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## ***Sciasminettia* Shewell, 1971: a new lauxaniid genus for Europe, with description of a new species and a key to known species (Diptera: Lauxaniidae)**

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### **Abstract**

A new species of *Sciasminettia* Shewell, named *S. europaea* sp. n., is described. Furthermore, this genus is recorded from Europe for the first time and a key to the three known species is given.

**Key words:** Diptera, Lauxaniidae, *Sciasminettia*, new species, key, Europe.

### **Resumen**

***Sciasminettia* Shewell, 1971: un género nuevo de lauxánido para Europa, con la descripción de una especie nueva y una clave de las especies conocidas (Diptera, Lauxaniidae)**

Se describe una especie nueva de *Sciasminettia* Shewell, a saber *S. europaea* sp. n. Además, este género se cita por primera vez de Europa y se da una clave de las tres especies conocidas.

**Palabras clave:** Diptera, Lauxaniidae, *Sciasminettia*, especie nueva, clave, Europa.

### **Laburpena**

***Sciasminettia* Shewell, 1971: lauxanidoen genero berri bat Europarako, espezie berri baten deskribapenarekin eta espezie ezagunen klabearekin (Diptera, Lauxaniidae)**

*Sciasminettia* Shewell generoko espezie berri bat deskribatzen da, *S. europaea* sp. n. hain zuzen. Halaber, generoa lehenengo aldiz aipatzen da Europarako eta ezaguturiko hiru espezieentzako klabea ematen da.

**Gako-hitzak:** Diptera, Lauxaniidae, *Sciasminettia*, espezie berria, klabea, Europa.

## **Introduction**

*Sciasminettia* Shewell (1971) is a lauxaniid genus known only from the Palaearctic Region. It is a small genus as it contains, up to now, only two species: *S. dichaeophora* (Hendel), described in 1907, and *S. similis* Shatalkin, described recently, in 2000. Both species are known from the Asian part of the Palaearctic Region. *S. dichaeophora* (Hendel, 1907) is known from

Georgia, Mongolia, Amur region, Korea and the Russian Far East (Papp, 1984, 1998; Shatalkin, 2000), whereas *S. similis* Shatalkin, 2000 is known from the Khabarovsk region, mountain range Malyj Khingan, river Dichun; Amur district, Zeya, and Primorye region, Ussuri area, Kamenushka (Shatalkin, 2000). Therefore, this genus is now recorded for the first time in Europe. This is an incredible and unexpected finding taking into account that the family Lauxa-



FIGURE 1. *Sciasminettia europaea* sp. n.: habitus (♀) (Scale bar = 1 mm).

niidae has been very studied for a long time in this political region.

*Sciasminettia* can be easily distinguished from other lauxaniid genera by characters of the head and the wing (Fig. 1). Head characteristically shaped: well flatten, especially in upper frontal area; fronto-facial angle obtuse: more than 160°; fronto-occipital angle very acute; lower part of the head with well-developed genae, which expand beneath and have two strong setae on both sides of the mouth (in vibrissal angle). Wing with unmistakable net-like pattern. Body with numerous dull-brown spots at bases of setae.

## Material and methods

During the study of dipterological material collected in the «Parque Natural de Aiako Harria», in the province of Gipuzkoa (northern Spain) (Carles-Tolrá *et al.*, 2003, 2006) some specimens belonging to this interesting genus were found. This material, thus, forms part of the study of the entomofauna of the Aiako Harria Nature Reserve.

## Results

*Sciasminettia europaea* sp. n. (Figs. 1, 2 and 3a)

### Type material:

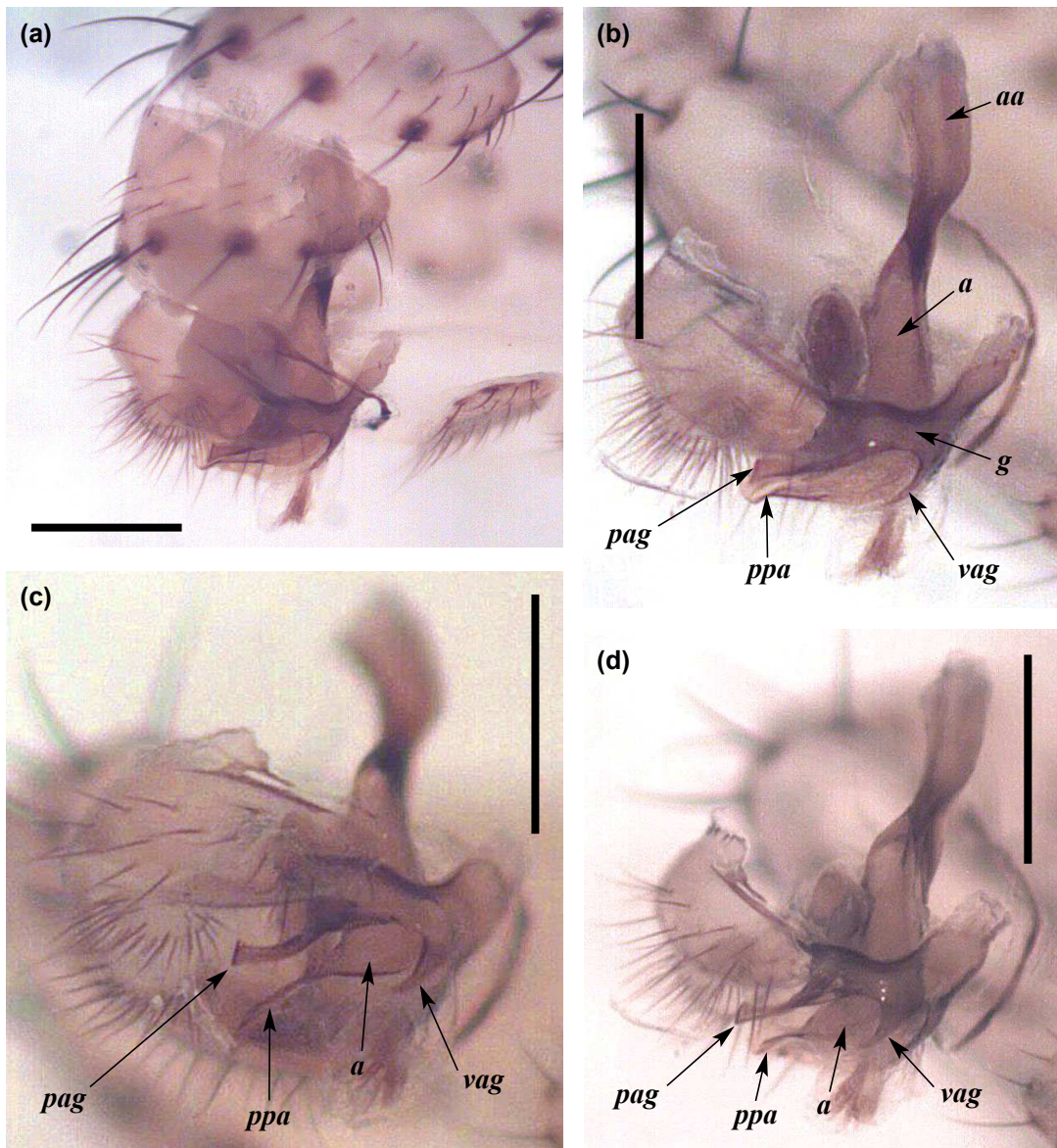
Holotype ♂ : Spain, Gipuzkoa: Aiendola (Oiartzun) (UTM TWN9592), 12.5.2003 1 ♂ (100 m), I. Zabalegui *leg.*

Paratypes: Spain, Gipuzkoa: Añarbeigoikoa (Errenteria) (UTM 30TWN9187), 22.3.2003 1 ♀ (dam, oak wood, on Juncaceae, 180 m), F. Calvo *leg.*; Santiagomendi (Astigarraga) (UTM 30TWN8691), 14.3.2006 1 ♀ (270 m), I. Zabalegui *leg.*; Ugaldetxo (Hernani) (UTM 30TWN8786), 30.7.2003 2 ♀♀ (60 m), I. Zabalegui *leg.*

Type material deposited in alcohol in the author's collection.

### Description:

Male. Head yellow. Frons 2.1 times as wide as long, with a median dull brown stripe between antennae and ocellar triangle; dull brown spots also at bases of ors and vte. Median part of face with shelving lon-

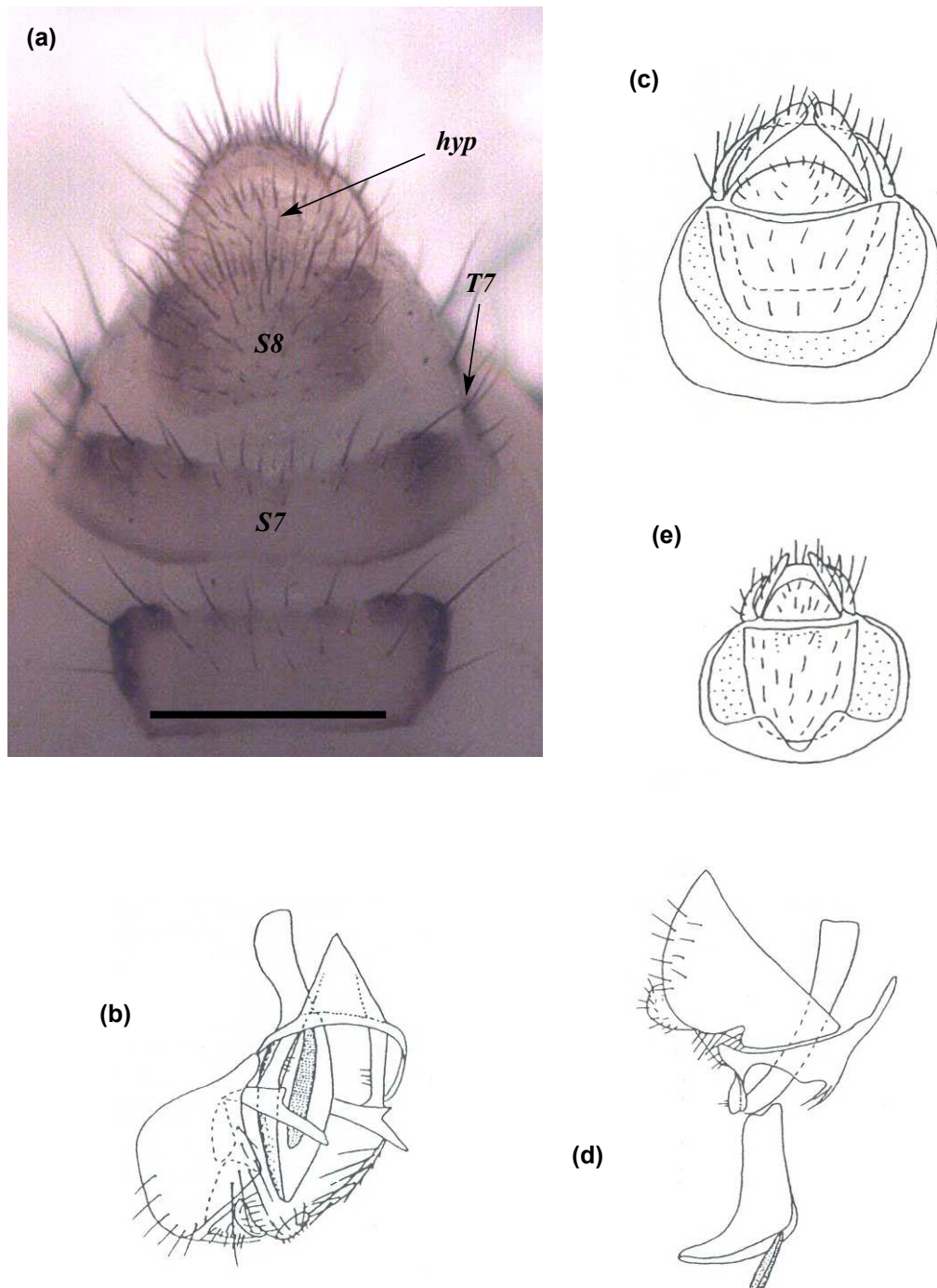


**FIGURE 2.** *Sciasminettia europaea* sp. n.: (a) male postabdomen in lateral view; (b) male genitalia (extracted) in lateral view; (c) male genitalia (extracted) in ventro-lateral view; (d) male genitalia (extracted) in anteroventro-lateral view (Scale bars = 0.3 mm). Abbreviations: a = aedeagus; aa = aedeagal apodeme; g = gonopod; pag = posterior arm of gonopod; ppa = posterior projection of aedeagus; vag = ventral arm of gonopod.

gitudinal wall. Face with three dull-brown stripes: one of them located along the longitudinal wall and proved to be seemingly a continuation to the frontal stripe; the other two stripes located laterally from the first. Wide dark dull-brown stripe, with two long

setae, between eye and mouth. Eye 3.5 times as high as gena. Antennae widely based, yellow, third segment 1.9 times as long as wide. Arista dull-brown and with hairs, which are shorter than half-width of third antennal segment. Palpus yellow, apically black.





**FIGURE 3.** (a) *Sciasminettia europaea* sp. n.: female postabdomen in ventral view (Scale bar = 0.3 mm); (b)-(c) *Sciasminettia dichaeophora* (Hendel): (b) male genitalia; (c) female postabdomen; (d)-(e) *Sciasminettia similis* Shatalkin: (d) male genitalia; (e) female postabdomen. All drawings after Shatalkin (2000). Abbreviations: hyp = hypoproct; S7 and S8 = sternites 7 and 8, respectively; T7 = tergite 7.

Thorax yellow. Mesonotum with several dull-brown spots and incomplete brownish stripes on each side of each dorsocentral row. Anepisternum pilose posteriorly. Spot on meron absent. Scutellum yellow, with spots at bases of setae and with a pair of dark dull-brown medially fused stripes. Chaetotaxy: 1 h, 1 posth, 2 np, 1 sa, 2 pa, 1+2 ia (posterior one longer), 1+3 dc, 5-6 pairs of long ac (including prescutellars), ac slightly shorter than dc, in two rows, small alternate ac also present, 1 prepst, 1 anepst, 2 kepst. Legs yellow, fore and hind femora with dull-brown preapical dorsal spots and with spots around preapical tibial setae. Mid tibia with one spur. Hind tibia with preapical seta and with 2 ventral spots (1 in the middle and 1 basal). Hind trochanter with a dull-brown spot. Hind coxa with a small brown anterolateral tubercle.

Wing (Fig. 1) entirely with many dull-brown spots. Last segment of vein M 1.3 times as long as the anterior one, which is also slightly longer than the foregoing one. Haltere brownish-yellowish.

Abdomen yellow with brownish spots at bases of bigger setae. Tergite 2 brownish medially. Sternites brownish laterally.

Genitalia (Fig. 2): epandrium small, yellow. Gonopod: ventral arm small, spine-like, posterior arm well developed, long, twisted, bottle-like (in ventral view), backward directed. Aedeagus concave, with a posterior projection; aedeagal apodeme short.

Female as for male. Postabdomen (Fig. 3a). Tergite 7 and sternite 7 fused. Sternite 8 rectangular, wider than long, pilose, brownish laterally, inner lining of copulatory chamber not studied. Hypoproct semi-circular, pilose. Cercus short, pilose, with 2 sinuate, longer hairs.

Body length 3.4–4.0 mm; wing length 3.6–4.0 mm.

**Discussion:** *Sciasminettia europaea* sp. n. is very easily distinguishable from the other 2 species by morphological and genital characters in both sexes.

**Biology:** unknown.

**Etimology:** the specific name refers to the continent where the specimens of the new species were collected.

**Distribution:** hitherto only known from northern Spain.

### Key to species of *Sciasminettia* Shewell

- (1a) Face yellow, lacking dull brown stripes or only with hint of them; meron with a black spot. Male: aedeagus boat-like (Fig. 3b). Female: sternite 7 posteriorly without incision (Fig. 3c) . . . . . *dichaetophora* (Hendel)
- (1b) Face with three dull brown stripes; meron yellow, without spot or it is diffuse and more grey than black. Male: aedeagus with a posterior projection . . . . . 2
- (2a) Meron: spot diffuse and more grey than black. Male: gonopod: posterior arm short and downward directed; aedeagal apodeme long (Fig. 3d). Female: sternite 7 with a posterior median incision; sternite 8 subquadrate (Fig. 3e) . . . . . *similis* Shatalkin
- (2b) Meron yellow, without spot. Male: gonopod: posterior arm long and backward directed; aedeagal apodeme short (Figs. 2a-d). Female: sternite 7 without a posterior median incision; sternite 8 wider than long (Fig. 3a) . . . . . *europaea* sp. n.

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