A new syrphid fly species of the *Paragus serratus* complex from Turkey (Diptera: Syrphidae)

Guy Van de Weyer

Samenvatting. Een nieuwe soort zweefvlieg uit het *Paragus serratus* complex uit Turkije (Diptera: Syrphidae)
Uit Zuid-Turkije (prov. Antalya) wordt een nieuwe soort uit het *Paragus serratus* complex beschreven. Ze wordt vergeleken met *Paragus azureus scrupeus* Stuckenberg, 1954 en *Paragus pusillus* Stuckenberg, 1954.

Résumé. Une nouvelle espèce de syrphide du complexe de *Paragus serratus* de Turquie (Diptera: Syrphidae)
Une nouvelle espèce du complexe de *Paragus serratus* est décrite de Turquie (prov. Antalya). Elle est comparée à *Paragus azureus scrupeus* Stuckenberg, 1954 et *Paragus pusillus* Stuckenberg, 1954.

Key words: Diptera – Syrphidae – *Paragus* – *serratus* complex – Turkey – new species.

Van de Weyer, G.: Pieter Breughellaan, 26, B-2840 Reet (Rumst).

Introduction

The genus *Paragus* Latreille, 1804 is a small genus of syrphids, the larvae of which are aphid predators. It is distributed on all continents except South America (Vockeroth 1986). The two subgenera, *Paragus* Latreille, 1804 and *Pandasyopthalmus* Stuckenberg, 1954 are both represented in the Old and New World. In the last paper on the occurrence of this genus in Turkey (Hayat & Claussen 1997), eleven species are recorded. Within the subgenus *Paragus*, Stuckenberg (1954) described a well defined group, which he named the *Paragus serratus* complex (7 species). This group can be defined by the following characters:

1. The scutellum is very deeply serrated, bearing on its outer margin a row of conspicuous, peg-like teeth. A slightly serrated condition is found in many other species of *Paragus*, but the serrations are usually weak and inconspicuous.
2. The third and fourth abdominal segments are carinate.
3. The second abdominal segment is longitudinally narrower than the first segment.
4. There is a distinct, elevated, transverse ridge across the middle of the anterior half of the first abdominal segment.
5. The ventral surface of the scutellum is covered by a dense, white pubescence.
6. There are two well developed longitudinal strips of tomentum on the mesonotum.
7. There is a facial stripe in the male (only found in the subgenus *Pandasyopthalmus*).
8. Characteristic shape of the genitalia.

All of the seven species in this complex are mainly Tropical (three are African, three Oriental and one is common to both regions). Only one species been known to occur in Turkey so far (Hayat & Claussen 1997 and Claussen pers. comm.): *Paragus azureus* Hull, 1949, where it is represented by the ssp. *scrupeus* Stuckenberg, 1954 only.

On 10 September 1999, J. Dils and J. Faes caught a *Paragus* specimen that does not belong to any of the eleven known species in this genus. It apparently belongs to a new species that is described here as

Paragus faesi sp. nov.

Type. Holotype ♂: Turkey, Antalya province, Güzelbağ (N 36°42'46" – E 31°53'58"), 700 m, 10.IX.1999, J. Dils and J. Faes leg., deposited in the Institute of Systematics and Population Biology, Zoological Museum, Amsterdam. Female unknown.

Description

Size. Body length: 4.8 mm – wing length: 3.8 mm.

Head (fig. 3). Face creamy-yellow, shining with sparse short, silvery hairs. Facial stripe extending upwards to base of antennae, almost light brown. Antennae proximally half the length of the face; first segment badious, second similar but lighter at top. Third segment black and crineous at base and below, 1.35 times as long as first two together. Arista shorter than third segment, yellowish-brown. Frontal angle 90°. Vertex glossy black covered with short white hairs. Occiput with light coloured pruinosity, covered with white hairs. Ocellar triangle isosceles, with sparse, short white hairs.

Thorax (fig. 4). Mesonotum shining black, with some violaceus reflection, heavily granulated. Mesonotal pile short and white. Mesonotal stripe conspicuous and white, ending just before base of scutellum – quite broad and tapering only slightly, not ending in sharp points. They diverge all over the thorax. Two little transverse lines of white tomentum at sides on the transverse suture. Scutellum yellow, only a quarter black at base, with ten yellow subequal scutellar teeth.

Legs. Two anterior pairs of femora dark brown with distal third whitish. Posterior femora shining black in the centre, basal tip light brown and distal third whitish. All tibiae yellow-white on the basal half, pale testaceous elsewhere. All tarsi pale testaceous and metatarsi darkened above. Halteres with creamy-yellow stalk and a white capitulum.

Wing. Sigma pale, creamy-yellow and veins dark brown. Subcosta and apical part of first longitudinal vein yellowish-brown. Squama white.

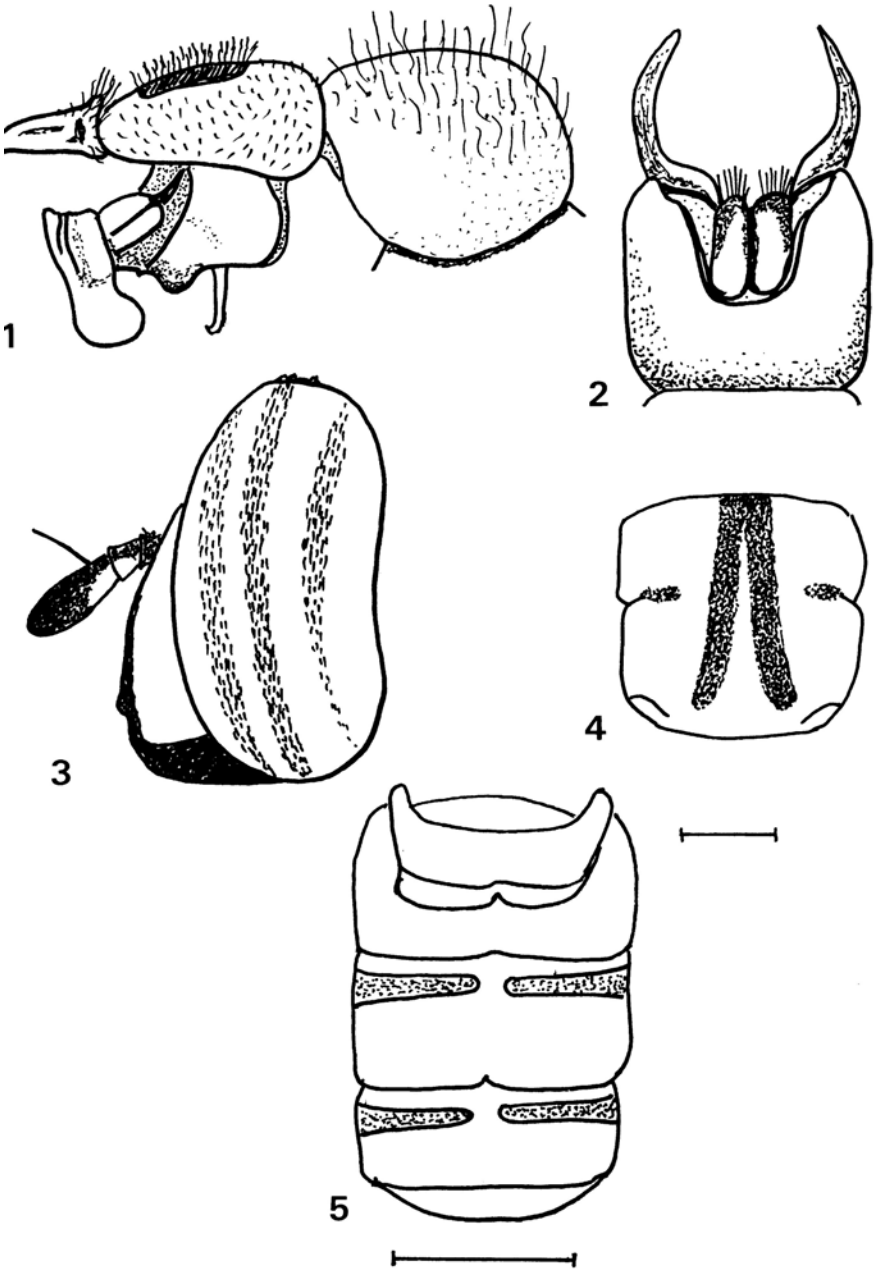
Abdomen (fig. 5). Sides almost parallel, diverging a little anteriorly, each curving gently backwards from moderately prominent shoulders. Shoulders with dark fusco-piceus, somewhat shining colour extending down to apex of second segment, from whence it extends diagonally across the segments to posterior margin of first segment. Remainder of abdomen brownish-amber, covered with white hairs. Transverse troughs of third and fourth segment well developed, rather deep with flattened sides. White vittae occupy this troughs only a little separated in the middle.

Genitalia (figs. 1–2). Epandrium rounded, about two times longer than broad. Cerci long, flattened and moderately prominent. They are about half the length of the epandrium with long white hairs. Surstyli in lateral view half the length of the epandrium, almost uniformly narrowed from base to apex. In dorsal view they are very curved from the base to the top. Inferior paramere well developed, extending ventrally into rounded lobes that project below level of the hypandrium. Ventrally the hypandrium bears a finger-like projection, like *pusillus* but thinner.

Etymology. The species is dedicated to Mrs. Jeannine Faes, who has collected, together with her husband Mr. Jos Dils, over the last twenty years during numerous expeditions a great number of insects in the Mediterranean area, especially Greece and Turkey. She also collected the holotype.

Diagnostic characters

Because no good key of the Palaearctic species of *Paragus* exists and only two species are now known from Turkey, a synoptic table is presented here, summarizing the diagnostic features that allow the separation of *P. faesi* **sp. nov.**, *P. azureus scrupeus* and *P. pusillus* (Stuckenberg, 1954) from West and Southern Africa, as the genitalia of the latter taxon are much alike those of *P. faesi*).



Figs. 1–5 : *Paragus faesi* **sp. nov.**, holotype ♂ – 1. Genitalia (lateral view); – 2. Genitalia (dorsal view); – 3. Head in profile; – 4. Thorax; – 5. Abdomen.

	P. faesi **sp. nov.**	*P. pusillus*	*P. azureus scrupeus*
facial stripe	light brown	indistinct	dark ligneous brown
mesonotal stripes	ending before scutellum	ending before scutellum	touching scutellum
abdomen (shape dorsal view)	rather narrow with nearly parallel margins	like *faesi*	third and fourth segment distinctly tapered
colour of abdomen	brownish amber	dark, especially on first and last two segments	brown, translucent
finger-like projection of the hypandrium	present	present	absent
form of surstylus (lateral view)	triangular, curved downwards et the end	like *faesi*	rectangular, curved upwards at the end
shape of hypandrium (lateral view)	egg-shaped, two times longer than broad	almost square	almost square

References

Hayat, R. & Claussen, C., 1997. A new species and new records of the genus *Paragus* Latreille, 1804 from Turkey (Diptera: Syrphidae). — *Zool. in the Middle East* **14**: 99–108.

Stuckenberg, B. R., 1954. The *Paragus serratus* complex, with descriptions of new species (Diptera: Syrphidae). — *Trans.R.ent.Soc.Lond.* **105**(17): 393–422.

Vockeroth, J. R., 1986. Revision of the New World species of *Paragus* Latreille (Diptera, Syrphidae). — *Can.Ent.* **118**: 183–198.