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A new species of *Paraphamartania* from Spain (Diptera: Asilidae)

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With 1 figure

Summary

A new species of *Paraphamartania* Engel from Spain is described and illustrated. Keys for the Palaearctic genera of the tribe Isopogonini and the species of *Paraphamartania* are given.

Keywords: Diptera; Asilidae; Dasypogoninae; Isopogonini; *Paraphamartania*, new species; keys; Palaearctic; Spain.

Zusammenfassung

Eine neue *Paraphamartania*-Art aus Spanien wird beschrieben und illustriert. Bestimmungsschlüssel der paläarktischen Isopogonini-Gattungen und der *Paraphamartania*-Arten werden vorgestellt.

Contents

1. Introduction

Among some Asilidae from Spain recently sent to me for identification, I found a specimen of the genus *Paraphamartania* Engel. The comparison with the descriptions of the other known species shows that it is a new species which is described herewith.

2. Description of *Paraphamartania stukei* spec. nov. (Fig. 1a–e)

Holotype female: Spain, Galicia, Prov. Lugo, ESE Sarria, 4 km ENE Renche, 42° 46' N 7° 14' W, 7. VI. 1995, leg. J.-H. Stuke. The holotype is deposited in the Staatliches Museum für Naturkunde Stuttgart, Germany [SMNS].

Derivatio nominis: The species is named after Jens-Hermann Stuke (Bremen).

Head black, golden pruinose, a small spot above the antenna and the ocellar tubercle shining. Face uniformly slightly convex, slightly widened below (Fig. 1a); the bases of antennae are situated slightly below the upper third of the compound eye (Fig. 1b); occiput with 2 setae and short yellow hairs; face with yellow hair below the antennae in two groups laterally, yellow mystax composed of several long and weak bristles arranged in two rows above the upper margin of the face; hair on the back of the head and the post-genal beard yellow. Proboscis with yellow hair at base and top. Palpi two-segmented, with yellow hair. Antennae black with brownish tomentum on all segments; ratio of segments (1st, 2nd, 3rd, style): 1 to 0,9 to 3,2 to 0,8 (Fig. 1d); style two-segmented, 1st microsegment somewhat longer than the 2nd, and the 2nd with an apical sensillum.

Thorax black, convex; pronotum and anterior and lateral parts of pre- and mesoscutum with golden tomentum (Fig. 1c); mesoscutum with a dark tomentose median stripe which is narrower than the vertex and ends at the transverse suture; short hair on mesoscutum yellow (2 lateral spots in front of the scutellum remain bare); 3–4 weak humeral, 2 notopleural, 1 supraalar, 2 postalar and 7–9 dorsoecentral setae (4–5 dorsocentral setae in front of the transverse suture are short and weak), acrostichal setae not distinguishable from hair cover. Pleura golden tomentose, without hair; postnotal fan (metapleural tuft) yellow, composed of hair and 4 stronger setae. Scutellum black and shiny, without hair on the disc and bristles on the posterior margin; metanotum with white tomentum laterally. Halter pale with brownish base.

Legs black and yellow, hair cover and bristles yellow; coxae black with golden temtentum and yellow hair; fore and mid femora black, apical third yellow; hind femur black, apical two-thirds yellow; all tibiae yellow with black tips, apex of fore tibia ventrally with shmall curved spur; tarsal segments black (base of metatarsus somewhat lighter).

Wings infuscated brown (by dense microtrichia), except for apical part which is whitish (Fig. 1e); costa extends round axillary cell, with black hair (yellow only at the base), alula somewhat reduced, posterior cells open and anal cell closed at the margin.

Abdomen black, rather slender like the thorax, tapering from tergite 5; without postmetacoxal bridge; tergites 2–5 with constricted hind margins, first tergite also with a constricted basal part (Fig. 1a); hair cover short and yellow; fine bristles at sides of the first tergite only, no discal setae; tergites shiny, except for the golden tomentose spots at the lateral hind corners of each tergite which are triangular and posteriorly wider; sternites with longer yellow hair and sternites 1–5 brownish tomentose. Ovipositor with acanthophorites (5 strong, brown spines at each side) and short, yellow hair.

Body length: 8.5 mm; length of wing: 6.5 mm.

Male: Unknown.

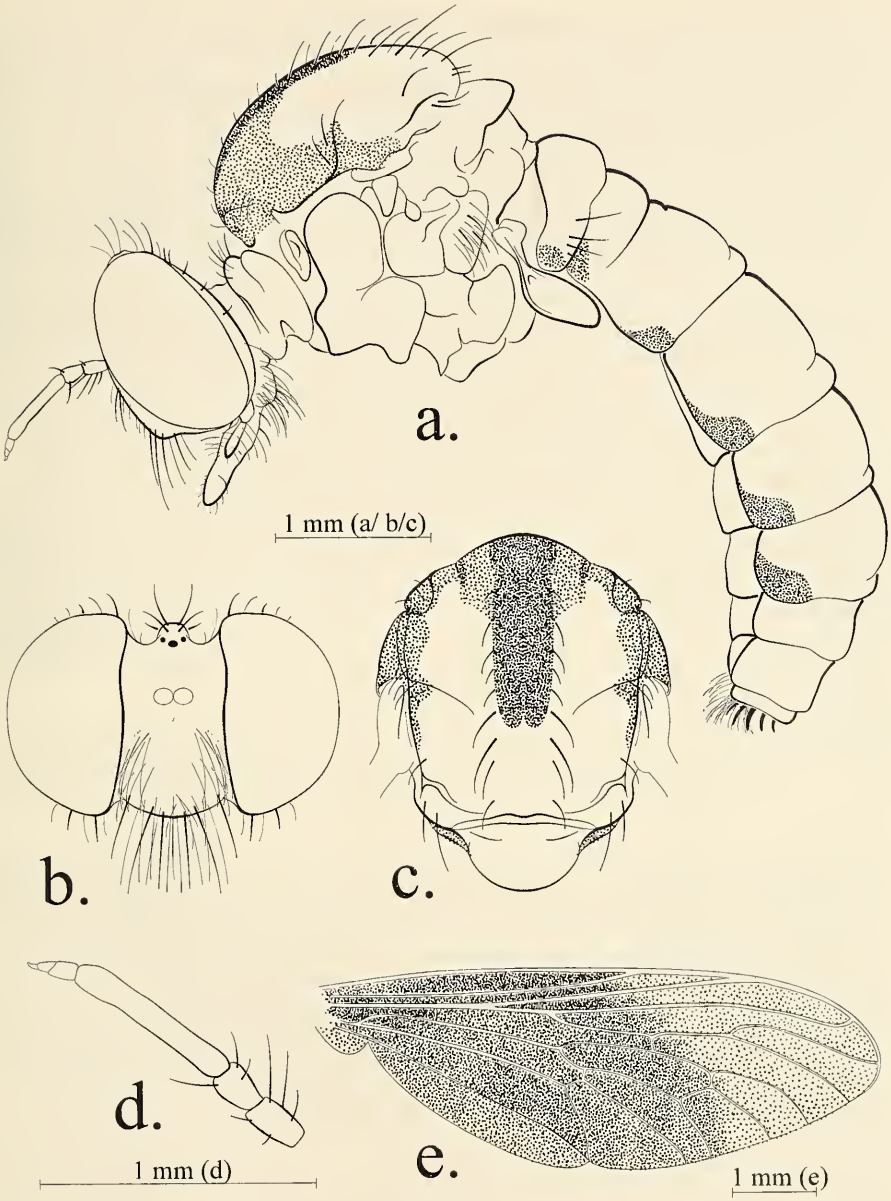

Fig. 1a-e. *Paraphamartania stukei* spec. nov., female. – a. Head, thorax, abdomen in lateral view (only with the tomentum on mesoscutum and tergites); – b. head in frontal view; – c. thorax in dorsal view; – d. antenna in lateral view; – e. right wing.

3. Key to the tribes of the Palaearctic Dasypogoninae and the genera of the tribe Isopogonini

1 Antennal style one-segmented or absent; fore tibial spur large, situated on a process, resting on a tubercle with denticles on the basitarsus opposite the spur .....
..... Megapodini Carrera, 1949 & Dasypogonini Macquart, 1838

- Antennal style with 2 microsegments; fore tibial spur bristle-like, sigmoid, not situated on a process (sometimes difficult to see); all wing cells open, or only anal cell closed (Isopogonini Hardy, 1948) 2
2 Female terminalia without spines on acanthophorites ..... *Leptarthrus* Stephens, 1829
- Female terminalia with spines on acanthophorites 3
3 Bases of antennae at level of the upper fourth of the compound eye; style without apical sensillum (Richter, 1966: Fig. 1–4); dorsocentral setae absent; anal cell open ..... *Theurgus* Richter, 1966
- Bases of antennae slightly below the upper third of the compound eye; style with apical sensillum; dorsocentral setae present ..... *Paraphamartania* Engel, 1930.

Remarks to the key: Papavero (1973: 276) writes in his key to the tribes of the Dasypogoninae, that all wing cells are open in Isopogonini. Unfortunately this is not correct, because the anal cell of *Paraphamartania* is closed, in some specimens of *P. syriaca* even petiolate. Moreover he remarks that the fourth posterior cell is open or closed, not petiolate in Dasypogonini. I own some specimens of *Dasypogon diadema* which have the 4th posterior cell petiolate. I think this character is variable.

According to Richter (1966, 1988) *Theurgus* differs from *Paraphamartania* in the shape of pubescence of the antenna. *Theurgus* should have dense pubescence on the 3rd antennal segment and style, whereas *Paraphamartania* should not have pubescense there. Engel (1930: 441) writes: „Fühler schwarz, das 3. Fühlerglied auf der Innenseite schwach grau bestäubt". I have found material of *P. syriaca* from Israel, determined by Engel in the collection of the Museum für Naturkunde Stuttgart [SMNS]. These specimens have pubescence on all antennal segments. Therefore this feature can not be used for the distinction of the genera.

4. Key to the species of *Paraphamartania* (only for females)

1 Face convex, more projecting ventrally than in the new species (Engel, 1930: Fig. 274); ocellar tubercle brownish tomentose with long setae (as long as the 3rd antennal segment); 1st microsegment of style shorter than the 2nd, with distinct sensillum; dorsocentral setae strong, reaching the humeral tubercles; bristles on mesoscutum present in large numbers; hair cover on mesoscutum as long as antennal segments 1+2; mesoscutum entirely tomentose (only a small shiny spot in front of scutellum); scutellum tomentose with 4 strong scutellar setae; legs black (only knees narrowly brown); wings clear, slightly brownish along the veins and at base and tip (by microtrichia); costa with yellow hair; tergites without constricted hind margins; tergites each with a lateral stripe of tomentum which may be continuous or form triangular spots which are wider posteriorly, at least tergites 3–5 each with two spots of tomentum at the anterior margin dorsolaterally ..... *syriaca* (Schiner, 1867)
- Face convex, only slightly projecting ventrally (Fig. 1a); ocellar tubercle without tomentum and with short setae (as long as antennal segments 1+2); 1st microsegment of style longer than the 2nd, with indistinct sensillum (Fig. 1d), postsutural dorsocentral bristles strong, presutural dorsocentral bristles weak, not reaching the humeral tubercles; other bristles weak; hair cover on mesoscutum as long as antennal segment 1; only anterior and lateral parts of pre- and mesoscutum with golden tomentum (Fig. 1c); scutellum shiny, without scutellar setae; legs reddish, only bases of femora, tips of tibiae and tarsal segments black; wings infuscated brown (by dense microtrichia), except for the apical part which is white infuscated (Fig. 1e); costa with black hair (yellow only at the base); tergites 2–5 with constricted hind margins (Fig. 1a); tergites only with triangular tomentose spots at their lateral hind corners (Fig. 1a) ..... ***stukei* spec. nov.**

5. Additional comments

The tribe Isopogonini includes 15 genera (with 106 species) with the following distribution (number of species in parentheses):

Neotropical region: *Cophura* Osten Sacken, 1887 (15); *Alvarenga* Carrera, 1960 (2); *Annamyia* Pritchard, 1941 (1); *Aphamartania* Schiner, 1866 (7); *Aspidopyga* Carrera, 1949 (1); *Theromyia* Williston, 1891 (3, 2 of them from the Chilean subregion). – Nearctic region: *Cophura* Osten Sacken, 1887 (38); *Comantella* Curran, 1923 (4); *Hodophylax* James, 1933 (4); *Omniablautus* Pritchard, 1935 (4); *Nicocles* Jaennicke, 1867 (15). – Palaearctic region: *Leptarthrus* Stephens, 1829 (3); *Paraphamartania* Engel, 1930 (2); *Theurgus* Richter, 1966 (2). – Australasien region: *Aterpogon* Hardy, 1930 (1); *Questopogon* Dakin & Fordham, 1922 (4). – Two fossil records are known from the Florissant shales (Oligocene): *Cophura antiquella* Cockerell, 1913 and *Nicocles miocenicus* Cockerell, 1909.

Only 7 of the 106 species are known from the Palaearctic region. *Leptarthrus* is restricted to Europe and Turkey and *Theurgus* to the Middle and East of Asia. *Paraphamartania syriaca* is known from Syria, Israel, Cyprus (Eastern Mediterranean) and Kazakhstan. The new species represents the first record of an Isopogonini from Spain. *Paraphamartania stukei* spec. nov. agrees in some characters with *Theurgus zimini* Richter, 1966. Both have no scutellar setae and the thorax is more convex in lateral view.

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