

A NEW SPECIES OF UNDINELLA (COPEPODA: CALANOIDA) FROM THE MEDITERRANEAN SEA

George D Grice

▶ To cite this version:

George D Grice. A NEW SPECIES OF UNDINELLA (COPEPODA: CALANOIDA) FROM THE MEDITERRANEAN SEA. Vie et Milieu , 1971, XXII, pp.87 - 94. hal-02966478

HAL Id: hal-02966478 https://hal.sorbonne-universite.fr/hal-02966478

Submitted on 14 Oct 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés. Vie Milieu, 1971, Vol. XXII, fasc. 1, sér. A, pp. 87-94.

A NEW SPECIES OF UNDINELLA (COPEPODA : CALANOIDA) FROM THE MEDITERRANEAN SEA⁽¹⁾

by George D. GRICE Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543, U.S.A.

SUMMARY

The genus Undinella (Copepoda, Calanoida) is found for the first time in the Mediterranean. Description of Undinella stirni, n. sp.

INTRODUCTION

The species described here was found in plankton samples which were collected in deep waters of the Mediterranean Sea as part of a systematic study of the calanoid copepods. The samples in which the new species occurred were obtained by means of a Bongo net (McGowAN and BROWN, 1966).

(1) Contribution No. 2502 from the Woods Hole Oceanographic Institution. This study was supported in part by National Science Foundation Grant GB 8612.

7

DESCRIPTION

Undinella stirni n. sp.

Localities and Materials. $34^{\circ}00' \text{ N}$ $33^{\circ}56.5' \text{ E}$, May 13, 1969, 1100-1400 m sampling depth, 2 females — $33^{\circ}57' \text{ N}$ $22^{\circ}27' \text{ E}$, May 15, 1969, 1250-1350 m sampling depth, 3 females, 1 stage V female — $33^{\circ}21' \text{ N}$ 19°33.7' E, May 18, 1969, 1150-1250 m sampling depth, 1 female — $38^{\circ}23.5' \text{ N}$ $3^{\circ}20' \text{ E}$, June 3, 1969, 1100-1200 m sampling depth, 3 females, 1 stage V female, 1 male — $36^{\circ}24.5' \text{ N}$ $1^{\circ}42' \text{ E}$, 1100-1400 m sampling depth, 1 female — $36^{\circ}15' \text{ N}$ $4^{\circ}07.5' \text{ W}$, 850-1000 m sampling depth, 1 female.

Types. Female holotype and male allotype have been deposited in U.S. National Museum, Washington, D. C. Paratypes are in the Woods Hole Oceanographic Institution collections.

Female (Figs. 1-16). Head and first thoracic segment separate, fourth and fifth thoracic segments fused. Posterolateral corner of cephalothorax rounded, not reaching midpoint of genital segment. Rostrum strong and bearing 2 short filaments. Genital segment in dorsal view asymmetrical. Only left seminal receptacle present.

Antennule with 24 free-segments, reaches to middle of genital segment. Exopod of antenna twice the length of endopod. Gnathal lobe of maxillule well-developed. Distal lobe of maxilla with strong spine. Second basal segment of maxilliped elongate and of uniform width.

Exopods of swimming feet 3-segmented. Endopod of first foot 1-segmented, of second foot 2-segmented, of third and fourth feet 3-segmented. Fifth feet 3-segmented. Right distal segment with 4 spine-like protrusions, left distal segment with 3 spine-like protrusions.

Total length adult females .90 - 1.00 mm.

Male (Figs. 17-21). Head and first thoracic segment fused, fourth and fifth thoracic segments fused. Right and left antennules with segments 8 and 9 and 23 and 24 fused. Right antennule with segments 19 and 20 fused. Other cephalosome appendages and swimming feet similar to female appendages.

Fifth pair of feet longer than urosome. Right foot uniramous, consists of two sub-equal segments. Left foot biramous, exopod 3-segmented, endopod 2-segmented.

Total length single adult male .76 mm.



FIG. 1-8. — Undinella stirni n. sp. 1, Female, lateral; 2, Fourth and fifth thoracic segments and urosome, dorsal view; 3, Genital segment, ventral view; 4, Anterior end of head, ventral view; 5, Right first antennule (some setae omitted); 6, Antenna; 7, Mandible; 8, Gnathal lobe of mandible.



FIG. 9-16. — Undinella stirni n. sp. 9, Maxillule; 10, Maxilla; 11, Maxilliped; 12, First foot; 13, Second foot; 14, Third foot; 15, Fourth foot (second and third exopodal segments missing), 16, Fifth pair of feet.





G.D. GRICE

REMARKS

U. stirni is similar to U. brevipes Farran, 1908, but there are well marked differences between the two species. The female U. brevipes has numerous small spines on the carapace, U. stirni has a smooth carapace. U. brevipes has the posterolateral corners of the cephalothorax pointed, they are rounded in U. stirni. The genital segment is symmetrical in U. brevipes, it is asymmetrical in U. stirni. The fifth feet are asymmetrical in both species. In the male of U. brevipes the posterolateral corners of the cephalothorax are pointed, they are rounded in U. stirni. In U. brevipes the inner margin of the right first exopodal segment of the fifth foot has a large protuberance. This margin is smooth in U. stirni. U. brevipes is also a larger species (female 1.4-1.6 mm, male 1.2 mm) than U. stirni (female .9-1.0 mm, male .7 mm). This is apparently the first species of Undinella to be reported for the Mediterranean Sea. It is a pleasure to name it in honor of Dr. Joze STIRN.

ABSTRACT

A new species of *Undinella* is described from deep waters of the Mediterranean Sea. This is the first species of this genus to be reported from the Mediterranean Sea.

RÉSUMÉ

Une nouvelle espèce du genre *Undinella* est décrite des eaux profondes de la Méditerranée. C'est la première récolte du genre dans cette mer.

ZUSAMMENFASSUNG

Eine neue, bisher im Mittelmeer unbekannte Art von Undinella wird beschrieben.

92

NEW SPECIES OF UNDINELLA (COPEPODA, CALANOIDEA)

LITERATURE CITED

FARRAN, G.P., 1908. Second report on the copepoda of the Irish Atlantic Slope. Scient. Invest. Fish. Brch Ire., 1906 (II): 1-104.

McGowan, J.A. and D.M. BROWN, 1966. A new opening-closing paired zooplankton net. Bull. Scripps Instn Oceanogr., 66-23: 1-56.

Recu le 9 juin 1970.