechia parva* Lundström, 1909

1♂, Oonga, southeast of Haapsalu, 04.10.1995; 3♂♂, Tiksoja near Tartu, 09.05.1994 and 19.09.1995; 4♂♂, Nigula Nature Reserve, 03.08.1990, 23.05.1994, 02.07.1994, and 27.08.1995; 23♂♂, Nigula Nature Reserve, 13.04.1996 (from broken umbelliferous stems); 78♂♂, Tartu, 09.03. and 10.03.1996 (from broken umbelliferous stems). Total 109♂♂.

### *Exechia repanda* Johannsen, 1912

1♂, Rähni near Tartu, 11.05.1994; 67♂♂, Nigula Nature Reserve, 13.04.1996 (from broken umbelliferous stems); 253♂♂, Tartu, 09.03. and 10.03.1996 (from broken umbelliferous stems). Total 321♂♂.

### *Exechia repandoides* Caspers, 1984

2♂♂, Oonga, southeast of Haapsalu, 01.06.1990 and 27.04.1995; 1♂, Tõstamaa, 30.09.1995. Total 3♂♂.

## ADDITIONAL COMPARATIVE MATERIAL STUDIED

### *Exechia parva* Lundst.

1♂, Helsingi, 02.10.1909, R. Frey leg., C. Lundström det., Spec. typ. No. 4254 (paratypus) at the Zoological Museum, Helsinki, Finland.

### *Exechia repanda* Johannsen

1♂, Helsinki, 01.01.1981, R. Väisänen leg. et det., material deposited at the Zoological Museum, Helsinki, Finland; 1♂, Leningrad District, Udel'naya, 21.09.1937, Stackelberg leg. et det., material deposited at the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.

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## PEREKONNA *Exechia* Winn. (DIPTERA, MYCETOPHILIDAE) KAHE LIIGI ESMASLEIUD EESTIST

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On esitatud andmed kahe Eestist esmakordselt leitud seenesääsklase – *Exechia repanda* Johannsen ja *E. repandoides* Caspers – kohta. Liigi *E. repandoides* puhul on tegu esimese taasleiuga pärast selle kirjeldamist Caspersi poolt 1984. aastal. On esitatud kahe mainitud liigi ja liigi *E. parva* Lundst. isaste genitaaljoonised.