

## A new *Hesperocorixa* and notes on *Parasigara* from Portugal (Het., Corixidae)

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**ABSTRACT.** — *Hesperocorixa luteola* n. sp. from Portugal is described, including the V instar larva. Notes on the identification of *Parasigara* larvae and females are added.

During a trip in spring 1976 an undescribed Corixid was collected in the marshes near Aveiro, Portugal. A description of this species is given here. A complete account of the findings in Portugal during trips in 1971 and 1976 is in preparation.

*Hesperocorixa luteola* n.sp.

Length ♂  $5.8 \pm 0.4$ , ♀  $6.0 \pm 0.3$ ; width of head ♂  $1.7 \pm 0.2$ , ♀  $1.8 \pm 0.1$  (measurements in mm, based on 10 randomly selected specimens, if available, and presented as 0.95 tolerance intervals for 0.95 of the population, assuming a normal distribution).

Colour light brown, pronotum with 5-6 quite regular transverse yellowish lines (usually 6 of which the 3rd and 4th are confluent laterally), hemielytra with broken, rather broad and distinctly contrasting yellowish lines which are confluent in the inner basal angle of clavus, forming a light spot which is accentuated by the underlying dorsum being light too. Eyes brownish red, ventér and legs yellowish, dorsum yellowish except for lateral and posterior parts of mesonotum, median part of metanotum and first tergite, dark brown; the remainder of dorsum may be infuscated.

Ocular index ♂  $1.0 \pm 0.1$ , ♀  $1.1 \pm 0.2$ ; frons with a few whitish bristles which border the area of the frontal fovea which is shallow and indistinct in males and not depressed in females. Vertex slightly produced, notably in males.

Pronotum twice as broad as long, lateral edges rounded. Pronotum, clavus and corium distinctly and finely rastrate; margin of embolium concave halfway the nodal furrow; pruinose area apically of nodal furrow about one third the length of basal part; pruinose area along claval suture short, less than a quarter of basal embolar pruinose area and slightly less than the width of synthlipsis. Mesoepimeron at level of the scent gland osteole broader than the lateral lobe of the prothorax. Metaxiphus sharply pointed, longer than broad.

Middle legs with claws longer (about 1.1) than tarsus. Hind femur dorsally with about 15, ventrally with about 13 spines (marginals not counted, fig. 1, 2).

Male. — Pala (fig. 3) parallel-sided, with about 23 stridular pegs, 30 pegs in inner palmar row, 28 long bristles in lower row and only three long hairs in upper row, a row of small spines near upper margin. Tergite VII (fig. 4) with a little pronounced submedian lobe provided with bristles; strigil consisting of four regular rows of 90-100 teeth. Left paramere (fig. 5) right paramere (fig. 6) showing some resemblance to that of *H. sahlbergi* (Fieber) but the general appearance of *H. luteola* and *H. sahlbergi* is quite different.

Larva. — Fig. 7, the central dark band on abdomen is accentuated by gut contents. Length LA (see Cobben & Moller Pillot 1960)  $4.4 \pm 0.6$ ; greatest width of abdomen (B)  $2.3 \pm 0.3$ ; median length of pterothorax  $1.1 \pm 0.2$ ; width of head  $2.0 \pm 0.2$ . Long hairs covering the entire hind margin of mesonotum, metanotum medially longer than mesonotum. Scent gland openings quite large, the middle pair ( $\varnothing$  about 0.03 mm) twice as far apart as the diameter of a single opening. Claws and tarsi of middle legs of subequal length, hind femur dorsally with 13-15, ventrally with 8-10 spines; hind tibia dorsally with 4 spines.

The localities where the specimens have been collected are as follows:

N7633. Portugal, marsh 12 km S. of Aveiro, 20.IV.1976.

N7634. Portugal, marsh between São João de Loure and Angeja, 21.IV.1976.

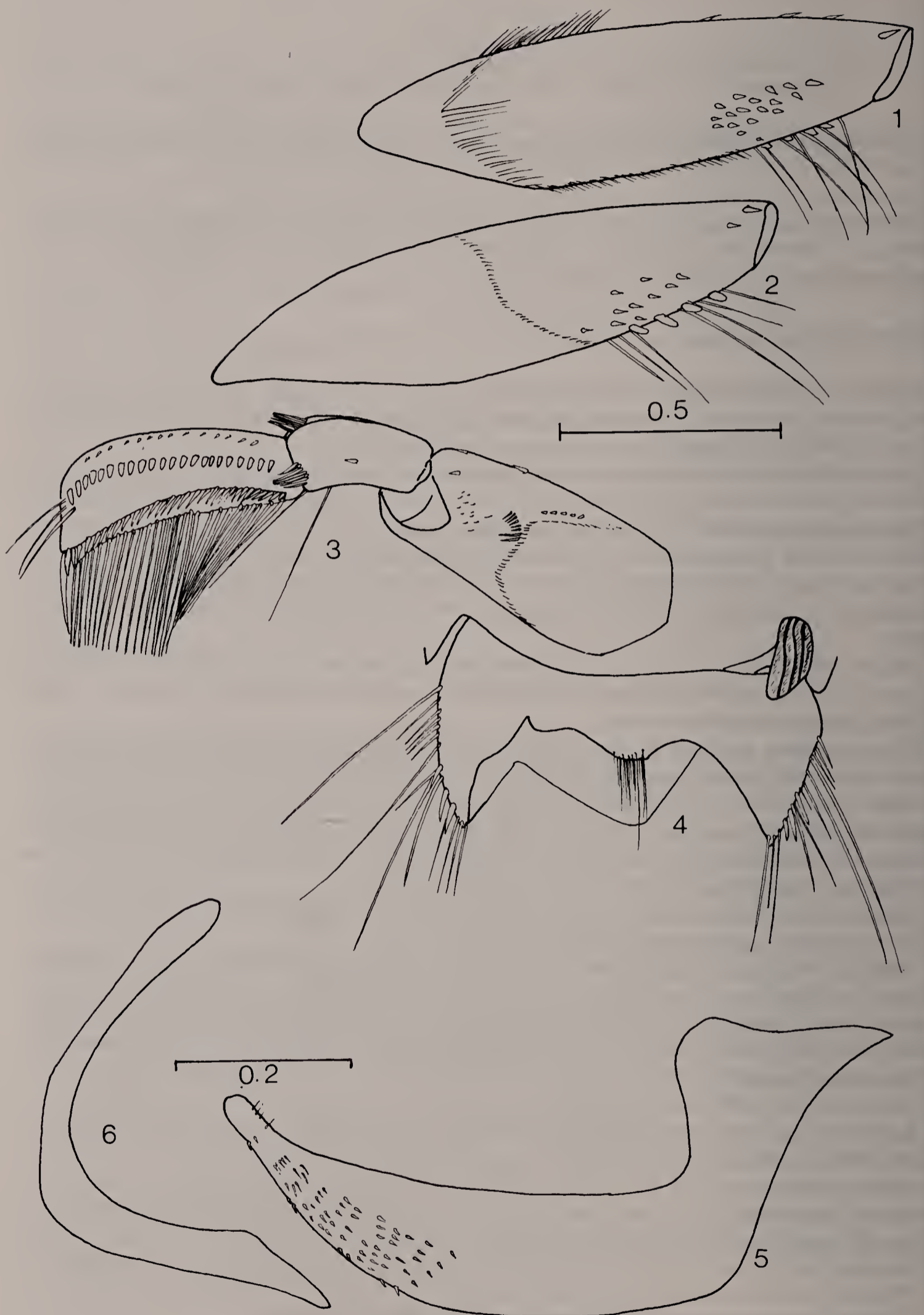


Fig. 1-6, *Hesperocorixa luteola* n.sp.: 1-2, hind femur of adult, 1 dorsal, 2 ventral view; 3, ♂ fore leg; 4, ♂ tergite VII; 5, left paramere; 6, right paramere, scales in mm.

N7635. Ditches along fields and pastures near N7634, 21.IV.1976.

Specimens studied: N7634, holotype ♂, allotype ♀, 3 paratypes ♀, 1 paratype lv (lv = larva) V, 1 paratype lv IV, Rijksmuseum van Natuurlijke Historie (Leiden); further paratypes: N7633, 6 lv V Nieser Collection (Utrecht); same, 1 lv V, Zoological Institute (Leningrad); N7634, 1 ♂, 1 ♀ Zoological Museum (Copenhagen); same, 3 ♂, 3 ♀ Nieser Collection; same, 1 ♂, 3 ♀ British Museum of Natural History (London); same, 1 ♂, 3 ♀, 3 lv V C. Dunn, Academy of Natural Sciences of Philadelphia.

Etymology: *luteola* refers to the, for a *Hesperocorixa*, light general colour of the species.

Comparative notes. General facies more like a *Sigara* but pala, metaxiphus, strigil and parameres in adults and the hairs on mesothorax in larvae fit better with *Hesperocorixa*. *H. algirica* (Puton) which has also a light colour, has, in males, a relatively longer and narrower pala and right paramere broader at apex. The larva has a size between those of *H. moesta* (Fieber) (LA about 3.4) and *H. linnei* (Fieber) (LA about 5.5) the abdominal pattern of the larva is more contrasting than usual in European *Hesperocorixa*, though far less so than in larvae of *Parasigara* which are similar in structure and not much larger.

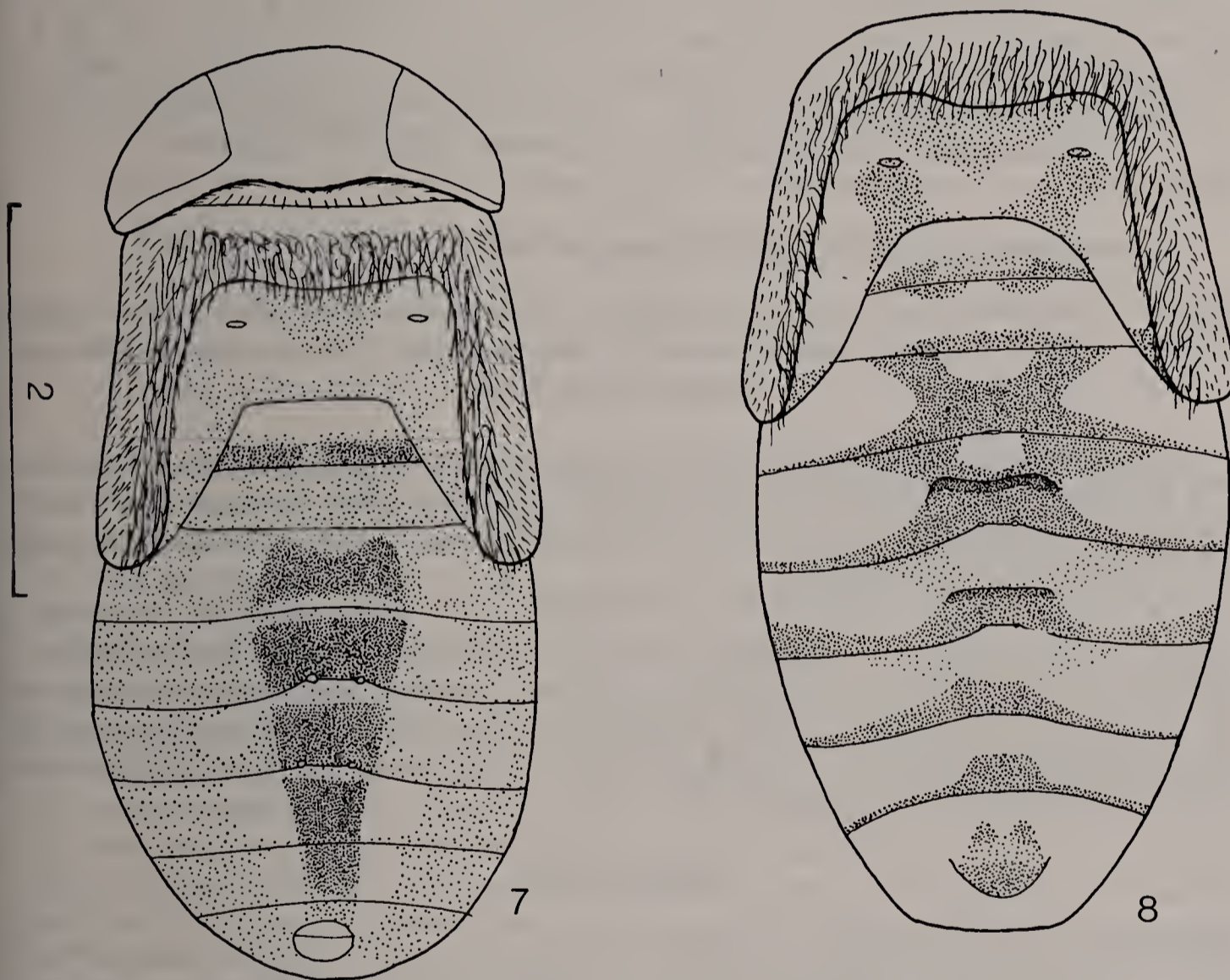


Fig. 7-8, larva V dorsal view: 7, *Hesperocorixa luteola*; 8, *Parasigara transversa gauthieri*, pterothorax and abdomen, scale in mm.

*Parasigara transversa gauthieri* Poisson larva V, fig. 8.

Description. — Dark pattern strongly contrasting. Length LA  $4.6 \pm 0.5$ ; greatest width of abdomen  $2.3 \pm 0.3$ ; median length of pterothorax  $1.1 \pm 0.2$ ; width of head  $2.1 \pm 0.3$ . Long hairs covering the hind margin of mesonotum, metanotum medially longer than mesonotum. Scent gland openings rather narrow ( $\varnothing$  of middle pair about 0.025 mm) thrice as far apart as the diameter of a single opening, scent glands dark reddish. Claws and tarsi of middle legs of subequal length; hind tibia dorsally with 4 spines.

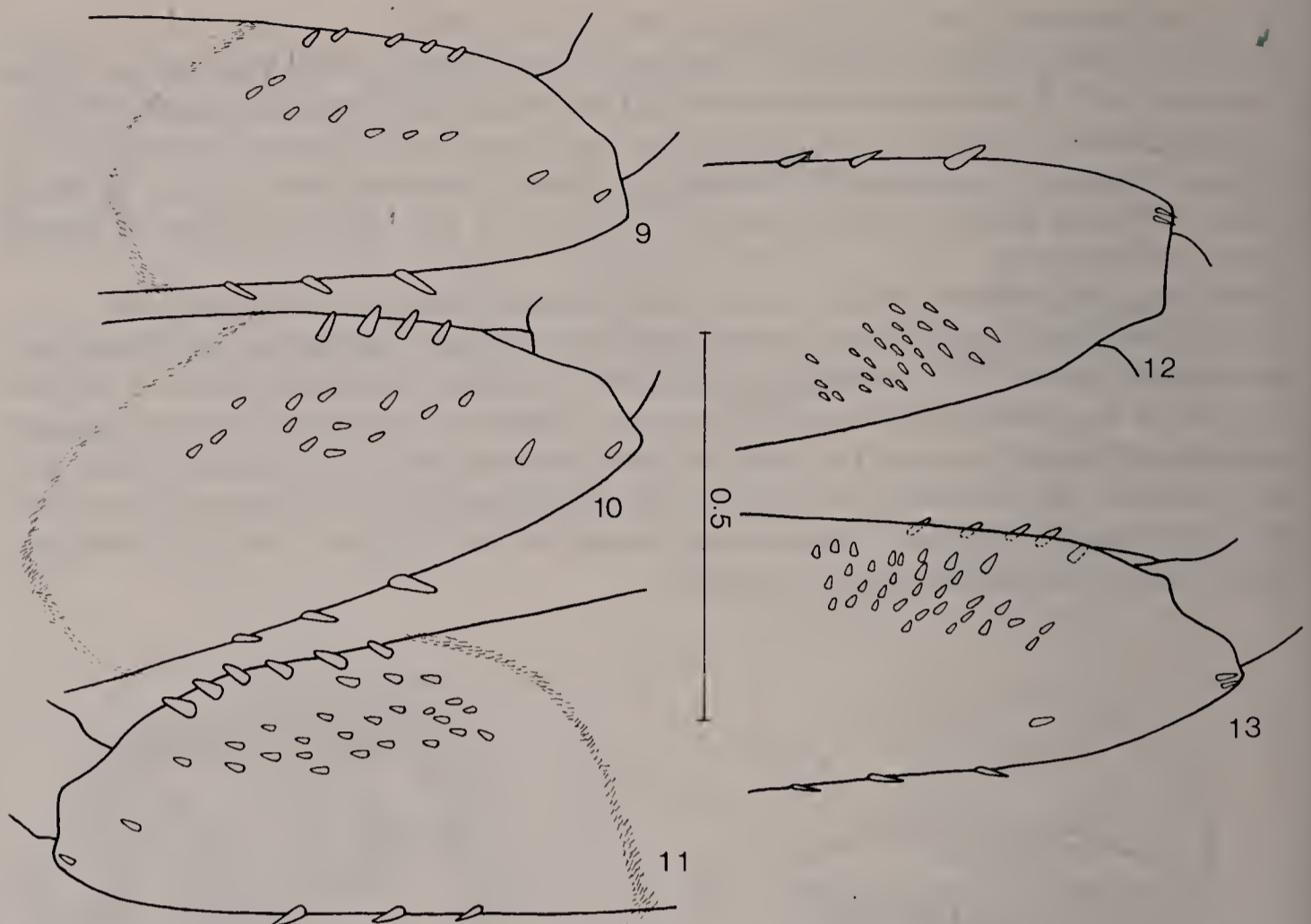


Fig. 9-13, *Parasigara* adults, apices of hind femur: 9, *P. infuscata* ventral; 10, *P. transversa transversa* ventral; 11, *P. transversa gauthieri* ventral; *P. infuscata* dorsal; 13, *P. transversa gauthieri* dorsal view, scale in mm.

Comparative notes. Abdominal pattern strongly contrasting, differing from the pattern found in W. European *Hesperocorixa* although it reminds the pattern of the N. American *Hesperocorixa atopodonta* (Hungerford). Most characters as in *Hesperocorixa*, the relatively narrow scent gland openings are perhaps an exception.

The ventral spines on the hind femur in *Parasigara* seem to give possibilities to separate at least the females of the taxa of *Parasigara* occurring in Portugal. *P. infuscata* (Rey) adults have 8-13 (fig. 9), a larva studied had 11 ventral spines. *P. transversa transversa* (Fieber) has usually 14-16 (fig. 10); one ♂, however, had 22; a larva studied had 14 ventral spines. *P. transversa gauthieri* adults have 20-27 (fig. 11) ventral spines, the larvae studied, however, only 13-16. So specific identification of larvae still offers problems.

#### LITERATURE

- Cobben, R. H., and Moller Pillot, H., 1960. The larvae of Corixidae and an attempt to key the last larval instar of the Dutch species. — *Hydrobiologia* 16: 323-356.  
 Nieser, N. Faunistical notes on aquatic Heteroptera VI (in preparation).  
 Poisson, R. A., 1957. Hétéroptères aquatiques. — *Faune de France* 61: 1-263, ill.

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