

## Description of the male of *Euthycera seguyi* Vala, 1990 (Diptera, Sciomyzidae)

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**Key words:** Allotype male, diptera, distribution, *Euthycera seguyi*, Sciomyzidae.

**Abstract.** The male of *Euthycera seguyi* Vala, 1990 (Diptera, Sciomyzidae) is described and illustrated for the first time. The distribution of this species, limited originally to the type-locality in France is extended to Spain. A key of west-palaearctic species of *Euthycera* is established.

**Resumen.** Descripción del macho de *Euthycera seguyi* Vala, 1990 (Diptera Sciomyzidae). Se captura y describe por primera vez el macho de *Euthycera seguyi* Vala. La distribución de dicha especie se amplía a España. Por último, se da una clave de las especies paleártico-occidentales de *Euthycera*.

### Introduction

In 1990, Vala described a new species of Sciomyzidae, *Euthycera seguyi*, from a single female collected in France at Le Vernet near Perpignan (Pyrénées Orientales) in 1904. The female holotype was discovered in the Diptera collection of the INRA Versailles. A few months later, the first author received a male specimen of *Euthycera* collected by Mr. Garanto in north-eastern Spain. After a detailed study we came to the conclusion that it belongs to *Euthycera seguyi*. In fact, it shows all of the most distinctive characters of the species, a typical general pattern and the absence of acrostichal presutural and prescutellar bristles in particular.

We present the description of the male of *Euthycera seguyi* and illustrate the male genitalia for the first time. The examined specimen is here designated as the allotype of the species under study.

*Euthycera seguyi* Vala. Male (Figures 1-8)

Head. Face concave, with a whitish pruinosity, without any darkening in middle. Large lunula, shiny grey-brown, strongly exposed, with depression

in middle, and protuberant between antennae. Mid-frontal stripe brown, subshining, large, and concave mid-frontal stripe, almost reaching anterior margin of frons. Orbito-antennal spot between lunula and eye margin pale brown, not very visible. On each orbital plate, 2 pairs of fronto-orbital bristles, bases of bristles are linked together by a long velvety brown orbital spot. Each orbital spot edged on anterior (ocular side) and posterior half (ocellar triangular side) with silvery pruinosity. Orbital plates mat yellow, with a few fine and short hairs on anterior margin. Convex ocellar triangle with 2 strong ocellar bristles. 1 pair of inner and outer verticals. Very strong postocellar bristles. Cheeks with a few fine black hairs extending along lateral margin of face. Some stronger and longer hairs on occiput. Antennae brownish; first segment minute, yellow-brown, with a row of bristles on anterior margin; second segment subshining, with many short bristles, particularly on anterior margin; third segment subequal to second segment, mat, yellowish around base of arista. Arista with brown basal segments, rest of arista with short and white plumosity.

Thorax. Greyish, with 4 distinct longitudinal dark stripes on mesonotum: 2 continuous linear submedian, 2 lateral ones cut by the transverse suture. On each side of mesonotum, chaetotaxy consisting of 1 humeral, 2 notopleural, 1 supraalar, 2 postalar and 2 dorsocentral bristles. Scutellum with a large brown longitudinal stripe and 2 pairs of scutellar bristles.

Legs. Pale yellow except for 1/5 apical part of fore tibia and the 3 last fore tarsal segments being black. Tarsal segments of other legs more or less whitish, nevertheless 2-3 first segments darkened by dense short hairs. Fore femur with 5 strong anterodorsal bristles and another 1 in middle of upper posterior side. Middle femur with 1 strong anterior bristle in middle. Hind femur with 2 ventrolateral rows of strong bristles. Preapical bristles well developed on all tibiae.

Abdomen. Yellowish brown, strongly marked with whitish pruinosity; dorsal side distinctly darker; longitudinal brown mark present on each abdominal segment. Perianthrium brownish.

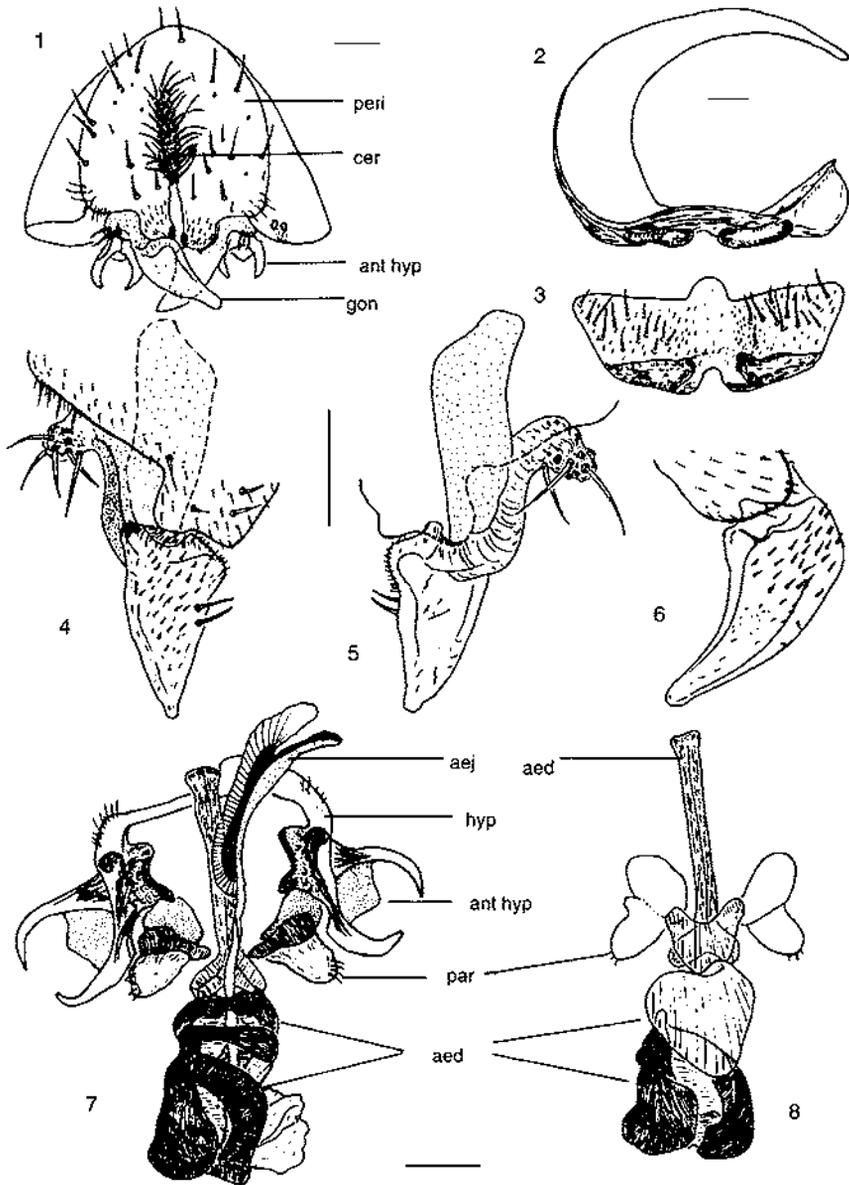
Male genitalia (Figs. 1-8): systernite (Fig. 2) and sternite V (Fig. 3) equipped with large sclerotized parts; gonostylus (= posterior surstylus) with solid base and convex external edge (Figs. 1, 4, 5, 6). Anterior cornua of hypandrium in shape of a claw with very outspread halves (Fig. 7) and with large sclerotized plate between them.

Body length 6.6 mm, wing length 5 mm.

#### *Material examined*

Allotype male: Spain, Tarragona, Aiguamúrcia, 13-20.XI.1988 (Garanto leg.), collected with a vinegar trap. Additional female: Spain, Barcelona, Begas, 28.IX.1982 (Carles-Tolrà leg.), collected on grass in a burned pinewood.

All material is deposited in the private collection of Dr. Carles-Tolrà.



Figures 1-8. *Euthycera seguyi* allotype male. 1, perianthrium in caudal view. 2, synsternite 6-7. 3, sternite V. 4, gonostylus in caudal view. 5, *ibid.* in anterior view. 6, *ibid.* in lateral view. 7, aedeagal complex, ejaculatory apodeme and hypandrium in anterior view. 8, aedeagal complex in posterior view. aed= aedeagus; aej= ejaculatory canal apodeme; ant hyp= anterior arm of hypandrium; cer= cercus; gon= gonostylus; hyp= hypandrium; par= paramere (= postgonite); peri= perianthrium. Scales equal to 0.2 mm.

## Discussion

Regarding Vala's description of *Euthycera seguyi* female (1990), we found only a few external morphological differences between both sexes: the right anterior dorsocentral bristle is present, no hairs on the prosternum are distinct and the orbito-antennal spot is barely visible in the male. As regard the male postabdomen, the particular morphology of synsternite 6-7 (sternum 6), hypandrium and aedeagal complex are clearly different from those of the other *Euthycera* species. Among 17 species of the genus *Euthycera*, *Euthycera seguyi* is the ninth species recorded in Spain: Rozkosny (1987), Vala (1989) and Carles-Tolrà (1990). The previously cited species are *E. alaris* Vala, 1983, *E. chaerophylli* (Fabricius, 1798), *E. cribrata* (Rondani, 1868), *E. fumigata* (Scopoli, 1763), *E. stichospila* (Czerny, 1909), *E. stictica* (Fabricius, 1805), *E. vockerothi* Rozkosny, 1988 —described exclusively from Spain—, and *E. zelleri* (Loew, 1847). In addition to these species, we can cite *E. guanchica* (Frey, 1936), endemic species of Canary Islands.

The species is recently known in the west-mediterranean area with 1 site in south-western France and 2 sites in north-eastern Spain (Fig. 9). Geographically all these sites are situated in the same Catalanian area.

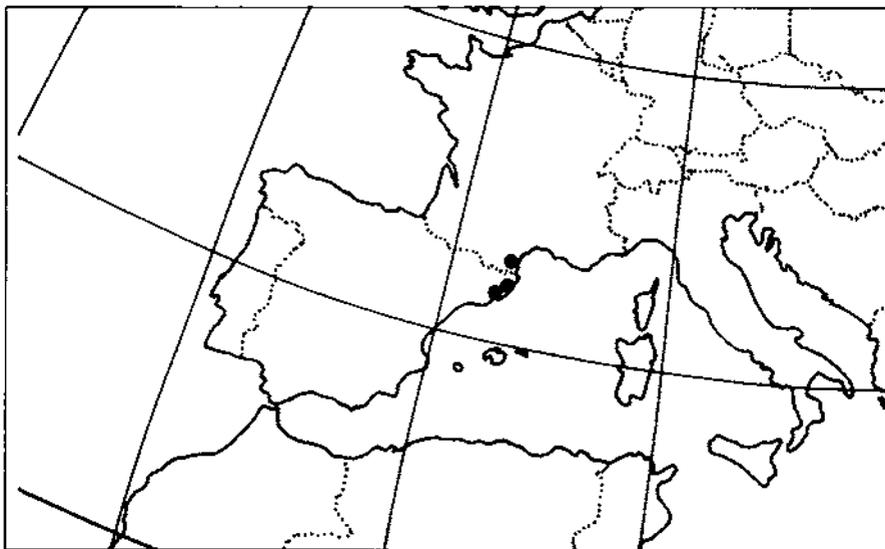


Figure 9. *Euthycera seguyi*, distribution map.

## Key to the west-mediterranean species of Euthycera

- |  |                                 |   |
|--|---------------------------------|---|
| 1. Arista long black plumose, yellowish species .....  | <i>chaerophylli</i> (Fabricius) |   |
| – Arista short white haired .....  |                                 | 2 |
| 2. Face with a black spot in the middle .....  |                                 | 3 |
| – Face without black spot .....  |                                 | 4 |
| 3. Mesonotum without acrostichal presutural bristles, femora<br>bicolorous, dark brown with a broad yellow ring in apical half<br>at least on middle and hind femora ..... | <i>vockerothi</i> Rozkosny      |   |
| – Mesonotum with complete chaetotaxy, femora unicolorous .....   | <i>stictica</i> (Fabricius)     |   |
| 4. Mid-frontal stripe flat and mat, antenna dark brown to black .....  | <i>cribrata</i> (Rondani)       |   |
| – Mid-frontal stripe concave and shining .....   |                                 | 5 |
| 5. Anterior wing margin mainly dark brown without pale spots,<br>legs yellow .....   | <i>fumigata</i> (Scopoli)       |   |
| – Anterior wing margin with pale spots .....   |                                 | 6 |
| 6. Mesonotum without presutural and acrostichal presutural<br>bristles .....   | <i>seguyi</i> Vala              |   |
| – Mesonotum with complete chaetotaxy .....   |                                 | 7 |
| 7. Wings with pale spots concentrated into distinct groups .....   | <i>alaris</i> Vala              |   |
| – Wings with pale spots not concentrated into groups .....   |                                 | 8 |
| 8. Body dark brown, central area of wings around anterior<br>cross-vein not distinctly paler .....   | <i>stichospila</i> (Czerny)     |   |
| – Body yellow-brown, central area of wings around anterior<br>cross-vein distinctly paler .....  | <i>zelleri</i> (Loew)           |   |

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