

Platycephala isinensis sp. n. (Diptera: Chloropidae) from Iran

Štěpán KUBÍK & Miroslav BARTÁK

Department of Zoology and Fisheries, Faculty of Agrobiolgy, Food and Natural Resources, Czech University of Life Sciences Prague, CZ-16521 Prague, 6–Suchbát, Czech Republic; e-mail: kubik@af.czu.cz, bartak@af.czu.cz

Abstract: A new species, *Platycephala isinensis* sp. n. (Diptera: Chloropidae) is described from Iran and main differential characters are illustrated.

Key words: *Platycephala*; Chloropidae; Diptera; Iran; *Phragmites* sp.

Introduction

The genus *Platycephala* was erected by Fallén (1820). It belongs to the *Platycephala* genus group sensu Andersson (1977), based on the following characters: head usually triangular, distinctly longer than high; frontal triangle very long, reaching anterior margin of frons, with broadened apex; eyes oval, with long axis horizontal, bare or with sparse short setulae; arista slender with short pubescence; antennae elongated, third antennal segment longer than wide, often narrowed apically; scutum deeply and densely punctuate; anepisternum with numerous setae; hind femur often greatly thickened, and hind tibia curved; abdomen very long and narrow. In total, 17 species are known (Becker 1907; Frey 1923; Nartshuk 1973, 1984; Cherian 1978; Kanmiya 1983; Yang & Yang 1994, 1995, 1997; An & Yang 2003); of these six are Palearctic [*P. palpata* (Nartshuk, 1973), *P. planifrons* (F., 1798), *P. rugosa* (Nartshuk, 1964), *P.*

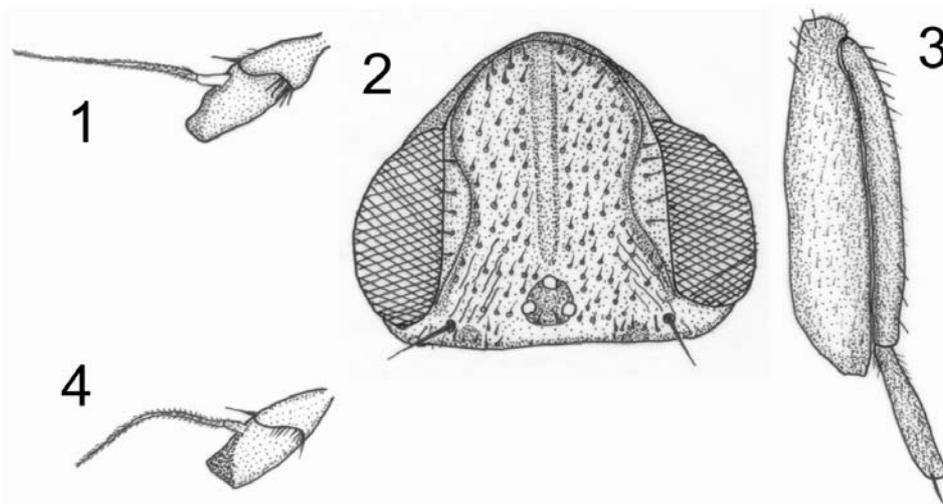
sasae Nartshuk, 1973, *P. scapularum* Becker, 1907 and *P. umbraculata* (F., 1794)] and 11 Oriental (*P. extensa* Frey, 1923, *P. giganta* Cherian, 1978, *P. guizhouensis* An et Yang, 2003, *P. josephi* Cherian, 1978, *P. lii* An et Yang, 2003, *P. maculata* An et Yang, 2003, *P. xanthodes* Yang et Yang, 1994, *P. sichuanensis* Yang et Yang, 1997, *P. sinensis* Yang et Yang, 1994, *P. subelongata* Kanmiya, 1983 and *P. zhejiangensis* Yang et Yang, 1995) in distribution.

The larvae of *Platycephala* are phytophagous on stems of *Phragmites* spp.

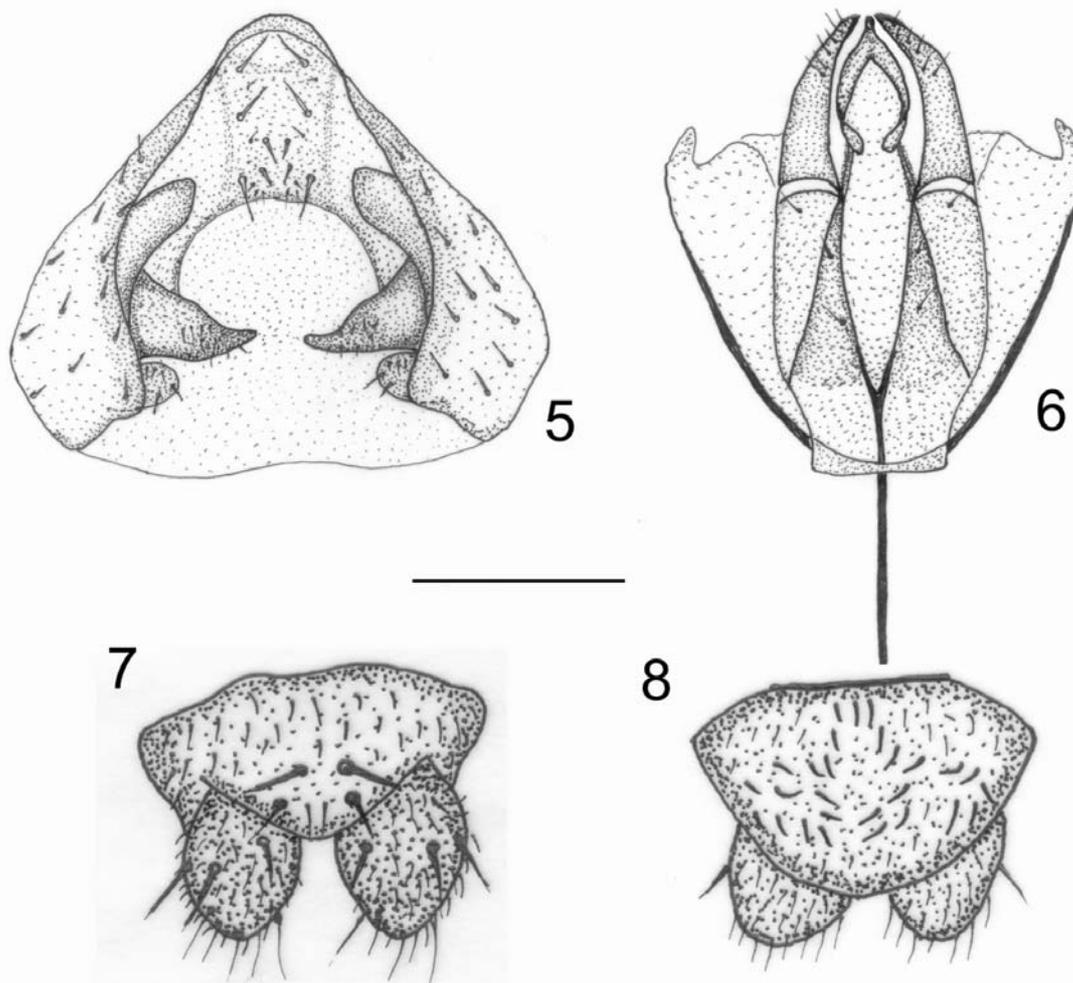
In the present paper, one species from Iran is described as new to science.

Platycephala isinensis sp. n.

Diagnosis. Similar to *Platycephala scapularum* Becker, 1907 from Biskra in the shape and colour of hind femur and frontal triangle, but the third antennal segment is



Figs 1–3. *Platycephala isinensis* sp. n., holotype: 1 – antenna, lateral view; 2 – head, dorsal view; 3 – hind femur and tibia, lateral view. Fig. 4 – *Platycephala scapularum* Becker, antenna, lateral view.



Figs 5–8. *Platycephala isinensis* sp. n.: 5 – male genitalia, posterior view; 6 – hypandrium and phallic complex; 7 – female terminalia, ventral view; 8 – female terminalia, dorsal view. Scale 0.1 mm.

elongated and narrowed apically (Fig. 1), whereas in *P. scapularum* it is nearly square-shaped (Fig. 4).

Description. Holotype. Body length 6.5 mm, wing length 4.3 mm. Head yellow, trapezoid in profile, about 1.2 times as long as high; frons produced beyond anterior level of eye, in profile about 0.6 times as long as long axis of eye, gena broadened, parafacial as long as long axis of eye. Frontal triangle yellow, brown punctured and with yellowish-brown medial stripe, occupying most of area of frons and reaching its anterior margin; area between eye and frontal triangle depressed and yellow (Fig. 2). Occiput subshining, yellow with two dark brown rounded spots. Setulae on head pale, setae brownish-black, outer vertical seta distinctly stronger than the very short and fine orbitals; setulae on frontal triangle fine, short and yellow. Antenna yellow with only apical part of the third antennal segment dark brown; pedicel as long as third antennal segment; third antennal segment broadened basally but narrowly elongated distally; arista white with pale yellow basal segment, short pale pubescent. Proboscis and palpi yellow, clypeus brownish-yellow.

Thorax entirely yellow, slightly narrower than

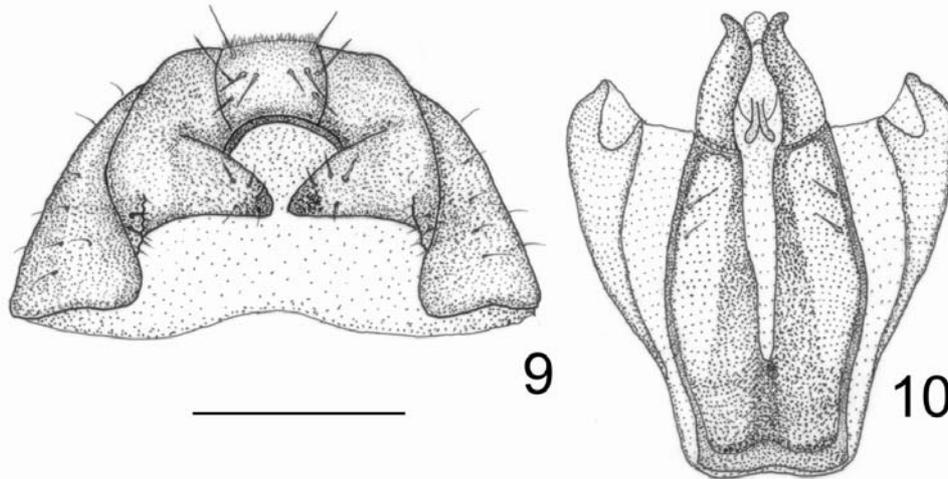
head; scutum shiny yellow with 5 yellow-brown prominent setose punctured stripes, notopleural seta 0–1; scutellum pale, microtrichose and dark punctured, 1.1 times as wide as long. Thoracic setae and setulae dark; anepisternum with numerous dark short setulae, yellow, only left margin yellow-brown; katepisternum yellow-brown, flat and shiny; postpronotum yellow with central dark brown oval spot. Legs predominantly yellow; hind femur distinctly thickened, about 2 times as thick as fore femur (Fig. 3). Setulae on legs dark dorsally and pale ventrally. Wing hyaline; veins yellow. Squama yellow with dark brown fringes. Haltere yellow, knob whitish-yellow.

Abdomen yellow-brown, light microtrichose. Setulae on abdomen brown. Male genitalia as in Figs 5–6, female genitalia as in Figs 7–8. Setulae on genitalia yellow-brown and short.

Type material. Holotype: male, East Iran, Isin, 11. – 15.V.1973, Expedition of the National Museum Prague.

Paratypes: 17 males and 27 females, same locality and date as the holotype.

Holotype of the new species is deposited in the collection of the National Museum Prague. Paratypes are de-



Figs 9, 10. *Platycephala scapularum*: 9 – male genitalia, posterior view; 10 – hypandrium and phallic complex. Scale 0.1 mm.

posited in the collections of the National Museum Prague and Czech University of Life Sciences Prague.

Etymology. The species is named after the type locality (Isin).

Distribution. Iran, Isin

Differential diagnosis. Differential characters between *Platycephala isinensis* sp. n. and *P. scapularum* Becker:

<i>P. isinensis</i> sp. n.	<i>P. scapularum</i> Becker
Third antennal segment elongated and narrowed	Third antennal segment nearly square
Clypeus yellow-brown	Clypeus yellow
Setulae on head pale, setae brownish black	Setulae on head dark, setae black
Setulae on frontal triangle thin, short and yellow	Setulae on frontal triangle thin, short and black
Mesonotum with yellow-brown stripes	Mesonotum with reddish-brown stripes
Male genitalia as in Figs 5, 6	Male genitalia as in Figs 9, 10

Acknowledgements

This paper was supported by IRP MSM 6046070901. We are grateful to Dr. J. Ježek (National Museum Prague), for the loan of some material from Iran and to Mr. N. Wyatt (Natural History Museum London), for the loan of some related *Platycephala* species.

References

- An S. & Yang D. 2003. A review of the genus *Platycephala* Fallén, 1820 from China (Diptera, Chloropidae). *Ann. Zool.* **53**: 651–656.
- Andersson H. 1977. Taxonomic and phylogenetic studies on Chloropidae (Diptera) with special reference to Old World genera. *Entomol. Scand. Suppl.* **8**, 200 pp.
- Becker T. 1907. Die Ergebnisse meiner dipterologischen Frühjahrsreise nach Algier und Tunis, 1906. *Z. Syst. Hymenopteren Dipteren* **7**: 369–407.
- Cherian P.T. 1978. The genus *Platycephala* (Diptera, Chloropidae) from India. *Oriental Insects* **12**: 137–141.
- Fallén C.F. 1820. *Oscinides Svecicae*. *Diptera Svecicae* 2 (20), Literis Berlingianis, Lundae, II+10 pp.
- Frey R. 1923. Philippinische Dipteren. I. Fam. Chloropidae. *Not. Entomol.* **3**: 71–83.
- Kanmiya K. 1983. A systematic study of the Japanese Chloropidae (Diptera). *Mem. Entomol. Soc. Wash.* **11**, 370 pp.
- Nartshuk E.P. 1973. New species of Chloropidae (Diptera) of the Palearctic fauna. *Entomol. Obozr.* **52**: 215–227.
- Nartshuk E.P. 1984. Family Chloropidae, pp. 222–299. In: Soós Á. & Papp L. (eds), *Catalogue of Palearctic Diptera* 10, Akadémiai Kiadó, Budapest.
- Yang J.K. & Yang D. 1994. New species of the genus *Platycephala* (Diptera, Chloropidae) from China. *Entomotaxonomia* **16**: 153–155.
- Yang J.K. & Yang D. 1995. Diptera: Chloropidae, pp. 541–543. In: Wu H. (ed.), *Insects of Baishanzu Mountain, Eastern China*, China Forestry Publishing House, Beijing.
- Yang J.K. & Yang D. 1997. Diptera: Chloropidae, pp. 1553–1554. In: Yang X.K. (ed.), *Insects of the Three Gorge Reservoir Area of Yangze River*, Chongqing Publishing House, Chongqing.

Received October 1, 2007
Accepted March 3, 2008