

## ***PSECTROSCIARA AMPULLACEA* SP.N.: A NEW SCATOPSID SPECIES FROM SPAIN (DIPTERA: SCATOPSIDAE)**

Miguel Carles-Tolrá

Avda. Príncipe de Asturias 30, ático 1; E-08012 Barcelona, Spain – mcarlestolra@terra.es

**Abstract:** A new species of Scatopsidae (*Psectrosciara ampullacea* sp.n.) is described from Spain.

**Key words:** Diptera, Scatopsidae, *Psectrosciara*, new species, Spain.

***Psectrosciara ampullacea* sp.n.: un nuevo escatópsido de España (Diptera, Scatopsidae).**

**Resumen:** Se describe una especie nueva de Scatopsidae (*Psectrosciara ampullacea* sp.n.) de España.

**Palabras clave:** Diptera, Scatopsidae, *Psectrosciara*, especie nueva, España.

**Taxonomy/Taxonomía:** *Psectrosciara ampullacea* sp.n.

### **Introduction**

*Psectrosciara* Kieffer in Enderlein (1911), is a scatopsid genus easily distinguishable by the following combination of characteristics: scutum normal, without an elevated ridge; apical spur of fore tibia absent; wing without false vein; posterior veins and membrane with macrosetae among microtrichia; base of vein  $M_1$  lacking; body strongly compressed laterally, elongated; and vein  $R_{4+5}$  reaching the costa in a smooth curve (Haenni, 1997).

This genus is known from many parts of the world, although it is very well represented in the Nearctic, Neotropical and Australian regions. Regarding the Palaearctic region, only 3 species have been recorded up to now: *P. brevistylis* Cook (1958) from Iran, *P. asklepios* Haenni (1990) from Greece and *P. dissita* Amorim & Haenni (1992) from East Siberia. Consequently, only one species was hitherto known from Europe.

Nothing is known about the biology and immature stages of these flies. Nevertheless, it seems they are related with arid and dry zones.

In 2005 the author received a lot of dipterological material for study. It had been collected in southern Spain, concretely in the Natural Park of Cabo de Gata-Níjar (Carles-Tolrá & Aguirre-Segura, 2007) in the province of Almería, an arid zone. Among that material a male specimen of Scatopsidae and a loose abdomen of the same species were found that were identified as *Psectrosciara* thanks to the key by Haenni (1997). The comparison with the descriptions of known Palaearctic species of this genus (Amorim & Haenni, 1992; Cook, 1958 and Haenni, 1990) allowed to check that they belong to a new species, which represents the second European species and the first record of this genus in the Iberian Peninsula.

According to Haenni & Báez (2002), 20 species belonging to 12 genera are known to occur in Spain. This new species increases such numbers to 21 and 13, respectively, and it is described below.

### ***Psectrosciara ampullacea* sp.n. (Figs 1-9)**

Head dark brown, elongated. Antennae with 10 segments, the two first flagellomeres very short, last flagellomere bullet-shaped. Eyes holoptic, lateral margin oblique.

Thorax compressed laterally, brown. Mesonotum with a median light brown stripe, pointed anteriorly and not reaching the anterior margin, mesonotum with very short dense hairs. Scutellum and metanotum light brown.

Wing (Fig. 3) with macrotrichia on all veins and on membrane posteriorly to vein  $R_{4+5}$ ; membrane covered with microtrichia; all veins brownish, posterior ones less so but clearly contrasting with wing membrane; base of vein  $M_1$  diffuse, almost lacking; vein  $CuA_1$  not reaching wing margin; costal ratio:  $C1/C2/C3 = 1/2/0.9$ .

Legs brown. Fore coxa long, almost as long as the femur. Fore tibia: distal half distinctly dilated. Mid and hind tibiae gradually dilated in all its length. Tibiae with very short ventroapical spines. Hind tarsi: 1st tarsomere larger than remaining tarsomeres.

Abdomen brown, cylindrical, long, distinctly overpassing the tip of the wings. Tergite 1 short, wider than long; tergite 2 divided in a small anterior sclerite and a larger posterior sclerite; tergites 3-5 rectangular, longer than wide; tergite 5 somewhat wider; tergite 6 quadrate; tergite 7 somewhat wider than long; tergite 8 short, projecting latero-posteriorly, with very long hairs and a pair of dorsolateral spiracles. Tergites 1-8 with an anterior slight emargination. Sternite 7 divided in two large triangular sclerites.

Genitalia (Figs 4-9). Epandrium bottle-shaped, with a preapical strangulation, fused but somewhat articulated with tergite 8. Gonocoxites well developed, long, with long ventral hairs; gonostyles very long and narrow, pointed, curved upwards and inwards, with long posterior hairs. Tergite 8 and gonocoxites fused, forming an almost complete tubular structure. Parameres (Fig. 6) very narrow, apex hook-shaped, inwardly curved, without hairs.

Total body length (holotype): 3.4 mm. Wing: 2.05 mm.

Abdomen (loose): 2.3 mm.

FEMALE unknown.

MATERIAL EXAMINED: Holotype male: Spain: Almería, Cabo de Gata, Rambla del Corralete (36°43'49"N, 02°11'23"W), 21.5.2004, pitfall among dry river vegetation, including *Thymus vulgaris* L., *Chamaerops humilis* L., *Lavandula* spp. and *Cistus* spp., - A. Aguirre leg.

Other material (not paratype) (male abdomen only): as the holotype but 10.6.2004. All material preserved in alcohol (70°) and deposited in the author's private collection.

DISCUSSION: *Psectrosiara ampullacea* sp.n. is closely related to *P. asklepios*. In *P. asklepios* the epandrium is not bottle-shaped, the lateral margins are parallel, the apex has a ventral projection and the gonostyles are clearly dilated distally (cf. Fig. 2 and 3 in Haenni, 1990). So, both species can be very easily separated by their genitalia.

BIOLOGY: unknown. The specimens were collected in an arid and dry zone with pitfall placed among dry river vegetation including *Thymus vulgaris* L., *Chamaerops humilis* L., *Lavandula* spp. and *Cistus* spp.

DISTRIBUTION: hitherto only known from southern Spain.

ETYMOLOGY: the specific name *ampullacea* comes from Latin (*ampulla* = bottle) and refers to the bottle-shaped epandrium.

### Acknowledgements

My most sincere thanks to Dr. Antonio Aguirre (University of Almería) for the shipment of this very interesting material. Thank you also very much to Jean-Paul Haenni (Neuchatel) for the corroboration of the new species, the shipment of papers on scatopsids and the review of this paper. Finally, my most gratitude to Jane Pérez (Barcelona) and Joana Danés (Barcelona) for their help in English and Latin, respectively.

### References

- AMORIM, D. DE SOUZA & J.-P. HAENNI 1992. A new species of *Psectrosiara* Kieffer from East Siberia belonging to the *scatopsiformis*-group of species (Diptera, Scatopsidae). *Mitt. Schweizer. Entomol. Gesell.*, 65: 363-367.
- CARLES-TOLRÁ, M. & A. AGUIRRE-SEGURA 2007. Algunos dípteros capturados en el Parque Natural Cabo de Gata-Níjar (España, Almería) (Insecta, Diptera). *Boln. S.E.A.*, 41: 197-202.
- COOK, E.F. 1958. A contribution toward a monograph of the Scatopsidae (Diptera). Part VII. The genus *Psectrosiara* Kieffer. *Ann. ent. Soc. Am.*, 51: 587-595.
- HAENNI, J.-P. 1990. First European record of *Psectrosiara* Kieffer, with description of a new species from Greece (Diptera, Scatopsidae). *Mitt. Schweizer. Entomol. Gesell.*, 63: 255-257.
- HAENNI, J.-P. 1997. 2.12. Family Scatopsidae: 255-272. In Papp, L. and Darvas, B. (ed.): *Contributions to a Manual of Palaearctic Diptera (with special reference to flies of economic importance. Volume 2. Nematocera and Lower Brachycera*. Science Herald, Budapest. 592 pp.
- HAENNI, J.-P. & M. BÁEZ 2002. Scatopsidae: 70-71. In Carles-Tolrá Hjorth-Andersen, M. (coord.): *Catálogo de los Diptera de España, Portugal y Andorra (Insecta)*. Monografías S.E.A., 8: 323 pp.

► **Fig. 1-9.** *Psectrosiara ampullacea* sp.n. **1.** habitus in lateral view; **2.** habitus in dorsal view; **3.** wing; **4.** male genitalia in lateral view; **5.** male genitalia in dorsal view; **6.** male genitalia in ventral view; **7.** male genitalia in dorsolateral view, gonostylus in broadest view; **8.** male genitalia in lateral view (setae omitted); **9.** male genitalia in dorsal view (setae omitted). Abbreviations: ep = epandrium, gcx = gonocoxite, gst = gonostyle, S = sternite, T = tergite. Scale bars: Figs 1-3 = 1 mm, Figs 4-9 = 0.2 mm.

