

Description of a new species of the genus *Eumerus* (Diptera, Syrphidae) from Iran

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A new species of the genus *Eumerus* and new records of four species of this genus from Iran are presented. The new species is close to *E. lunatus* (Fabricius, 1794) and *E. urartorum* Stackelberg, 1960 but differs by its mostly black abdomen. In *E. lunatus* and *E. urartorum* the abdomen is red. Drawings of the head, hind femur and tibia, abdomen and male terminalia are provided.

Key words: *Eumerus ahmadii*, new species, new records, Iran, Syrphidae.

Zusammenfassung

Eumerus ahmadii **spec. nov.** wird aus dem Iran beschrieben. Die Art ist nahe verwandt mit *E. lunatus* (Fabricius, 1794) und *E. urartorum* Stackelberg, 1960. Außerdem werden vier weitere Arten der Gattung *Eumerus* nachgewiesen, davon sind drei Erstnachweise für den Iran (*E. amoenus*, *E. sogdianus*, *E. tricolor*).

Introduction

Four species of the genus *Eumerus* were identified among Iranian material from the collections of Mr Babak Gharaei and the Plant Pests and Diseases Research Institute (the curator of the collection is Mr Ebrahim Gilasian). In addition, specimens of a species which was not identifiable using the keys to the Palearctic species of this genus (Sack 1932, Stackelberg 1961) were found. Since this species has rather striking morphological features which do not correspond with those of any known species, we consider it as undescribed. The description of this new species, and also a list of the other species found, are presented below. The holotype of the new species is deposited in the Zoological museum of the Institute of Animal Systematics and Ecology RAS (Novosibirsk, Russia), the paratype is deposited in the Insects Taxonomy Research Department of the Plant Pests and Diseases Research Institute (Teheran, Iran).

Description of *Eumerus ahmadii* spec. nov.

Holotype: Male. Iran. Fars: west slope of Deno Mountain, 2210 m 18-20.VIII.1976 (Corum and Pazuki). Paratype: Female. Iran. Shiraz, Fars 2.V.1998 (B. Gharaei).

Diagnosis: Using the key of Stackelberg (1961) to the Palaearctic species of *Eumerus*, the new species runs to *E. lunatus* (Fabricius) and *E. urartorum* Stackelberg, but differs from both by its predominantly black abdomen, the abdomen being red in *E. lunatus* and *E. urartorum*.

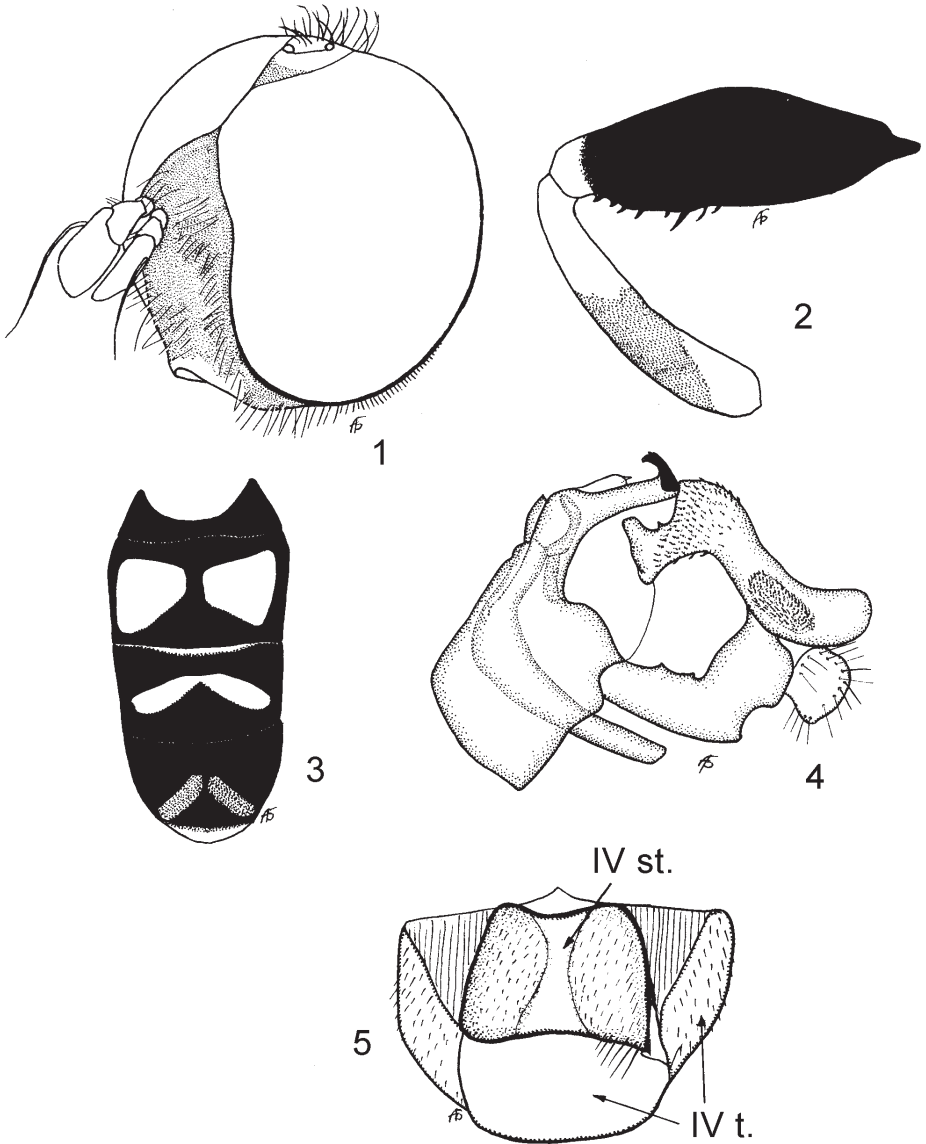
Etymology: The new species is named in honour of the famous Iranian entomologist Dr Ali Asghar Ahmadi.

Male (figs 1-5):

H e a d : Face comparatively narrow, narrower in lower part, covered with dense silver dusting and hairs, only mouth margin narrowly black, cheeks low, with silver dusting and hairs; frons flat, narrow, covered with silver dusting and hairs, angle of approximation of eyes distinctly less than 90°; antennae: 1st and 2nd segments brownish, 3rd segment elongated, bright yellow (fig. 1), arista bare, yellow in basal half and black in apical half; eyes bare, holoptic, the length of their contact to length of frons = 1.3: 2.3, ommatidia of the upper part of eyes distinctly larger than those of the lower part; vertex covered with silver dusting in anterior 1/5, posterior part shining, ocellar triangle equilateral, covered with brown hairs in anterior part and with white hairs in posterior part.

T h o r a x : Mesonotum with fine punctuation, black, shining, slightly grey dusted laterally and along transverse suture, with 2 fine, longitudinal grey stripes on the anterior half, covered with sparse, short, white hairs; scutellum with sharp punctuation and a distinctly demarkated rim; pleurae black with fine grey dusting and comparatively long and dense white hairs, sternopleuron covered with long white hairs only on postero-dorsal corner; legs: coxae, trochanters and femora black, except for a narrowly yellow apex to the femora; fore and mid tibiae and tarsi yellow; tibiae laterally slightly brownish; hind tibiae yellow for the basal 1/3 of their length and blackish for the apical 2/3; hind metatarsus brownish dorsally, other segments yellow; hind femur swollen in the middle, with some strong, short teeth (fig. 2) apico-ventrally and with comparatively short white hairs; wings hyaline.

A b d o m e n : broadest at the anterior margin of tergite II (fig. 3); tergite I black; tergite II with large yellow spots, which are covered with fine grey dusting on their posterior half; tergite III with a yellow band medially, along the anterior margin and with medially connected, oblique, small, yellow spots; tergite IV with oblique spots of grey dusting and with a yellow band along its hind margin; sternite IV as in fig. 5; tergite VIII with short yellow hairs. Male terminalia as in fig. 4.



Figs 1-5: Male of *Eumerus ahmadii* spec. nov. – 1. head in lateral view; – 2. hind femur and tibia; – 3. abdomen dorsally; – 4. genitalia laterally; – 5. top of abdomen without genitalia ventrally: IV t. – the fourth tergite, IV st. – the fourth sternite.

Female:

Frons narrow with 2 stripes of grey dusting anterior and posterior to the ocellar triangle. Anterior half of mesonotum with 3 narrow longitudinal stripes and with grey dusting along the transverse suture. Fore and mid tibiae yellow on the basal 2/3 and darkened on the apical 1/3; hind tibia yellow on the basal 1/3 and darkened on the apical 2/3. Yellow spots on tergite II with dense grey dusting; spots on tergites III-IV completely grey dusted; tergite IV without a yellow band on the hind margin. Otherwise as in the male.

Size: Body: 6.0-6.9 mm; wing 4.1-4.2 mm.

List of species of the genus *Eumerus* in the collections studied

Eumerus amoenus Loew, 1848: First record from Iran; previously known from southern Europe, North Africa, Mongolia and Turkey (Peck 1988). – Material examined: 1 male, 1 female Iran. Shiraz: Fars 2.V.1998 (B. Gharaei coll.).

Eumerus sogdianus Stackelberg, 1952: First record from Iran; previously known from Lithuania, Georgia, Middle Asia, Mongolia and China (Peck 1988). – Material examined: 12 males, 13 females Iran. Gazvin 19.X.1973 (Naim coll.); Mesh-Torogh 18.VI-19.VII.1973 (A. Jat coll.); Freyz Abad 16.XI.1999 (Arbad coll.); Shiraz, Fars 2.V.1998 (B. Gharaei coll.); Darab, Fars 25.V.1997 (B. Gharaei coll.); Marand 9.VI.1997 (H. Lotfalizadeh coll.); Moghan 9.IV-6.VI.2000 (H. Lotfalizadeh coll.).

Eumerus tricolor (Fabricius, 1798): First record from Iran; previously known from Spain to West Siberia (Peck 1988). – Material examined: 1 male Iran. Yasuj-Tolegorgi, 2000m 4.V.1995 (Mirz et Hash coll.).

Eumerus tadhikorum Stackelberg, 1949: Material examined: 2 males Iran. Golestan. P. M. Golestan, Almehr, 1700m 25.VII.2001 (Gil., Mogh., Ch.).

Acknowledgements

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