

DESCRIPTIONS OF THREE NEW SPECIES OF MUSCIDAE IN CHINA
(DIPTERA: MUSCIDAE)

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Three new species of Muscidae – *Caricea acerca*, *Phaonia yinggeensis* and *Helina capaciflava* – from China are described.

Key words: Palaearctic – Diptera – Muscidae

Among the specimens collected from the Taibei Mountains in Shanxi Province this year, there have been found three new species belonging to the genera *Caricea*, *Phaonia* and *Helina* respectively of *Muscidae*. The types are kept in the first author's laboratory.

Caricea acerca sp. n. (Figs 1, 2)

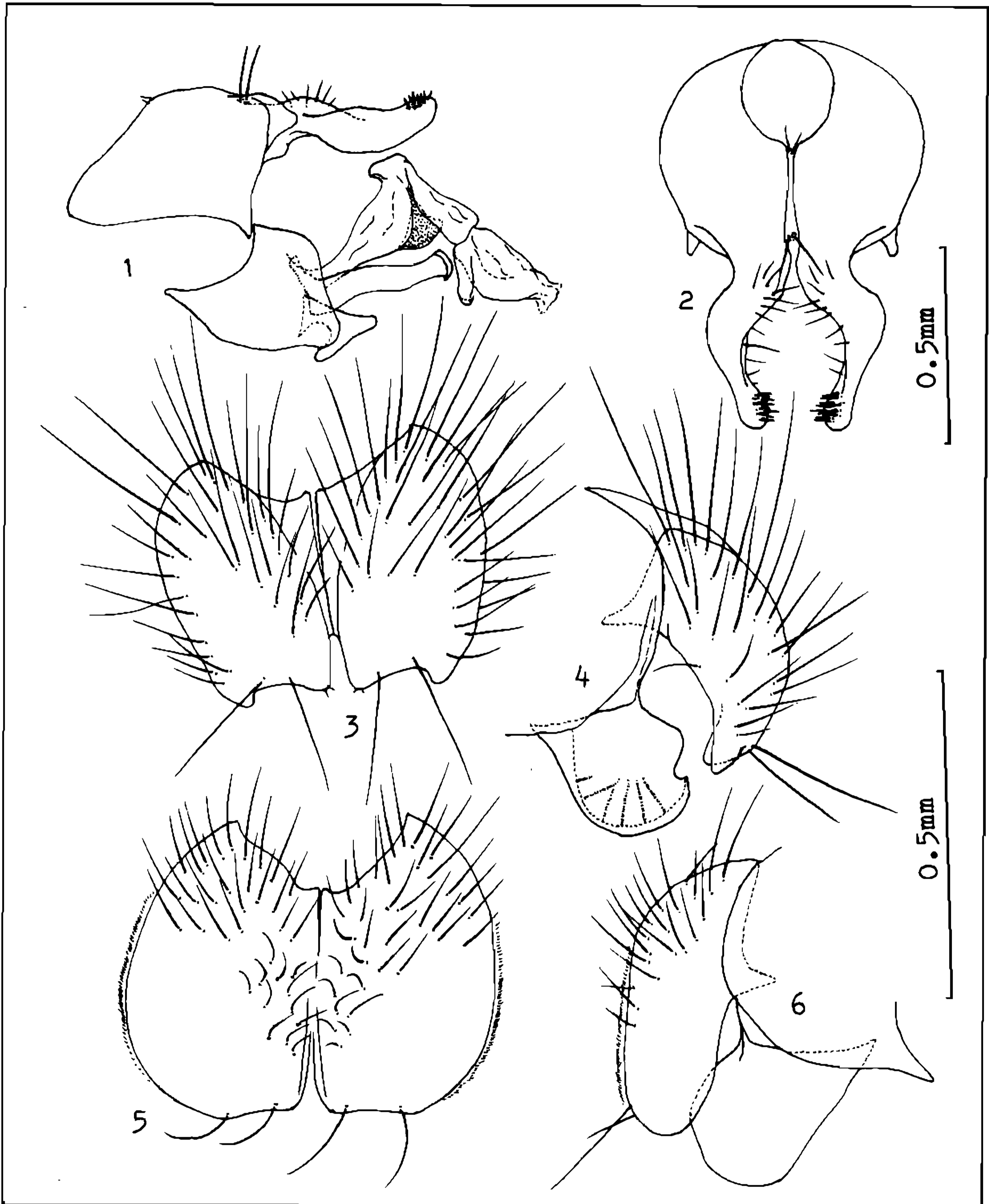
MALE: Body length 6.8-7.0 mm. *Head*: Eyes bare; lateroposterior margin of the eye concave forward; frons widely open, about one-third the width of the head; interfrontalia orange and 3 times the width of parafrontalia; Ocellar triangle extend to the middle part of frons; 2 pairs of strong inferior orbitals on lower one-third of frons, 2 pairs of distinct reclinate superior orbitals just front the ocellar triangle, fore pair stronger than hind pair; middle part of parafacialia about half the width of third antennal segment; Antennae and palpi yellow; Arista long plumose, the longest hairs on arista longer than the width of third antennal segment; gena very narrow and one-eighth the height of the eye, labella with several strong spinulae. *Thorax*: Yellow scutum with gray-yellow pollen and 3 dark longitudinal stripes; acrostichal hairs in 2 irregular rows; dorso-centrals 2 + 3, first dorso-centrals on prescutum about one-three times the length of second dorso-centrals; intra-alar bristles 0 + 1; prealar bristle absent; Notopleura, prosternum, propleura, pteropleura, hypopleura and beret bare; lower prostigmatal bristles curved downward; mesothoracic and metathoracic spiracles yellow; sternopleurals forming equilateral triangle; lateral and ventral surfaces of scutellum bare, basoscutellar and apicoscutellar bristles well developed; squamae yellowish.

tinged; veins orange; basicosta yellow, setulae of costa and costal spine short; radial node bare; $R_4 + 5$ and $M_1 + 2$ straight; cross veins cloudless; halter yellowish. *Legs*: Yellow, fore tibia without posterior bristles; mid femur with 2 to 3 bristles on basal half of the posteroventral surface; mid tibia with 2 bristles on the posterolateral surface; hind femur with a row of complete but irregular bristles on the anteroventral surface, with 2 long bristles on posteroventral surface, hind tibia with 1 short seta on the anteroventral surface and with 2 bristles each on the anterodorsal and posterodorsal surfaces; anteroventral surface of fore metatarsus and posteroventral surface of hind metatarsus densely covered with setulae. *Abdomen*: Nearly conic and yellow; a pair of brown round spots on each tergite, but, the spots on second tergite obscure; apical part of fifth sternite more or less hyaline; cerci of male vestigial.

FEMALE: Unknown.

Holotype ♂, Mt. Taibai, Shaanxi, 1000 m, 8 June, 1989. Collected by Wang Mingfu and Ni Yongtian. Paratypes 9 ♂, 4 ♀ same data as the holotype.

This new species is closely similar to *Caricea mikii* (Strobl, 1893) in external features, but the latter in the body length 2.5 to 4.0 mm; frons narrow, interfrontalia black; costal spine absent; mid tibia with only a seta on the posterodorsal surface; squamae white, median dark longitudinal stripe present on second to fifth tergites; cerci present, paramere wider and forward.



Figs 1, 2: *Caricea acerca* sp. n. ♂. Figs 3, 4: *Phaonia yinggeensis* sp. n. ♂. Figs 5, 6: *Helina capaciflava* sp. n. ♂. Figs 1, 4, 6: lateral view of terminalia. Fig 2: posterior view of terminalia. Figs 3, 5: posterior view of cerci.

Phaonia yinggeensis n. sp. (Figs 3, 4)

MALE: Body length 7.5 to 8.0 mm. *Head*: Eyes covered with long hairs; width of frons about 1.5 to 2 times the width of third antennal segment; interfrontalia narrower than diameter of front ocellus at the narrowest part;

eight inferior orbitals situated on the lower 3/4 of parafrontalia, without superior orbitals; parafrontalia, parafacialia and gena with grayish pollen; parafacialia about equal to the width of third antennal segment; antennae dark brown, length of third segment about 3.5 times that of second; arista long plumose, the longest hairs

on arista longer than 2 times the width of third antennal segment; epistoma not protruding, vibrissal angle behind frons at lunule; hairs on metacephalon entirely yellow; gena about 1/4 the height of the eye, palpi dark brown. *Thorax*: Scutum black with grayish pollen and 4 dark longitudinal stripes; apical part and lateral margin of scutellum with orange; acrostichals 0 + 1, dorsocentrals 2 + 3, prealar bristle about 2 times the length of posterior notopleurals; notopleuron setulose; prosternum, propleura, pteropleura, hypopleura and beret bare; sternopleurals 1:2; squamae yellowish. *Wings*: Yellowish tinged; the veins brown; basicosta orange; $R_4 + 5$ and $M_1 + 2$ straight; cloud near cross vein r-m more distinct than that near cross vein m-m; halter yellowish. *Legs*: Orange except coxae and tarsi dark brown to black; fore tibia without posterior bristle; mid femur with 2 bristles on basal half of the posteroventral surface; mid tibia with 2 (and 1-3 short setae) bristles on the posterolateral surface; hind femur without posteroventrals; hind tibia with 4-6 bristles on the anteroventral surface; 1-2 bristles on the anterodorsal surface, 1 bristle on the distal one-third of the posterodorsal surface. *Abdomen*: Black in ground colour; covered with gray-yellow pollen; dark median stripe present on second to fifth tergites, with silvery checkered pattern; first sternite bare.

FEMALE: Unknown.

Holotype ♂, Mt. Taibai, Shaanxi, 1000 m, 8 June, 1989, collected by Wang Mingfu and Ni Yontian. Paratype 1 ♂, same data as the holotype.

This new species is closely allied to *Phaonia datongensis* Xue & Wang, 1986, but the latter different in following aspects: Parafacialia about 1.75 times the width of third antennal segment; the longest hairs on arista longer than the width of third antennal segment; hairs on metacephalon entirely black; beret dark setulose; cloudless near r-m and m-m cross veins; fore tibia with one anterodorsals and 2 posterior bristles on the middle part; hind femur with 2 posteroventral setae on the middle part, hind tibia with 2 to 3 setae on the anteroventral surface.

Helina capaciflava sp. n. (Figs 5, 6)

MALE: Body length 10 mm. *Head*: Eyes bare; frons with grayish pollen, about 2.0 to

2.5 times the width of third antennal segment; interfrontalia a little wider than the width of parafrontalia; 4 pairs of inclinate inferior orbitals on lower 2/5 of frons, without superior orbitals; parafacialia equal to or a little wider than the width of third antennal segment; antennae yellow, gray-brown apically, arista plumose, the longest hairs on arista about same as the width of third antennal segment; epistoma not protrudent than vibrissal angles, the latter behind frons at lunule; gena about 1/5 the height of the eye; proboscis short, palpi yellow and slender. *Thorax*: Scutum blackish with orange-brown, and with gray-yellow pollen and 4 dark brown longitudinal stripes, scutellum orange; acrostichals 0 + 1, dorsocentrals 2 + 3, prealar bristle absent; rotopleura, prosternum, propleura, pteropleura, hypopleura and beret bare; sternopleurals 1:2; squame yellowish. *Wings*: Hyaline; the veins brown; basicosta yellow; setulae of costa and costal spine short; cloudless near cross veins r-m and m-m, halter yellowish. *Legs*: Yellow, except tarsi black; fore tibia without posterior bristle; mid femur with 4 bristles on basal half of the posteroventral surface; mid tibia with 2 bristles on the posterolateral surface; hind femur with a row of short setulae on the anteroventral surface, among them 3 strong in apical part, with 2 setae on submiddle part of the posteroventral surface; hind tibia with 1 or 2 setae on the anteroventral surface, 2 to 3 setae on the anterodorsal surface. *Abdomen*: Nearly conic in dorsal view ground-colour yellow; tergites with a dark brown median longitudinal stripe; third tergite with a pair of dark brown kidney-like spots, fourth tergite with a pair of small round spots on the posterior half part.

FEMALE: Unknown.

Holotype ♂, Mt. Taibai, Shaanxi, 1000 m, 8 June, 1989, collected by Wang Mingfu and Ni Yongtian.

This new species is closely similar to *Helina sexmaculata* (Preysslner, 1791), but the latter different from the former by the following characters: 7 pairs of inclinate inferior orbitals on lower 3/5 of frons; the longest hairs on arista longer than the width of third antennal segment; gena about 1/7 the height of the eye; mid femur with a row of complete bristles on the posteroventral surface; 4th tergite without median longitudinal stripe, 5th tergite with a pair of small round spots.

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