# PALEARCTIC SPECIES OF THE GENUS COELOSIA WINN. (DIPTERA, FUNGIVORIDAE)

### By A. A. STACKELBERG.

(Zoological Institute, Academy of Sciences, Leningrad.)

Key to the species.

- 1 (6). Veins  $m_{1+2}$ ,  $m_3$ ,  $cu_1$  and  $cu_2$ <sup>1</sup> with macrotrichia.
- 2 (3). Sc<sub>2</sub> present. Mesonotal and scutellar bristles black. Basal section of rs oblique. Middle tibiae of the male in basal half slightly swollen, with an oval bare area.—Basal joints of antennae yellow, flagellum black. Mesonotum black, not shining; humeral callus yellow; pleurae brownish-yellow. Legs long. Wings tinged slightly brownish. Abdomen black.—N. RUSSIA: Leningrad province (Stackelberg) . . . . . . . . . . . C. thoracica Winn.
- 3 (2).  $Sc_2$  absent. Mesonotal and scutellar bristles yellow. Basal section of rs more or less perpendicular to  $m_1$ . Middle tibiae of the male simple.
- 4 (5). Dorsal plate of hypopygium (9th tergite) narrowly triangular. Stylus at tip with long and narrow appendage, in apical part covered with short bristly hairs. Fork-stem of m as long as rm or slightly longer. Cu-fork shorter and broader. Antennae short with yellow basal joints. Thorax brownish-yellow, disc of mesonotum blackish, or thorax all black (in specimens from North Russia). Legs yellow, tarsi, brownish. Wings nearly hyaline. Abdomen black, sometimes with yellow lateral spots on 2nd-4th tergite. Wing 4 mm.—RUSSIA: Leningrad province (Stackelberg), Kola peninsula (Chibinä : Fridolin), N.W. Siberia (distr. Obdorsk : Fridolin)
- 5 (4). Dorsal plate of hypopygium (9th tergite) short and broad, nearly quadrangular, with right distal margin. Stylus in apical part of the median margin only with a short appendage. Fork-stem of m 1½ times as long as rm. Cu-fork longer and narrower.—Antennae black, with yellow basal joints. Thorax with mesonotum yellow or brownish-yellow, rarely blackish. Mesonotal and scutellar bristles yellow. Legs yellow; front tarsi elongated. Wings nearly hyaline. Abdomen black with more or less distinct yellow lateral spots on 2nd-4th tergite or all black. Wing 4 mm.—N. RUSSIA: Leningrad province (Stackelberg), Kola peninsula (Chibinä: Fridolin)
  - (1). Veins  $m_{1+2}$ ,  $m_3$ ,  $cu_1$  and  $cu_2$  bare, without macrotrichia.

  - (7). Sc in apical half with macrotrichia. Long bristles on lateral parts of mesonotum and scutellum normally yellow. Body greyish—or brownish-yellow.

<sup>1</sup> Wing-venation after Hendel-Beier. PROC. R. ENT. SOC. LOND. (B) 15. PTS. 7-8. (AUG. 1946.)

Е

AME GOULES

- 9(10), m-fork-stem below to the base of rm bare without macrotrichia. Dorsal plate of hypopygium (9th tergite) simple, apically narrowed with right distal margin, without knife-like appendages.-Antennae black with basal joints yellow. Thorax brownish-yellow; mesonotal and scutellar bristles vellow. Legs vellow, tarsi brownish-black: front tarsi of the male very long. Wings nearly hyaline. Abdomen black. Wing 3.5 mm.-N. Russia; Leningrad province (Stackelberg) . . . . . . . . . . . . . . . C. silvatica Landr
- 10 (9). m-fork-stem below to the base of rm with macrotrichia. Dorsal plate of hypopygium on the apical margin with two or four black strongly sclerotised knife-like appendages.
- 11(12). Dorsal plate of hypopygium (9th tergite) on the distal margin with two black strongly sclerotised knife-like appendages (figs. 1, 2). Larger species : wing 4.5 mm. First flagellar joint vellow.-N. RUSSIA: Leningrad province (Stackelberg) . . . Č. bicornis sp. n.
- 12(11). Dorsal plate of hypopygium (9th tergite) on the distal margin with four black strongly sclerotised appendages (figs. 5, 6). Smaller species : wing 3.5 mm. First flagellar joint mainly black.-Kamt-

## Coelosia bicornis sp. n.

Abdomen narrow and moderately long. Hypopygium very large. Dorsal plate of hypopygium (9th tergite) with two black knife-like appendages (fig. 1).



Male. Head black, slightly dark grey pollinose. Palpi yellow to brownish-yellow. Antennae black; basal joints, 1st and 2nd flagellar joints mainly yellow. Thorax brown; mesonotum slightly shining, with 3 broad blackish-grey longitudinal stripes. Humeral

callus and lateral parts of mesonotum yellow; propleura and pteropleura dark yellow. Mesonotal and scutellar bristles pale yellow. Coxae and legs yellow, tarsi brownish; first joint of front tarsi slightly shorter than front tibiae. Claws small, with a small basal tooth. Empodium small. Wings nearly hyaline or very slightly tinged brownish. Costal vein reaches to about  $\frac{1}{2}$  of the distance from  $m_1$  to  $m_{2a}$ . Se ending slightly before rs. Basis of m = fork beyond the level of rs. Cu = fork moderately long. Apical half of sc, all  $r_{1+2}$  and  $m_1$  above,  $r_{1+2}$  and  $m_1$  below only in the apical half and m = stem below only with macrotrichia. m2a, m2b, cu, cu1a, cu1b and an without macrotrichia. Halteres



FIG. 3.—C. bicornis sp. n. J. Stylus from above.

FIG. 4.—C. bicornis sp. n. J. Stylus from below.

whitish. Abdomen black with more or less large yellow lateral spots on 2nd-4th tergite. Hypopygium (figs. 1, 2) very large, yellow. Dorsal plate of hypopygium (9th tergite) distally in the middle with moderately deep excision; lateral edge of plate with long black strongly sclerotised knife-like appendage. Stylus (figs. 3, 4) irregularly triangular, with obtuse distal margin, covered with long brownish bristly hairs. Wing 4.5 mm.

N. RUSSIA: Leningrad province-Tolmatshevo, Luga distr., 28.viii.1937 (3 3, Stackelberg). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.

### Coelosia quadricornis sp. n.

Abdomen narrow and moderately long. Hypopygium very large. Dorsal plate of hypopygium (9th tergite) with four black knife-like appendages (figs. 5, 6).

Male. Head black, pale grey pollinose. Palpi dark yellow to brown. Antennae black; basal joints and basal part of first flagellar joint vellow. Thorax dark brown. Mesonotum dark yellow with 3 broad black longitudinal stripes, slightly greyish pollinose; pleura grey pollinose. Mesonotal and scutellar bristles pale yellow. Coxae and legs pale yellow, tarsi brownish to blackish. First joint of front tarsi slightly shorter than front tibia. Claws small, with a small basal tooth. Empodium small. Wings nearly hyaline or very slightly tinged brownish. Costal vein reaches to the middle of the distance

# 80 Mr. A. A. Stackelberg on Palearctic species of the genus Coelosia Winn.

from  $m_1$  to  $m_{2a}$ . Sc ending slightly before rs. Basis of m = fork distinctly beyond level of rs. Cu = fork moderately short. Apical half of sc, r and  $m_1$  above and below and m-stem only below with macrotrichia.  $M_{2a}$ ,  $m_{2b}$ , cu, cu<sub>1b</sub> and an bare without macrotrichia. Halteres whitish. Abdomen black. Hypopygium (figs. 5, 6) large, yellow.



FIG. 5.—C. quadricornis sp. n. J. Hypopygium from above.

FIG. 6.—C. quadricornis sp. n. J. Hypopygium, lateral view.

Dorsal plate of hypopygium (9th tergite) distally in the middle with moderately deep excision; lateral edge of plate with two long, black, strongly sclerotised knife-like appendages. Stylus two-armed, covered with moderately long dark hairs. Wing 3.5 mm.

KAMTCHATKA: Shiveljutsh, 27.viii.1910 (2 3, Schmidt). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.