

NEW AND LITTLE KNOWN FUNGUS GNATS
OF THE GENUS *RYMOSIA* WINN.
FROM RUSSIA AND MIDDLE ASIA.

(Diptera, Mycetophilidae)

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Summary. Descriptions of *Rymosia pseudobifida* n. sp. from Russian Far East, *Rymosia sakhalinensis* n.sp. from I. Sakhalin and *Rymosia istrae* n.sp. from Moscow Region are given. *Rymosia pseudocretensis* is found in Middle Asia for the first time.

***Rymosia pseudobifida* n.sp.**

Male. Head dark brown with yellow mouth parts. Antennae with scape, pedicel and base of first flagellar segment yellow, rest brown. Antennae about 0,6 length of front femur + tibia; length of sixth flagellar segment about 2 times its breadth. mesonotum brown with great yellow humeral spots. Sutellum dark brown; mediotergite light brown; pleurae brown. Propleura with one bristle. Halteres yellow.

Wing length 3,2mm. M-stalk about 0,6 times length of r-m. Cu-fork well before base of r-m. Vein An reaching level of middle of Cu2.

Legs yellow. Fore basitarsus about 1,5 length of tibia. Tibia I with 16a, 4d, 5v; II with 19 a, 2d, 5p; III with 6ad, 8d, 4p, 6v.

Abdomen tergites I, II, V, VI dark, II, IV with basal triangular yellow spots.

Male genitalia yellow, fig. I,B.

Female unknown.

Material examined: Holotype ♂, Russia, Far East, Primorye Reg., Lazo, Sokolchi, 12.VI.1979, A. ZAITZEV leg. Paratype ♂ with same data (A.N. Severtzov Institute, Moscow).

Remarks. *R. pseudobifida* is close to *R. bifida* Edw. and *R. batava* Barendrecht from which it is distinguished in the form of the dorsal processes of the gonostylus.

***Rymosia sakhalinensis* n.sp.**

Male. Head light brown with yellow mouth parts. Clypeus yellow. Antennae with scape, pedicel and first flagellar segment yellow, rest brown. Antennae about 1,1 length of front femur + tibia; length of sixth flagellar segment about 3 its breadth. Mesonotum yellowish brown with yellow humeral region. Scutellum brown with two scutellar bristles. Mediotergite, pleurotergite and pleurae yellowish brown. Propleura with one bristle. Halteres yellow.

Wing length 3,6 mm. M-stalk about 0,8 length of r-m. Cu-fork well before base of r-m. Vein An reaching level of 1/3 of Cu2.

Legs yellow. Fore basitarsus about 1,3 times length of tibia. Tibia I with 20p, 4 v; II with 20a, 4d, 4v; III with 6a, 5d, 6p.

Abdomen. Tergite I dark brown with narrow yellow band along the hind margins. Tergite II-V with large yellow markings towards bases. Genitalia yellow, figs. I, A, C.

Female unknown.

Material examined: Holotype ♂, Russia, I. Sakhalin, Kuznetsov Cape, 20.IX.1986, A. ZAITZEV leg. (A.N. Savertzov Institute, Moscow)

Remarks. *R. sakhalinensis* is close to *R. connexa* Winn. from which it is distinguished in the form of the gonostyle.

***Rymosia istrae* n.sp.**

Male. Head dark brown with yellow mouth parts; clypeus brown. Antennae with scape, pedicel and base of first flagellar segment yellow, rest brown. Antennae about 0,7 length of front femur + tibia; length of sixth flagellar segment about 1,5 times its breadth. Mesonotum yellowish with three broad dark brown stripes. Scutellum brown with two scutellar bristles. Mediotergite dark brown. Propleura yellow with two bristles. Pleurotergite and pleurae brown. Halteres yellow.

Wing length 4,1 mm. M-stalk subequal in length to r-m. Vein An reaching level of 1/3 of Cu₂.

Legs yellow. Fore basitarsus about 1,2 times length of tibia. Tibia I with 19p, II with 17a, 3d, 6v; III with 5a, 4d, 6p, 6v.

Abdomen. Tergites I and VI dark brown. Tergite II-V with large yellow markings towards bases. Genitalia yellow, figs.2,C,D.

Female unknown.

Material examined. Holotype ♂, Russia, Moscow Region, Pavlovskaja Sloboda, 24.V.1981, A. ZAITZEV leg.; Paratype ♂, with same data (A.N. Severtsov Institute, Moscow).

Remarks. *R. istrae* is close to *R. armata* Lack. from which it is distinguished in the form of the gonostyle.

***Rymosia pseudocretensis* Burghel-Balacesco 1966**

Male. Head dark brown with yellow mouth parts. Clypeus dark. Antennae with scape, pedicel and base of first flagellar segment yellow, rest brown. Antennae subequal in length to front femur + tibia; length of sixth flagellar segment about 2 times its breadth. Mesonotum brown. Scutellum light brown with two scutellar bristles. Propleura yellow with one bristle. Mediotergite, pleurotergite and rest of pleurae brown.

Wing length 3,5 mm. M-stalk about 0,5 times length of r-m. Cu-fork before base of r-m. Vein An reaching level of 1/3 of Cu₂.

Legs yellow. Fore basitarsus about 1,2 length of tibia. Tibia I with 9p, 3v; II with 7a, 4d, 4p; III with 5a, 5d, 6p.

Abdomen. Tergite I, VI dark brown. Tergite II-V with large yellow markings towards bases. Genitalia yellow, fig. 2,B.

Female. Very similar to male. Ovipositor fig. 2,A.

Material examined. 20 ♂♂, 8 ♀♀, Tadzhikistan, Nature reserve "Tigrovaya balka", 9.III.1978, M. DANILEVSKY leg., 9-19.IV.1987, A. ZAITZEV leg.; 5 ♂♂, 4 ♀♀, Uzbekistan, Zeravshan mountain range, Tahta-Karacha pass., 19.V.1962, N. KRIVOSHEINA leg. (A.N. Severtsov Institute, Moscow).

Distribution. North Africa (Algeria) (BURGHELE-BALACESCO, 1966), Europe (France) (MATILE, 1977), Middle Asia.

Biology. Larvae of *R. pseudocretensis* develop in fruit body of fungus of the family Helvellaceae.

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References.

BERGHELE-BALACESCO A. 1966 - Les Mycetophilidae (Diptères) cavernicoles de la collection Biospeologica (IVe-VIIIe séries des "Grottes visitées") - *Int. Journal of Speleology*, vol. 2: 319-334.
MATILE L. 1977 - Catalogue provisoire des Diptères Mycetophilidae de la Faune de France. *Bull. Mus. Nat. d'Hist. Natur.* 3 ser , No 456: 621-655.

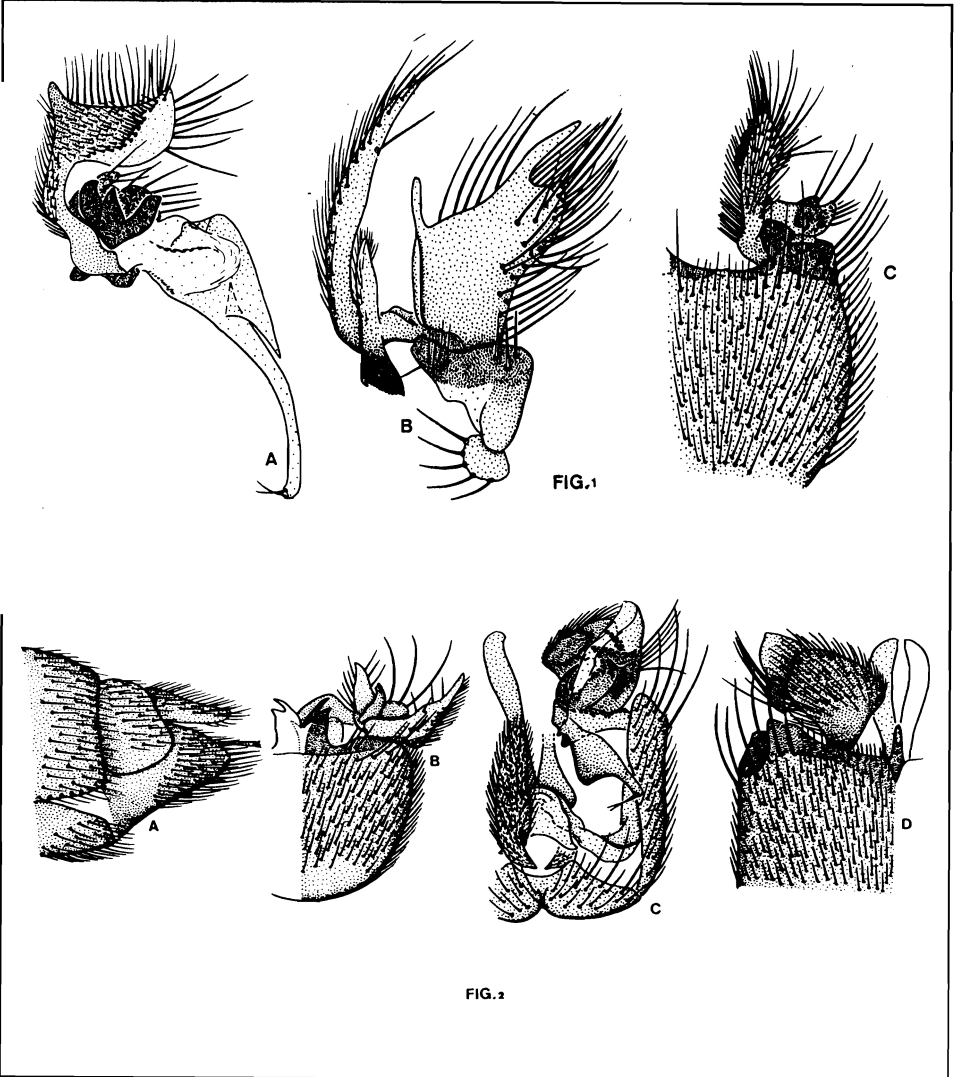
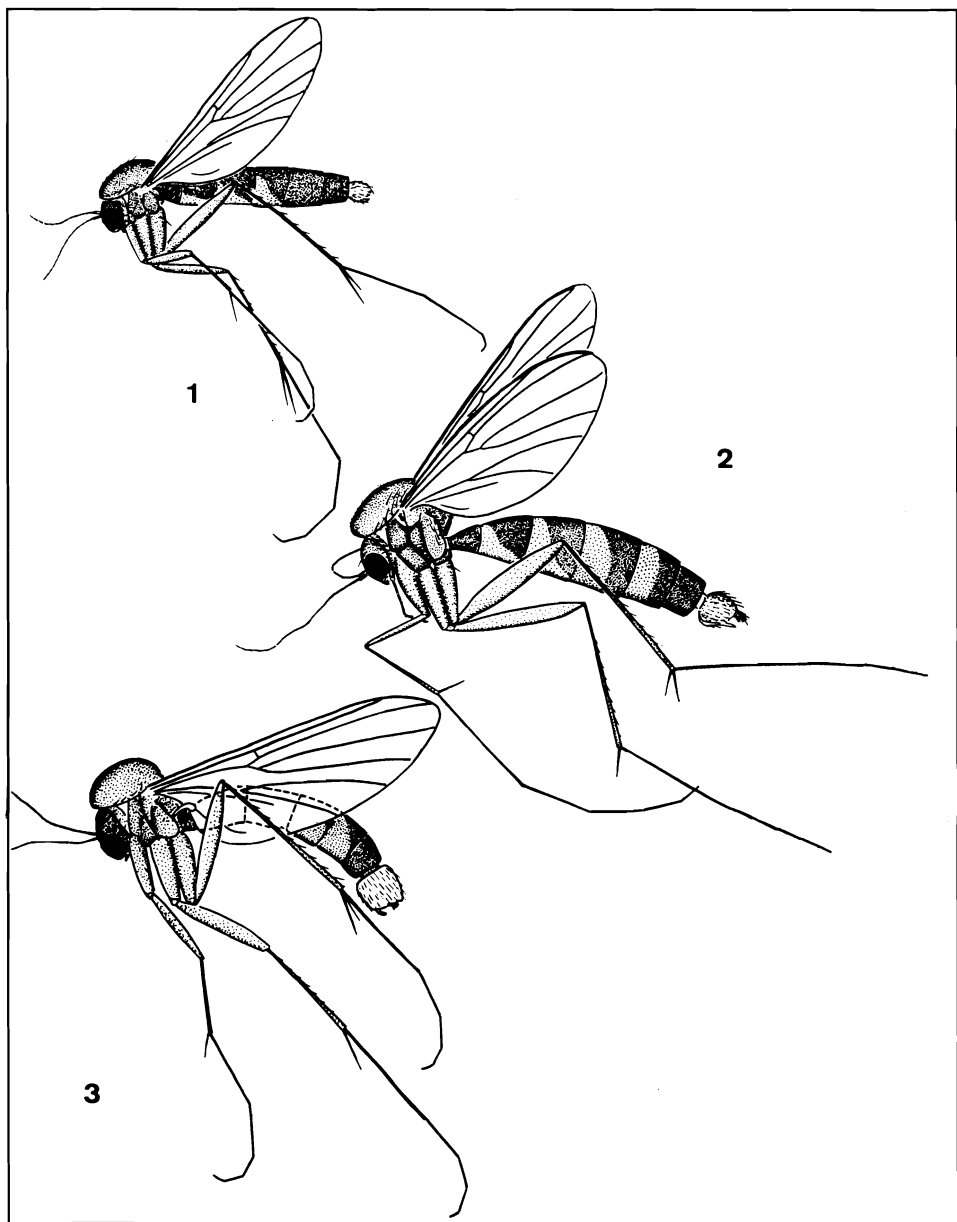


Fig. 1. Male genitalia of *Rymosia sakhalinensis* (A,C) and *R. pseudobifida* (B).

A,B, gonostylus from inside; C, Male genitalia, ventral aspect.

Fig. 2. Genitalia of *Rymosia pseudocretensis* (A,B) and *R. istrac* (C,D).

A, female ovipositor; B,D, male genitalia, ventral aspect; C, male genitalia, dorsal aspect.



1. *Rymosia pseudobifida* HT ♂. 2. *Rymosia sakhalinensis* HT ♂. 3. *Rymosia istrae* HT ♂.