

## New records of robber flies (Diptera: Asilidae) for Turkish fauna

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### Summary

Three species of robber flies *Habropogon spissipes* Hermann, *Stenopogon rufescens* Theodor. and *Promachus mustela* Loew are recorded for the first time from Turkey Important diagnostic characters of each species are given, and male genitalia are figured.

### Introduction

Members of the family Asilidae are voracious predators, feeding on various arthropods, mainly insects, and are an important agents in the maintenance of a biological balance in insect populations. However, some species feed on bees, parasitic wasps, and flies too (Hull, 1962; Theodor, 1980).

Systematical and faunistical studies on Asilidae of Turkey is very restricted. As native researchers Giray (1981) gave a preliminary list of the fauna of Asilidae, and Hayat (1993) made a faunal and systematic studies in Erzurum and neighbouring provinces. In the second study 44 species were recorded, among them 16 species were new for Turkish fauna.

### Material and Methods

Specimens were collected from Adana, İçel and Şanlıurfa provinces.

In order to study male genitalia fragments of specimens, the method that advised by Weinberg and Bacz (1992) was used.

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## Results

Two species in the subfamily Stenopogoninae and one species in the subfamily Apocleinae are recorded.

### Stenopogoninae

#### *Habropogon spissipes* Hermann, 1909

Synonym: *H. epissipes* Engel, 1925: *Bull. Soc. ent. Egypte*, 9: 351.

Face with white tomentum, beard restricted at the lower part of face and with white setae; segments of antennae yellowish-brown at the base, dark apically, style short; maxillary palps black.

Mesonotum with greyish-white tomentum laterally, white setae and hairs, and dark median stripe; pleura yellowish; all posterior cells of wings open, anal cell narrowly open; legs yellowish-brown.

Abdomen of female with greyish-yellow tomentum, reddish-yellow posterior margin of the terga, hairs short and white.

Parts of epandrium nearly rectangular, with pointed apex; proctiger with broadly heart-shaped dorsal part; apical process of gonocoxites with sinuate apical margin and a lateral point; dististylus with rectangularly bend apical part; aedeagus broadly conical, with narrow end; hypandrium short, broadly rounded, with a few short setae (Theodor, 1980) (Figs 1-5).

Length 10 mm; wings 6 mm (female).

Distribution: Egypt and Morocco (Theodor, 1980; Lehr, 1988).

Examined Material: Ceylanpınar (Şanlıurfa), 25 05. 1991, 1 female.

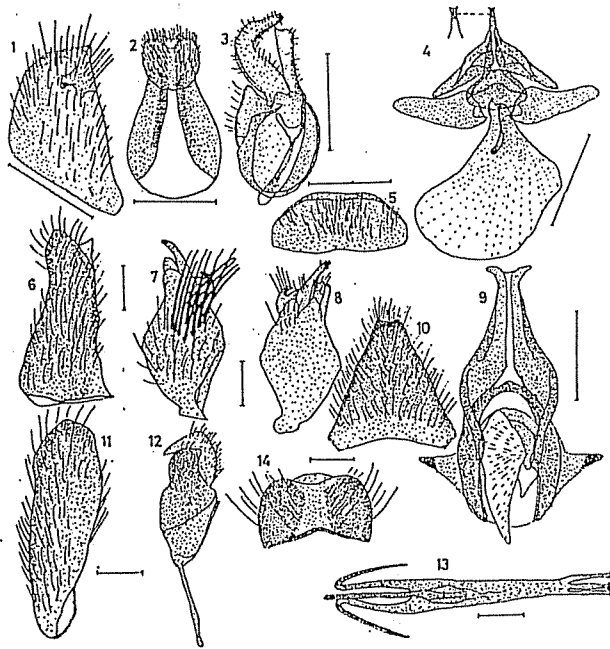
#### *Stenopogon rufescens* Theodor, 1980

Face with yellowish-white tomentum, beard with strong and yellowish-white setae; antennae reddish-brown; maxillary palps black, with white setae.

Mesonotum with yellowish-brown tomentum and with a dark brown median stripe divided by a narrow pale line, setae yellowish-white; wings brownish, cell R<sub>5</sub> narrowly open at the margin, cell M<sub>3</sub> closed and with short stalked; legs reddish-brown, fore and mid femora with a dorsal black stripe, hind femora with broad dorsal black stripe.

Abdomen with yellowish-brown tomentum, integument of terga reddish at the posterior margin.

Parts of epandrium tapering, with rounded apex and a dorsal triangular process; gonocoxites with long setae on dorsal and plate shaped process; dististylus broad at the base and tapering at the apex, inner hook short, brown, thick; aedeagus conical; hypandrium triangular (Figs 6-10).



Figs 1-5. *Habropogon spissipes* Hermann, 1. epandrium, 2. proctiger, 3. gonocoxite and dististylus, 4. aedeagus, 5. hypandrium (from Theodor, 1980); 6-10. *Stenopogon rufescens* Theodor, 6. epandrium, 7. gonocoxite and dististylus (outer side), 8. gonocoxite and dististylus (inner side), 9. aedeagus, 10. hypandrium; 11-14. *Promachus mustela* Loew, 11. epandrium, 12. gonocoxite and dististylus, 13. aedeagus, 14. hypandrium (Scale 0.5 mm).

Length 28 mm, wings 17 mm (male).

Distribution: Israel (Theodor, 1980; Lehr, 1988).

Examined Material: Erdemli (İçel), 01. 09. 1983, male.

### Apocleinae

#### *Promachus mustela* Loew, 1854

Face broad, as wide as an eye or slightly narrower, beard with thick white and black setae at the mouth margin and several setae further dorsally in the middle; antennae black, widely separated, arista about twice as long as segment 3; maxillary palps black, with white and black setae.

Mesonotum with black setae and white hairs, greyish tomentum, but less distinct at the some specimens; wings transparent, without microtrichia, cross vein R<sub>4</sub>-R<sub>5</sub> situated almost in the middle of cell R<sub>5</sub>, cell M<sub>3</sub> and anal cell closed and with a long stalk; femora black dorsally, reddish-yellow ventrally, tibiae reddish-yellow at the apex, tarsi black dorsally, reddish-yellow ventrally.

Abdominal terga black, with grey tomentum distinctly at some specimens, all hairs white.

Hypopygium narrower than the abdomen, with a white dorsal tuft; parts of epandrium with long setae; gonocoxites not fused; dististylus broad; aedeagus with tapering apical tubes, slightly funnel-shaped ends; hypandrium short, with rounded sides (Figs 11-14).

Length 24 mm (male), 25-33 mm (female); wings 16 mm (male), 18-21 mm (female).

Distribution: Israel, Lebanon and Syria (Theodor, 1980; Lehr, 1988).

Examined Material: Adana, 06.08.1993, 1 female; Silifke (İçel) 23.05.1992 1 male; Erdemli (İçel), 19.08.1992, 3 females, 1 male.

## Discussion

Studies on the Asilidae fauna of Turkey is not adequate. Up to now, 178 species have been recorded by various authors (Giray, 1981; Lehr, 1988; Richter, 1988; Hayat, 1993). The number of asilid species of Turkey, together with this study is increased up to 181.

Number of the known species of the Asilidae in Palaearctic Region is about 1300 (Lehr, 1988). Turkey is a large country has various geographical regions and climates, so the number of the asilid species can be expected more than this. New studies should be conducted on this important group of insects.

## Özet

### Türkiye Asilidae (Diptera) faunası için yeni kayıtlar.

*Habropogon spissipes* Hermann, *Stenopogon rufescens* Theodor ve *Promachus mustela* Loew, Türkiye Asilidae faunası için yeni kayıt olarak belirlenmiştir. Her türün önemli taksonomik karakterleri verilerek, erkek genital organının kısımları çizilmiştir.

## References

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