

LIST

Six new species of fungus gnats of the tribe Exechiini from Sakhalin and Kuril Islands (Diptera, Mycetophilidae)

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Descriptions of *Exechia kunashirensis* sp. n. from Kunashir I., *E. rohdendorfi*, *E. subcornuta* sp. n., *Brevicornu sakhalinense* sp. n. from Sakhalin I., *E. insularis* sp. n., *E. trispinosa* sp. n. from Sakhalin I. and Kunashir I. are given.

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Key words. Diptera, Mycetophilidae, *Exechia*, *Brevicornu*.

Exechia insularis A. Zaitzev, sp. n. (Figs 1, 2)

Holotype. ♂, **Russia, Sakhalin I.**, Kuznetsov Cape, 18.IX.1986, A. Zaitzev leg.

Paratypes. 38 ♂ with same data, 26.VIII.1986, 21.IX.1986; 1♂, Kuril Is, Kunashir I., 1.VII.1977, A. Zaitzev leg. (A. N. Severtzov Institute, Moscow).

Description. Male. Head blackish brown; clypeus round, dark brown; palpi yellow; antennae with scape, pedicel and base of first flagellar segment yellow, remainder dark brown. Median flagellar segments about as long as broad. Thorax yellowish brown. Mesonotum shining yellow with three broad dark brown stripes; mediotergite and scutellum dark brown. Pleurae yellow with three propleural bristles. Wing length 3,2 mm. *rm* about 2,3 times length of *M*-stalk. Tibia II with *25a*, *4ad*, *5d*, *12pd*, *7p*, *22v*; tibia III with *14a*, *7pd*, *4p*. Abdomen brown, segments two to four with yellow lateral marking. Genitalia yellow.

Female unknown.

Remarks. *E. insularis* is close to *E. pseudocincta* Strobl, from which it is distinguished in the form of the gonocoxyte and in structure of the gonostyle.

Exechia kunashirensis A. Zaitzev, sp. n. (Figs 3, 4)

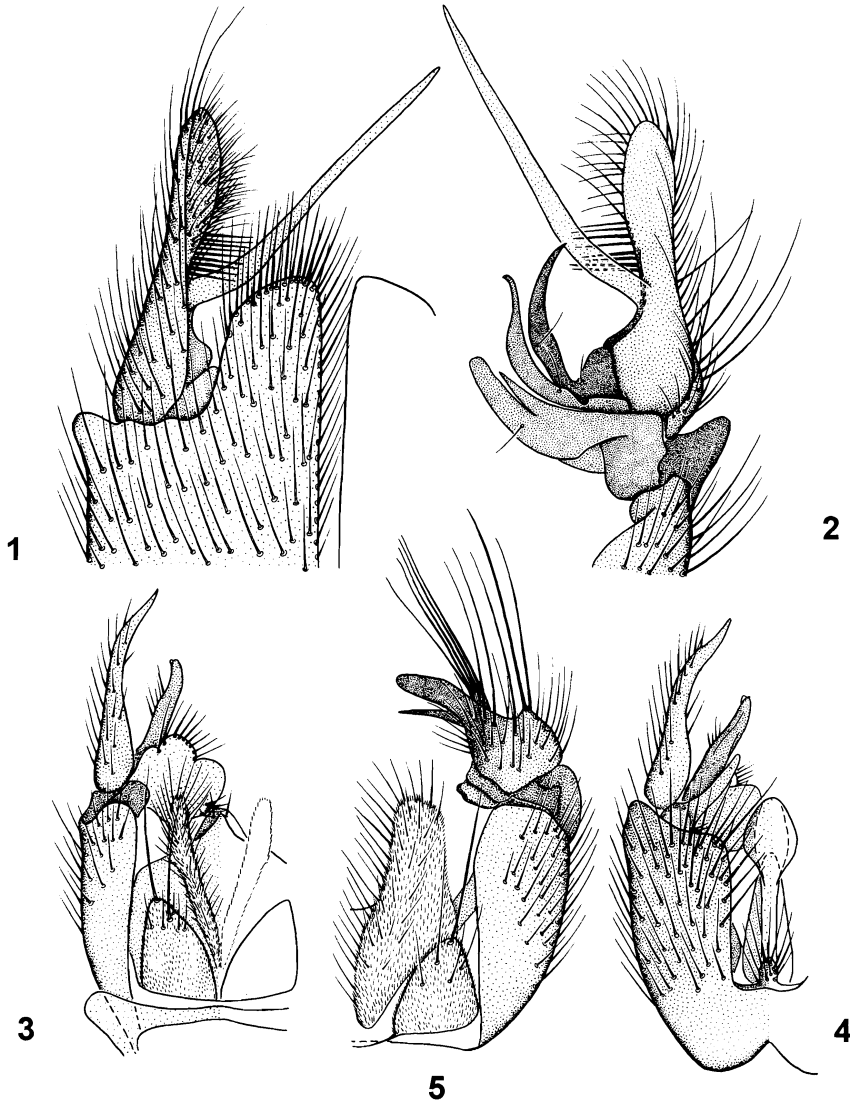
Holotype. ♂, **Russia, Kuril Is.**, Kunashir I., 23.V.1977, A. Zaitzev leg. *Paratypes*. 12 ♂ with same data, 16.IX.1976, 4.VII.1977, 10.VII.1977, A. Zaitzev leg. (A. N. Severtzov Institute, Moscow).

Description. Male. Head blackish brown; clypeus round, dark brown; palpi light brown; antennae with scape, pedicel and base of first flagellar segment yellow, remainder brown. Median flagellar segments about as long as broad. Thorax dark brown. Mesonotum with long bristles; pleurae yellow. Propleura yellow, with two strong propleural bristles. Wing length 3,2 mm. *rm* about 3 times length of *M*-stalk. Legs yellow. Fore basitarsus about as long as fore tibia. Tibia II with *23a*, *4d*, *8p*, *3v*; tibia III with *7ad*, *4pd*, *4p*. Abdomen dark brown. Genitalia yellow.

Female unknown.

Remarks. *E. kunashirensis* belongs to *spinigera*-group, with genital structure differing a little from the other species.

Biology. Larvae of *E. kunashirensis* develop in fruit body of *Oudemansiella mucida*.



Figs 1—5. *Exechia*, male genitalia.

1, 2, *E. insularis* sp. n.; 3, 4, *E. kunashirensis* sp. n.; 5, *E. rohndendorfi* sp. n. 1, 4, ventral view; 3, 5, dorsal view; 2, gonostylus, dorsal view.

Exechia rohndendorfi A. Zaitzev, sp. n.

(Figs 5, 6)

Holotype. ♂, Russia, Sakhalin I., Kuznetsov Cape, 20.IX.1986, A. Zaitzev leg.

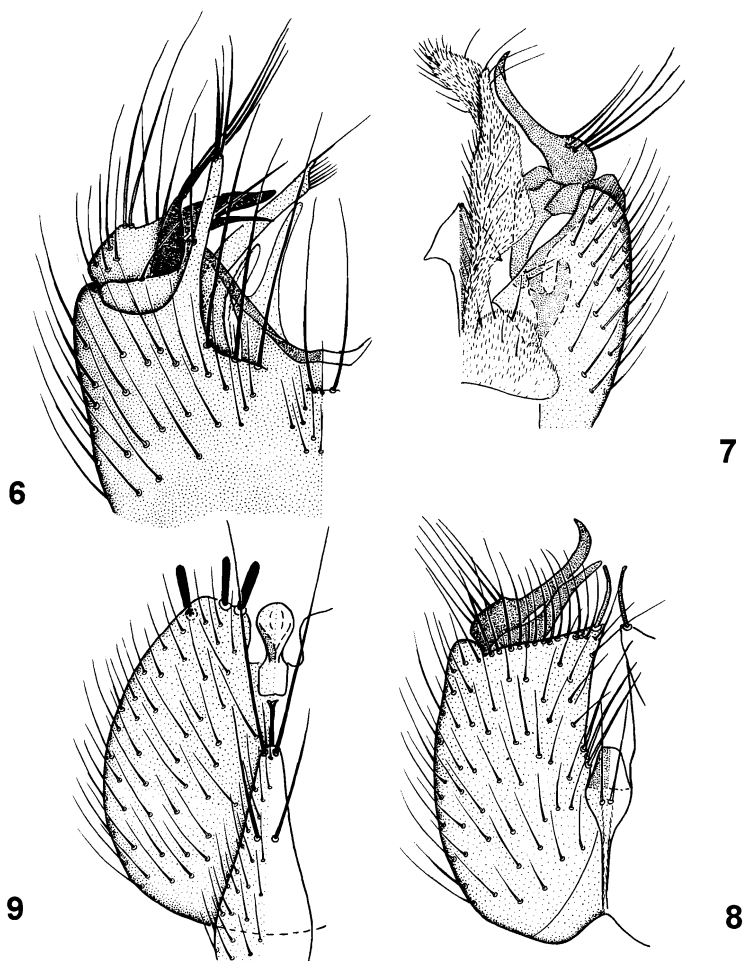
Paratypes. 4 ♂, with same data, 26.VIII.1986, 14.IX.1986, 20.IX.1986, A. Zaitzev leg. (A. N. Severtzov Institute, Moscow).

Description. Male. Head blackish brown; clypeus ovate, dark brown; palpi light brown; antennae with scape, pedicel and base of first flagellar segment yellow, rest brown. Median flagellar segments about

as long as broad. Thorax dark brown; mesonotum grey dusted with small yellow humeral spots; propleura with two strong bristles. Wing length 3,2 mm. *rm* nearly 2,5 times length of *M*-stalk. Legs yellow. Fore basitarsus 1,2 times length of fore tibia. Tibia II with 17*a*, 5*d*, 12*p*, 4*v*; tibia III with 11*ad*, 4*d*, 5*p*. Abdomen dark brown, segments two to three with small yellow lateral spots. Genitalia brown.

Female unknown.

Remarks. *E. rohndendorfi* is distinguished from other species of the genus *Exechia* in the structure of genitalia.

Figs 6—9. *Exechia*, male genitalia.

6, *E. rohdendorfi* sp. n.; 7, 8, *E. subcornuta* sp. n.; 9, *E. trispinosa* sp. n. 6, 8, 9, ventral view; 7, dorsal view.

***Exechia subcornuta* A. Zaitzev sp. n.**
(Figs 7, 8)

Holotype. ♂, **Russia**, *Sakhalin I.*, Kuznetsov Cape, 20.IX.1986, A. Zaitzev leg. (A. N. Severtsov Institute, Moscow).

Description. Male. Head blackish brown; clypeus round, light brown; palpi light brown; antennae with scape, pedicel and base of first flagellar segment yellow, rest brown; median flagellar segments about as long as broad. Thorax yellowish brown, mesonotum shining yellow, with dark hind part; scutellum and mediotergite dark brown. Pleurae brown; propleura yellow with two strong bristles. Wing length 2,5 mm. *rm* about 3 times length of *M*-stalk. Legs yellow. Fore basitarsus 1,2 times length of ^{fore tibia} ~~fore tibia~~. Tibia II with 20*a*, 4*d*, 11*p*, 7*v*; tibia III with 10*ad*, 5*d*, 4*p*. Abdomen brown; segments two to four with

yellow basal bands broadened laterally. Genitalia yellow.

Female unknown.

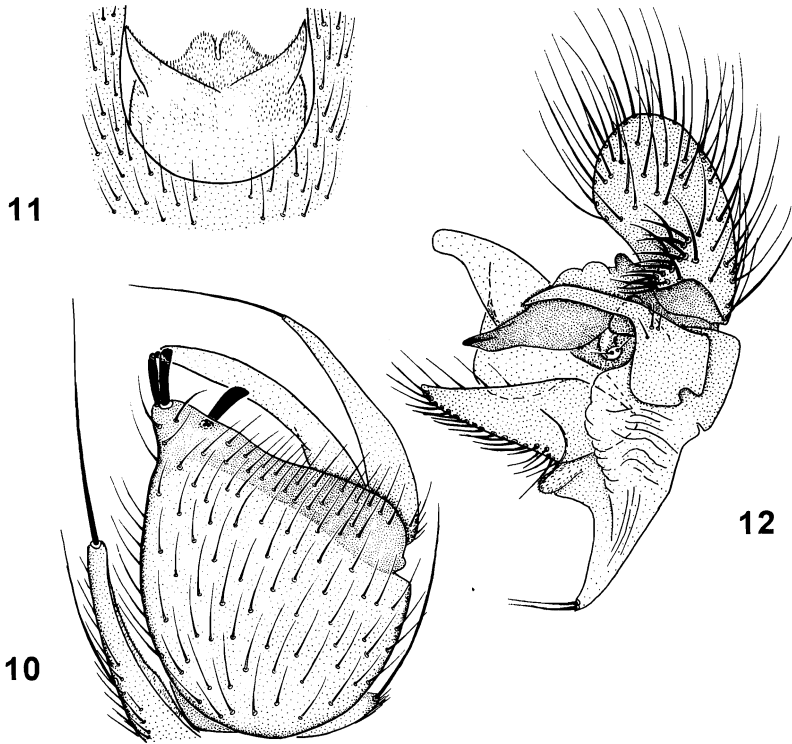
Remarks. *E. subcornuta* is close to *E. cornuta* Lundst. and *E. lundstroemi* Landr., from which it is distinguished in the form of gonocoxite and in the structure of gonostyle.

***Exechia trispinosa* A. Zaitzev sp. n.**
(Figs 9, 10)

Holotype. ♂, **Russia**, *Sakhalin I.*, Kuznetsov Cape, 16.IX.1986, A. Zaitzev leg.

Paratypes. ♂, *Kuril Is.*, Kunashir I., 20.VII.1977, A. Zaitzev leg. (A. N. Severtsov Institute, Moscow).

Description. Male. Head dark brown; clypeus ovate, brown; palpi yellow; antennae with scape, pedicel



Figs 10—12. Exechiini, male genitalia.

10, *Exechia trispinosa* sp. n., lateral view; 11, 12, *Brevicornu sakhalinense* sp. n.: 11, ventral appendage of gonocoxites, 12, gonostylus from inner side.

and base of first flagellar segment yellow, remainder dark brown. Length of median flagellar segments about 1,5 times its breadth. Thorax yellowish brown. Mesonotum shining brown, yellow on anterior border and on shoulders; pleurae yellowish brown, mesopleura and pleurotergite brown; propleura with two strong bristles; scutellum and mediotergite dark brown. Wings length 3 mm. *M*-stalk about 0,5 times length of *rm*. Legs yellow; fore tibia slightly shorter than fore basitarsus; tibia II with 29*a*, 3*d*, 6*p*, 2*v*; tibia III with 8*a*, 4*d*, 4*p*. Abdomen brown. Tergite III, IV with yellow markings towards bases. Genitalia yellow. Gonostyle with three stout apical spines. Female unknown.

Remarks. *E. trispinosa* is distinguished from the Palaearctic species of the genus *Exechia* in the structure of genitalia.

***Brevicornu sakhalinense* A. Zaitzev, sp. n.**
(Figs 11, 12)

Holotype. ♂, **Russia**, Sakhalin I., Kuznetsov cape, 11.IX.1986, A. Zaitzev leg. (A. N. Severtsov Institute, Moscow).

Description. Male. Head yellowish brown; mouth parts and palpi yellow; antennae light brown with dark apical segments; median flagellar segments about as long as broad. Thorax dark brown; mesonotum with small humeral spots; scutellum with two long and two short bristles. Wing length 2,8 mm; *M*-stalk 1,3 times length of *rm*. Base of *Cu*-fork under base of *rm*. Legs yellow, mid and hind femurs with dark spots from below; fore basitarsus about as long as fore tibia. Tibia II with 8*a*, 5*d*, 8*p*; tibia III with 5*a*, 4*d*. Abdomen dark brown.

Female unknown.

Remarks. *B. sakhalinense* belongs to *fissicauda*-group and is close to *B. verralli* (Edw.), from which it is distinguished in the form of sternal process of the gonocoxites and in the structure of the gonostyle.

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