

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

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Received 25 April 1997, accepted 24 September 1997

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 apexes. 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)

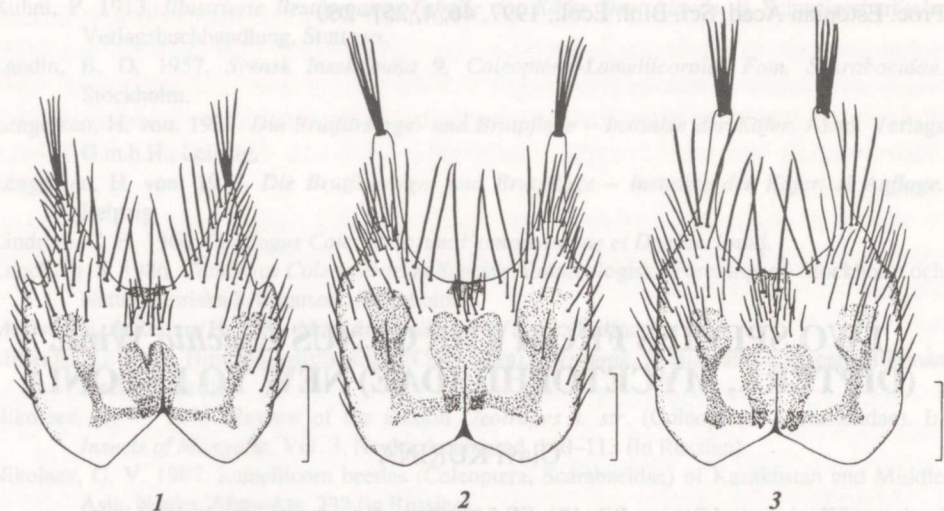


Fig. 1. Ventral view of gonocoxit. 1, *Exechia parva* Lundst.; 2, *Exechia repanda* Johannsen; 3, *Exechia repandoides* Caspers. Scale bar = 0.1 mm.

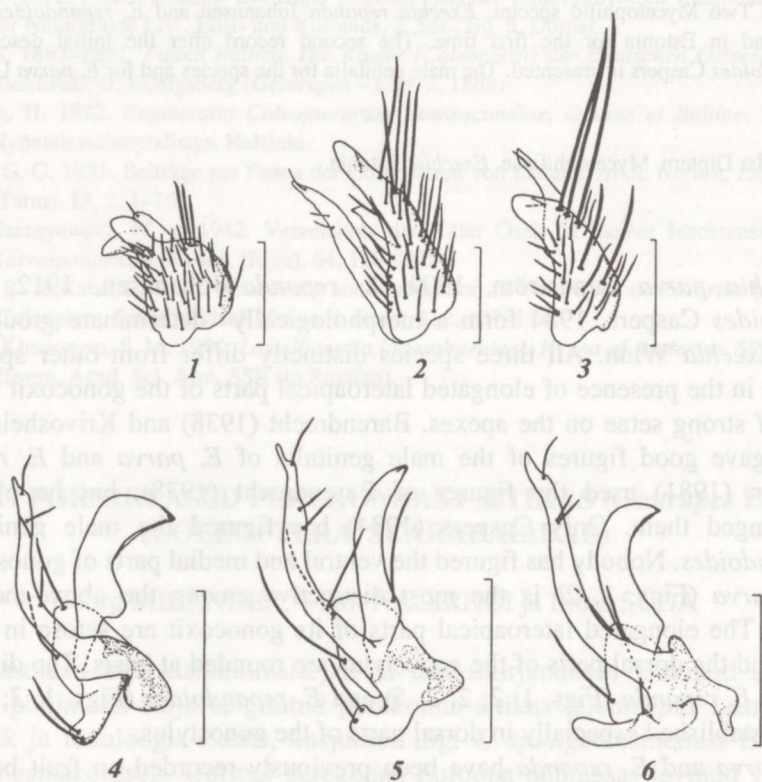


Fig. 2. Dorsal (1, 2, 3) and ventral and medial parts of gonostylus (4, 5, 6). 1, 4, *Exechia parva* Lundst.; 2, 5, *Exechia repanda* Johannsen; 3, 6, *Exechia repandoides* Caspers. Scale bar = 0.1 mm.

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♂, Töstamaa, 30.09.1995. Total 3♂♂.

ADDITIONAL COMPARATIVE MATERIAL STUDIED

Exechia parva Lundst.

1♂, Helsinge, 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.

ACKNOWLEDGEMENTS

I express my thanks to the Estonian Science Foundation for financial support, grant No. 128. I am greatly indebted to M. Jüssi and R. Oetjen for reading the manuscript.

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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.