DISCUSSION

The species closely resembles *Diogenes* avarus Heller in having similar habitat preference, general size and shell selection. Some of the salient features by which these two species could be distinguished are given in Table 1. ACKNOWLEDGEMENTS

We are grateful to Dr. P.A McLaughlin, Dr. Janet Haig and Dr. K.N. Sankolli for their valuable suggestions. Also, thanks are due to the authorities of Karnatak University for providing laboratory facilities.

REFERENCES

ALCOCK, A. (1905): Anomura. Fasc. I. Paguridea - Catalogue of the Indian decapod Crustacea in the collection of the Indian Museum, 2: i - xi + 1 - 197.

HENDERSON, J.R. (1893): A contribution to Indian Carcinology. Trans. Linn. Soc. London, (2) 5 : 325 - 426. JACKSON, H.G. (1913): Eupagurus. Liverpool mar. biol. Comm. Mem., 21: 1 - 79.

MCLAUGHLIN, P.A. (1974): The hermit crabs (Crustacea, Decapoda, Paguridea) of Northwestern North America. Zool. Verhandel, Leiden, 130 : 1-396.

A NEW SPECIES OF THE GENUS *EUPHILOSCIA* PACKARD (CRUSTACEA: ISOPODA: ONISCOIDEA) FROM WALTAIR, INDIA¹

C. JALAJA KUMARI, K. HANUMANTHA RAO AND K. SHYAMASUNDARI²

(With eleven text-figures)

A new oniscoid isopod *Euphiloscia rishikondensis* belonging to family Ligiidae is described. Thirty male specimens were collected under rocks near the shore at Rishikonda, Waltair. *Euphiloscia rishikondensis* sp. nov. is compared with *E. elrodii* Packard, 1873.

In the course of the study of the systematics of isopods (1978-1981), a number of new species belonging to the genus *Euphiloscia* Packard (1873) were collected from Waltair coast.

Isopods of the genus *Euphiloscia* have not been reported from India so far. Significant contributions to the knowledge of Indian oniscoid isopods are those of Collinge (1914), Barnard (1936), Joshi and Bal (1959) and Ramakrishna (1971). The genus *Euphiloscia* is so far represented by only one species, namely *Euphiloscia elrodii* (Packard 1873). The present species is described here as a new species.

Euphiloscia rishikondensis sp. nov.

Male: Length 7 mm; breadth 3 mm.

Colour: Brown body with dark spots on the mid-dorsal portion.

Body oblong-oval, somewhat longer and slender, attains greatest breadth at perconite 5,

dorsal surface slightly convex, studded with granules in the centre. A large number of tubercles arranged in two rows on each side of pereon. Cephalon distinctly separated from pereonite 1; twice as broad as long. Dorsal surface of cephalon covered with numerous large tubercles; frontal margin nearly truncate and not produced into a lobe. Antero-lateral angles of cephalon rounded and not produced into lobes. Eyes large, oval and located at antero-lateral angles of cephalon.

Antennule reduced in size, triarticulate, with broad basal article, article 2 short and terminal article longer than basal article.

Antenna very much longer, slender, almost reaches the end of pereonite 3. Antenna with 5 peduncular articles, article 1 short, article 2, 3 subequal, article 4, roughly 1 1/2 times longer than article 3, article 5 twice as long as article 4. Antennal flagellum 15-articulate; all articles covered with strong setae, terminal article provided with a pointed bristle.

Maxillule with 12 stout recurved spines on

Accepted April 1987.

²Department of Zoology, Andhra University, Waltair 530003 (India).

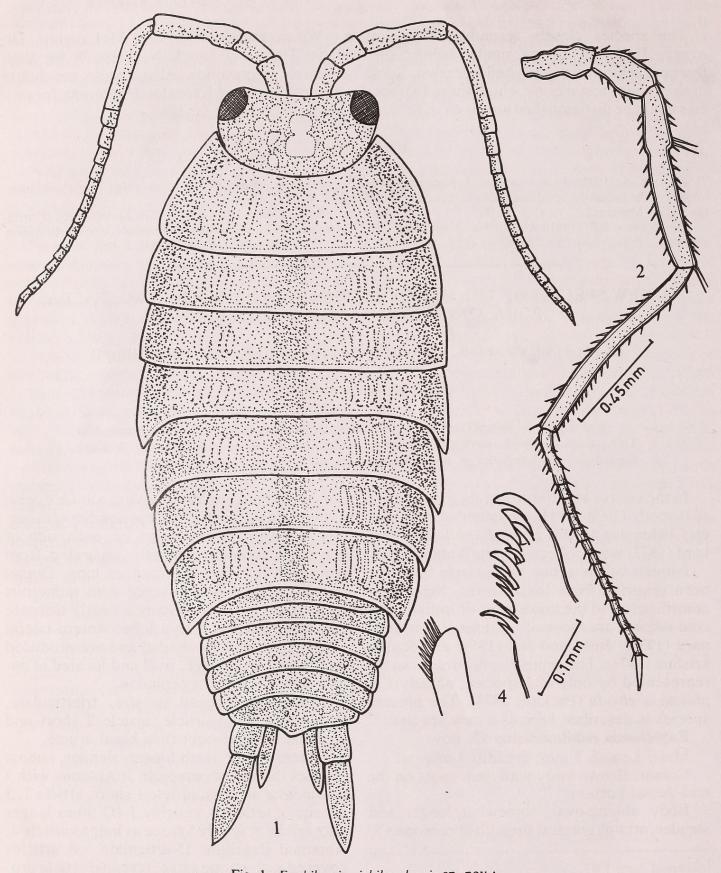
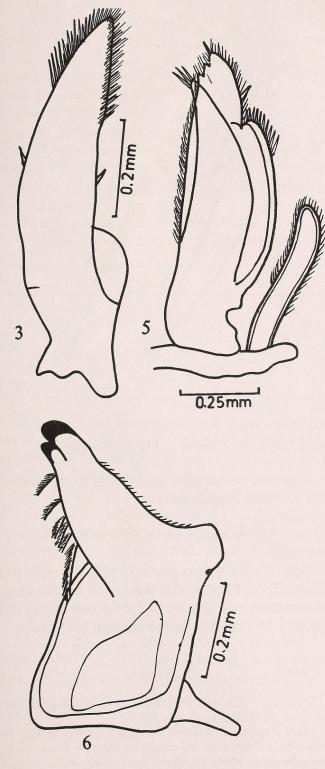


Fig. 1. Euphiloscia rishikondensis sp. nov.; Fig. 2. Antennule; Fig. 4. Maxillule.

exopod; as series of setae on endopod. Maxilla uni-lobate, terminal part heavily setose. Mandible with 2-cuspate incisor process, followed by six penicils arise from the lower margin. Maxilliped with outer palp terminates into 3



Euphiloscia rishikondensis sp. nov. Fig. 3. Maxilla; Fig. 5. Maxilliped; Fig. 6. Mandible.

setae; inner palp broad, apically trilobed; anterior margin of maxilliped covered with short setae.

Pereonites 2-6 subequal, pereonite 1 longer than other pereonites. Antero-lateral angles of pereonite 1 surround the base of cephalon. Coxal plates not separated from pereonites. Pereonite 7 extends up to pleonite 2.

Pereopods 1-7 gradually increase in length posteriorly, long and stout, all markedly setose. Anterior pereopods prehensile and densely covered with setae. Posterior pereopods comparatively long and slender. First 5 articles of all pereopods covered with thick short hairs.

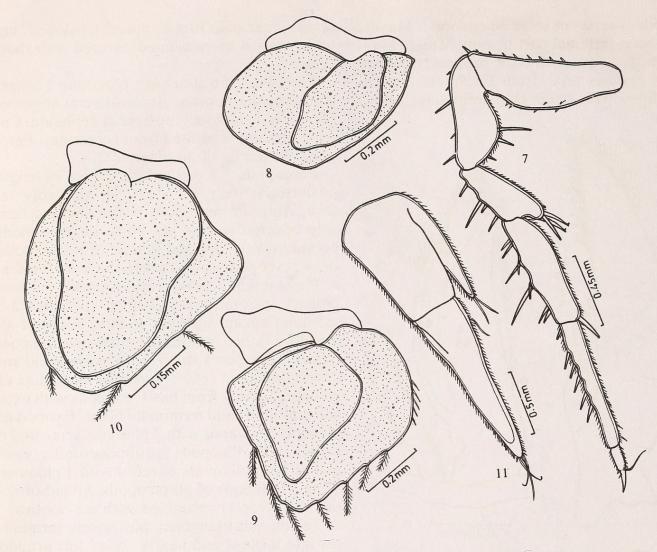
Pleon much narrower and rounded not macronate, pleonites 1-5 distinct, pleonites 2-5 subequal except pleonite 1. Side plates of all pleonites rather smooth and not projecting posteriorly. Pleopod 1 small, both exopod and endopod devoid of setae. Appendix masculina of pleopod 2 arises from basis, exceeds with exoand endopods and terminally blunt. Exopod of pleopod 2 covered with 7 plumose setae and 6 simple setae. Pleopods 3, 4 almost similar, exopod of both pleopods covered with 3 plumose setae. Endopods of all pleopods devoid of setae. All pleopods provided with air-cavities.

Telson sub-triangular, posteriorly terminates into a blunt and nearly round tip; uropod longer and slender, articulates to the tip of telson. Uropodal peduncle stout and broad. Endopod of uropod short and narrow, just reaches the basal part of exopod and terminates into 2 long setae. Exopod of uropod long, broad at the base and terminally provided with 3 long curved setae. Uropods also covered with short, thick hairs.

Material Studied: Thirty male specimens were collected under rocks near the shore at Rishikonda, Waltair. Holotype male 1 and paratypes male 4 are lodged in the Department of Zoology, Andhra University, Waltair. They will be deposited in the collections of the Zoological Survey of India, Calcutta.

DISCUSSION

The genus *Euphiloscia* differs from the genus *Philoscia* in having fifteen articulated flagellae of the antenna. The second and third



Euphiloscia rishikondensis sp. nov. Fig. 7. Percopod 7; Fig. 8. Pleopod 1; Fig. 9. Pleopod 3; Fig. 10. Pleopod 5; Fig. 11. Uropod.

joints are rather short, antenna very much longer. The abdomen is much longer and wider in proportion to the rest of the body. Uropods are much larger and slender than in Philoscia. The body colour of the species is brown with dark spots on the mid-dorsal portions. Euphiloscia rishikondensis sp. nov. resembles Euphiloscia elrodii in body colour, but differs in the shape of cephalon, pereon and pleon and structure of . Andhra University for providing facilities. appendages.

BARNARD, K.H. (1936): Isopods collected by the R.I.M.S. 'Investigator'. Rec. Indian Mus. 37 : 279-319.

COLLINGE, W.E. (1914): Description of a new species of terrestrial Isopoda from India. Ann. Maq. nat. Hist. 14 (8): 206-208.

JOSHI, O.N. & BAL, D.V. (1959): Some of the littoral species of Bombay isopods with detailed description of two new species. J. Univ. Bombay 27 (5B) : 57-69.

The species name is derived from the collection locality Rishikonda.

ACKNOWLEDGEMENTS

One of us (CJK) is grateful to the Council of Scientific and Industrial Research for financial assistance. We are thankful to authorities of

REFERENCES

PACKARD, A.S. (1873): On the cave fauna of Indiana. 5th Rep. Peabody Acad. Sci. 93-97.

RAMAKRISHNA, G. (1971): Studies on the Indian Isopods. Pt. 2. Notes on the oniscid collection from the Kameng Division of NEFA. Rec. Zool. Surv. India. 63 (1-4): 181-184.



Kumari, C Jalaja, Hanumantha Rao, K., and Shyamasundari, K. 1989. "A new species of the genus Euphiloscia Packard (Crustacea: Isopoda: Oniscoidea) from Waltair, India." *The journal of the Bombay Natural History Society* 86, 77–80.

View This Item Online: https://www.biodiversitylibrary.org/partpdf/156780

Holding Institution Smithsonian Libraries and Archives

Sponsored by Biodiversity Heritage Library

Copyright & Reuse Copyright Status: In Copyright. Digitized with the permission of the rights holder License: <u>http://creativecommons.org/licenses/by-nc/3.0/</u> Rights: <u>https://www.biodiversitylibrary.org/permissions/</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.