BEAUFORTIA

INSTITUTE OF TAXONOMIC ZOOLOGY (ZOOLOGICAL MUSEUM) UNIVERSITY OF AMSTERDAM

Vol. 41, no. 23

October 22, 1990

A NEW ORCHESTIA FROM GRAN CANARIA: O. STOCKI N. SP. (CRUSTACEA, AMPHIPODA, TALITRIDAE) STUDIES ON CRUSTACEA AMPHIPODA, 116

SANDRO RUFFO

Museo Civico di Storia Naturale, Lungadige Porta Vittoria, 9, 37129 Verona, Italy

ABSTRACT

Orchestia stocki n. sp. from Gran Canaria is described. It is similar to Orchestia canariensis Dahl, 1950 but differs in gnathopod 2 of male with stouter propodus and concave palmar margin.

INTRODUCTION

The terrestrial amphipods of the genus Orchestia from the Canary Islands were recently discussed by Stock & Boxshall (1989) and Stock (in press). Stock & Boxshall demonstrated that the species recorded for these islands as O. chevreuxi De Guerne, 1887, is a distinct species (O. guancha Stock & Boxshall, 1989). O. chevreuxi is restricted to the Azores. Moreover, Stock (in press) has given a more detailed description of O. canariensis Dahl, 1950, from Gran Canaria and has described a new species from La Gomera (O. gomeri).

My friends R. Sciaky and A. Vigna Taglianti recently gave me specimens of *Orchestia* they had collected at Tenerife and Gran Canaria. The material from Tenerife corresponds perfectly to the original description of *Orchestia guancha* Stock & Boxshall. I need only to point out that the group of bristles in the proximal portion of the basis of gnathopod 1 characteristic of this species (cf. Stock & Boxshall, 1989, fig. 1g P1 Q) is situated on the inner face.

The material comes from the following localities in Tenerife:

- El Bailadero, 23.II.1984, 1 O 1 Q, R. Sciaky leg.
- La Laguna, 22.II.1984, 1 O 1 Q, R. Sciaky leg.
- Anaga, Barranco de Iguana, 14.III. 1984,
 2 O 5 Q A. Vigna Taglianti leg.

The material from Gran Canaria on the other hand belongs to a new species which I dedicate with great pleasure to my colleague Prof. Dr. J. H. Stock in acknowledgement of his fundamental contribution to the study on Amphipods and as token of friendship upon his retirement from his university position.

Orchestia stocki n. sp.

Diagnosis.

An Orchestia similar to O. canariensis Dahl, 1950, but differing in gnathopod 2 of male, with stouter propodus, concave palmar margin and stronger dactylus.

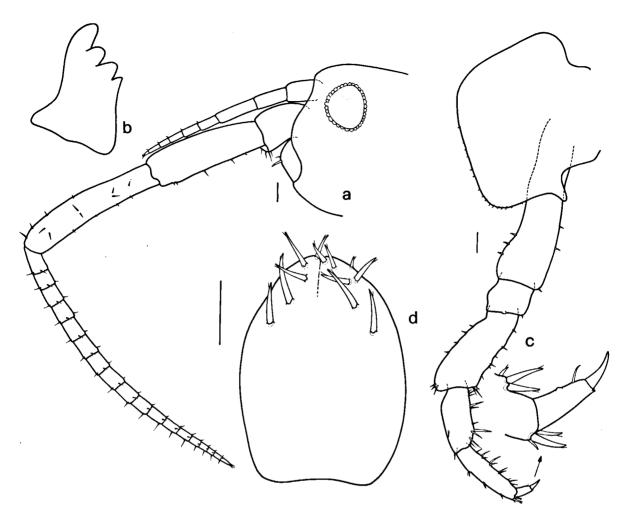


Fig. 1. Orchestia stocki n. sp. & holotype 18 mm, Las Lagunetas, Barranco de La Mina (Gran Canaria). a) Head and antennae 1-2. b) Left lacinia mobilis. c) pereiopod 4. d) telson. (Scales represent 0.25 mm).

Material examined.

Gran Canaria, Las Lagunetas, Barranco de La Mina, 1250 m a.s.l., 24.III.1984, 6 σ 1 Q, A. Vigna Taglianti leg. The material was collected near a spring issuing from a small cave. Accompanying fauna: *Nebria currax* Wollaston, *Agonum debile* Wollaston, *Harpalus schaumi grancanariensis* Van Emden. The holotype (σ MVR Cr 328, slides 3754-3760) and the paratypes have been deposited at the Museo Civico di Storia Naturale, Verona.

DESCRIPTION

Or 18 mm. Eyes large, subcircular, black (fig. 1a). Antenna 1 reaching tip of antenna 2 peduncle segment 4 (fig. 1a), peduncle segment 3 elongate, longer than segment 2, flagellum with 6 articles. Antenna 2 shorter than 1/2 of body, peduncle not swollen, flagellum relatively short, with 17-19 articles. Left lacinia mobilis 4dentate (fig. 1b).

Coxal plate 1 with some short spines only on distal rounded margin (fig. 2a), coxal plate 2 not very wide (fig. 2b), with inferior margin very convex, coxal plates 3-4 subrectangular (fig. 1c), with inferior margin slightly convex (coxal plate 3) or straight (coxal plate 4), coxal plates 5-7 without particular features (fig. 3a-c).

Coxal gill of gnathopod 2 elongate, sinuous (fig. 2b); coxal gills of pereiopods 3-4 similar, elongate, digitiform, with a short proximal

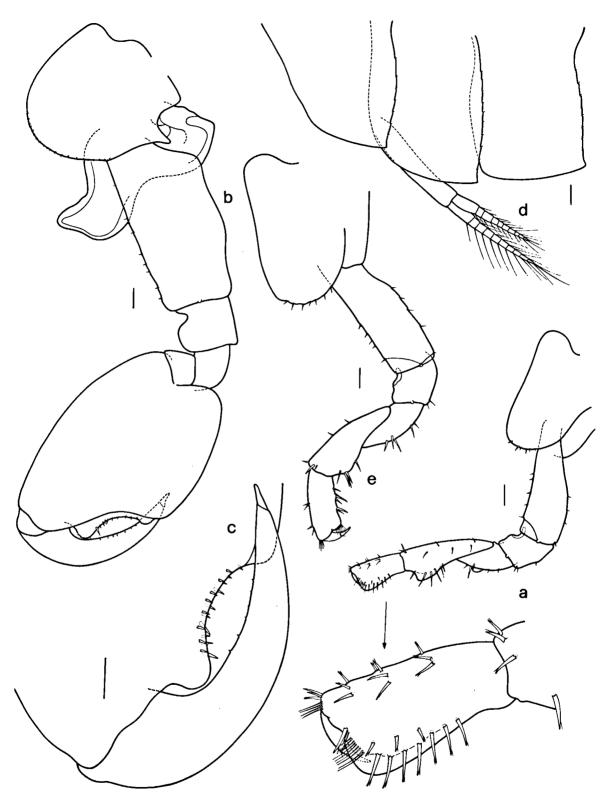


Fig. 2. Orchestia stocki n. sp. O holotype 18 mm, Las Lagunetas, Barranco de La Mina (Gran Canaria). a) gnathopod 1. b) gnathopod 2. c) Palmar margin and dactylus of gnathopod 2. d) epimeral plates 1-3. Q juv. paratype 10 mm. e) gnathopod 1. (Scales represent 0.25 mm).

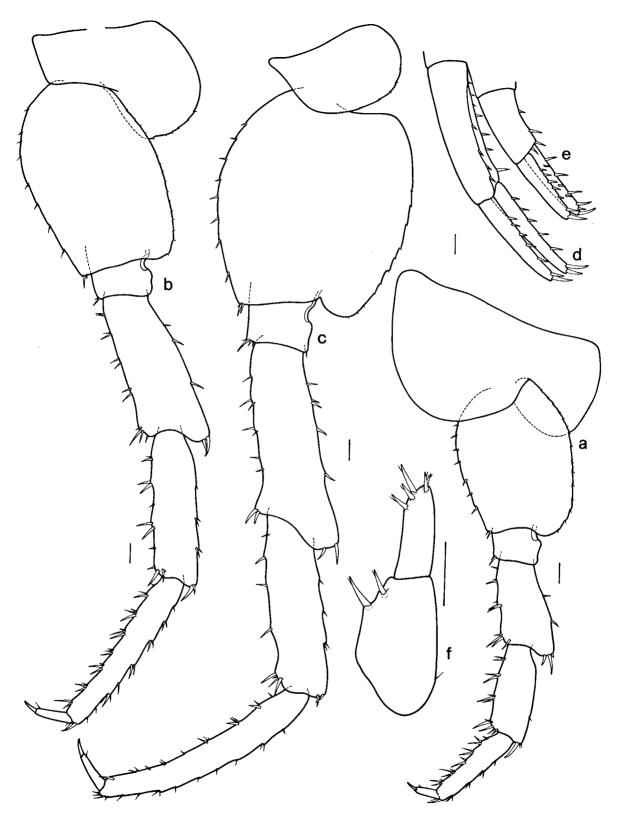


Fig. 3. Orchestia stocki n. sp. & holotype 18 mm, Las Lagunetas, Barranco de La Mina (Gran Canaria). a) pereiopod 5. b) pereiopod 6. c) pereiopod 7. d) uropod 1. e) uropod 2. f) uropod 3. (Scales represent 0.25 mm).

lobe; coxal gill of pereiopod 5 short, with a pair of similar distal lobes; coxal gill of pereiopod 6 elongate, digitiform, with a pair of similar proximal lobes.

Gnathopod 1 (fig. 2a): basis without proximal group of bristles on inner face, carpus elongate, propodus posterior margin regularly convex. Gnathopod 2: basis very stout, propodus oviform, stout, with a rounded large tooth near dactylus insertion, palmar margin distinctly concave, dactylus strong, drawn out into a fine, narrow tip (fig. 2b-c).

Pereiopods 3-7 minutely cuspidactylate. Pereiopods 3-4 similar (fig. 1c), without particular features, merus of pereiopod 3 longer than that of pereiopod 4. Pereiopod 5 (fig. 3a): basis fairly elongate, posterodistal lobe not very wide, propodus with 5-6 groups of spines on anterior margin. Pereiopod 6 slender (fig. 3b): basis elongate, posterior margin not very convex, propodus a little longer than carpus, with 7 groups of spines on anterior margin. Pereiopod 7 longer than pereiopod 6 (fig. 3c): basis wide, with distinct, rounded posterodistal lobe, merus and carpus not enlarged, propodus distinctly longer than carpus, with 8-9 groups of spines on anterior margin.

Epimeral plates 2-3 with a small posteroventral tooth and crenulate posterior margin (fig. 2d).

Pleopods (fig. 2d): rami with ca. 10 articles, as long as peduncle, endopodite slightly longer than exopodite.

Uropods 1-2 with both rami spinose (fig. 3de), distal spines not very long; uropod 3 elongate (fig. 3f), ramus subcylindrical, 2/3 as long as peduncle, with 5 short distal spines; peduncle with 2 distointernal spines.

Telson (fig. 1d) elongate with shallow distal cleft and with 10-12 spines distributed only on distal part.

Or (juvenile) 10 mm. Gnathopod 1 (fig. 2e): propodus subrectangular, elongate, dactylus longer than palmar margin.

REMARKS

Orchestia stocki n. sp. is closely related to Orchestia canariensis Dahl (cf. Dahl, 1950; Stock, in press) in the general habitus (antennae, pereiopods, uropods) and in the absence of a row of bristles on the inner face of the proximal part of the basis of gnathopod 1 either in the male or in the female. It differs from Orchestia canariensis in the stouter propodus of gnathopod 2 of the male, with a concave palmar margin (distinctly convex in Orchestia canariensis) and stronger dactylus (slender in Orchestia canariensis), and in the less spiny coxa 1, more elongate telson, less acute posteroventral tooth of epimeral plates 2-3.

ACKNOWLEDGEMENTS

I am very grateful to my friends Dr. R. Sciaky of Milano and Prof. A. Vigna Taglianti of the Dept. of Biology of the University of Roma for donation of the material described in this paper. I would also like to thank Prof. Dr. J. H. Stock of the University of Amsterdam for sending me the photocopies of some of his yet unpublished papers on the Talitridae of the Canary Islands and the Azores.

REFERENCES

- DAHL, E., 1950. On some terrestrial Amphipoda from the Canary Islands and Madeira. Ark. Zool., 1 (14): 195-198.
- STOCK, J. H., (in press). Landhoppers (Amphipoda: Talitridae) of the genus Orchestia of the Canary Islands. Bull. Mus. nat. Hist. nat. Paris.
- STOCK, J. H. & G. A. BOXSHALL, 1989. Comparison between the Landhoppers (Amphipoda: Talitridae) of the genus Orchestia from Tenerife (Canary Islands) and the Azores. Beaufortia, 39 (2): 45-54.

Received: November 15, 1989

Institute of Taxonomic Zoology (Zoologisch Museum), University of Amsterdam, P.O. Box 4766, 1009 AT Amsterdam, the Netherlands