

136, 137, 138, 139, 140, 141
UNIVERSITY OF WASHINGTON

C.R.E. Rm.

COPY 1

DEPARTMENT OF OCEANOGRAPHY

Technical Reports

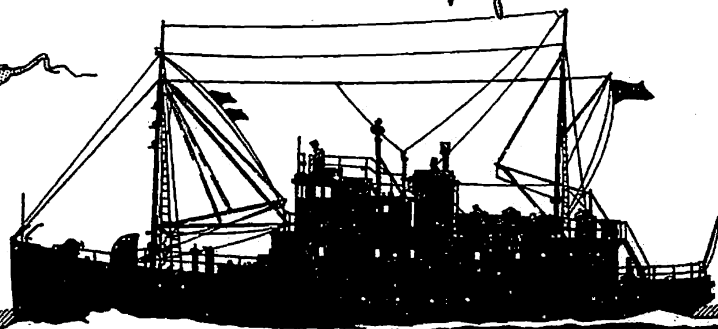
Nos. 136, 137, 138, 139, 140, and 141

A COMPILATION OF ARTICLES REPORTING
RESEARCH SPONSORED BY
THE OFFICE OF NAVAL RESEARCH

Office of Naval Research
Contracts Nonr-477(10)
and Nonr-477(37)
Project NR 083 012

Reference M66-1
January 1966

DEPARTMENT OF OCEANOGRAPHY
UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98105



SEATTLE, WASHINGTON 98105

UNIVERSITY OF WASHINGTON
DEPARTMENT OF OCEANOGRAPHY
Seattle, Washington 98105

Technical Reports

Nos. 136, 137, 138, 139, 140, and 141


A COMPILATION OF ARTICLES REPORTING

RESEARCH SPONSORED BY

THE OFFICE OF NAVAL RESEARCH

Office of Naval Research
Contracts Nonr-477(10)
and Nonr-477(37)
Project NR 083 012

Reference M66-1
January 1966


RICHARD H. FLEMING
CHAIRMAN

Reproduction in whole or in part is permitted
for any purpose of the United States Government

ARTICLES REPORTING RESEARCH SPONSORED BY THE OFFICE OF NAVAL RESEARCH

Technical Report No. 136

ON THE VERTICAL DISTRIBUTION OF ZOOPLANKTON IN THE SEA, by K. Banse. Pp. 55-125 in Progress in Oceanography, vol. II (Mary Sears, ed.). Pergamon Press, London. 1964.

Technical Report No. 137

SYNONYMS OF PROTODORVILLEA EGENA (EHLERS) (EUNICIDAE, POLYCHAETA), by K. Banse and G. Hartmann-Schröder. Proceedings of the Biological Society of Washington, 77:241-242. 30 December 1964.

Technical Report No. 138

THE INFLUENCE OF VARIABLE DEPTH ON STEADY ZONAL BAROTROPIC FLOW, by Gene H. Porter and Maurice Rattray, Jr. Deutsche Hydrographische Zeitschrift, 17(4):164-174. 1964.

Technical Report No. 139

THE MESOPELAGIC CARIDEAN SHRIMP NOTOSTOMUS JAPONICUS BATE IN THE NORTH-EASTERN PACIFIC, by Belle A. Stevens and Fenner A. Chace, Jr. Crustaceana, 8(pt. 3):277-284. 1965.

Technical Report No. 140

CARBONIFEROUS GLACIAL ROCKS FROM THE WERRIE BASIN, NEW SOUTH WALES, AUSTRALIA, by John T. Whetten. Geological Society of America Bulletin, 76:43-56. January 1965.

Technical Report No. 141

THE ORIGIN OF MANGANESE NODULES ON THE OCEAN FLOOR, by Enrico Bonatti and Y. Rammohanroy Nayudu. American Journal of Science, 263:17-39. January 1965.

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

SYNONYMS OF *PROTODORVILLEA EGENA* (EHLERS)
(EUNICIDAE, POLYCHAETA)¹

BY K. BANSE AND G. HARTMANN-SCHRÖDER

*Department of Oceanography, University of Washington, and
Zoologisches Staatsinstitut und Zoologisches Museum,
Universität Hamburg*

Since we may not have the opportunity to incorporate this note in an appropriate larger paper, we wish to report that we believe now that *Dorvillea mandapamae* and *D. graciloides*, described by us, are synonyms of *Stauronereis egena* Ehlers (1913) from Simonstown, South Africa. Following Pettibone (1961) the species is called *Protodorvillea egena*.

Stauronereis egena Ehlers, 1913, p. 501, pl. 35, figs. 1-6.

Stauronereis egena Augener, 1917, *partim*, p. 379.

Dorvillea egena Day, 1957, p. 95.

Dorvillea mandapamae Banse, 1959, p. 166, fig. 1.

Dorvillea graciloides Hartmann-Schröder, 1960, p. 117, figs. 169-172.

Protodorvillea egena Pettibone, 1961, p. 180.

Protodorvillea egena Day, 1963, p. 412.

There are minor deviations in the various descriptions which do not justify maintaining of separate species: the number and position of eyes differ, but the variability of the character during development has been shown for *D. mandapamae*. The anterior margin of the first segment of the single known specimen of *D. graciloides* is not straight as in the other forms. It is not known whether this is due to contraction or whether it represents nuchal organs not described for any other *Protodorvillea* species. Variations in relative lengths of the first and the second segments may as well be due to variable states of contraction.

None of the later authors has seen two aciculae supporting the two bundles of setae according to Ehlers (1913). A new inspection of a paratype of *D. mandapamae* (Museum Hamburg No. V.13021) shows that the inner margins of the prongs of the forked setae are not smooth but are feathered (Fig. 1) as in *P. egena*; Augener (1917) had already

¹ Contribution No. 308 from the Department of Oceanography, University of Washington, prepared with partial support by Contract Nonr-477(10), Project NR 083 012, with the Office of Naval Research. We acknowledge also helpful correspondence with Professor J. H. Day in Cape Town.

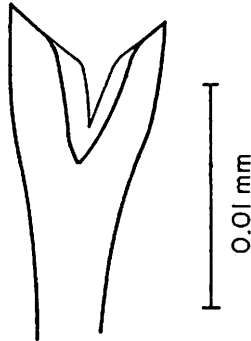


FIG. 1. Tip of forked seta from juvenile specimen from Mandapam.

suggested that Fig. 4 of Ehlers (1913) represents the forked seta but that the caption is wrong. *D. graciloides* seems to possess smooth forked setae. While some compound bristles with blades having tridentate tips were reported for *D. graciloides*, the blades of *D. mandapamae* appear as bidentate under 1000-fold magnification. Day (1963) has observed bidentate blades in new material of *P. egena* from the type locality, so Ehlers may have erred in reporting blades with pointed tips.

Augener (1917) saw the type of *P. egena* and added to the original description. However, his own material from Southwest Africa does not represent this species, as also pointed out by Day (1963). Both the single specimens from Swakopmund (Museum Hamburg No. V.8792) and from Lüderitzbucht (No. V.8753) belong to *Stauronereis sensu* Pettibone (1961), and seem to be identical with the specimens reported as *S. neglecta* from many places in South Africa.

LITERATURE CITED

- AUCENER, H. 1917. Polychaeta. Pp. 65-625 in Michaelsen, W. (Ed.) Beiträge zur Kenntnis der Meeresfauna Westafrikas, 2.
- BANSE, K. 1959. On marine polychaeta from Mandapam (South India). *J. Mar. Biol. Ass. India*, 1 (2): 165-177.
- DAY, J. H. 1957. The polychaete fauna of South Africa. 4. New species and records from Natal and Moçambique. *Ann. Natal Mus.*, 14 (1): 59-129.
- . 1963. The polychaete fauna of South Africa. 8. New species and records from grab samples and dredgings. *Bull. Brit. Mus. (Nat. Hist.)*, 10 (7): 383-445.
- EHLERS, E. 1913. Die Polychaeten-Sammlungen der Deutschen Südpolar-Expedition 1901-1903. *Dtsch. Südpolar-Exped.*, 13: 397-602.
- HARTMANN-SCHRÖDER, G. 1960. Polychaeten aus dem Roten Meer. *Kieler Meeresforsch.*, 16 (1): 69-125.
- PETTIBONE, M. 1961. New species of polychaetous worms from the Atlantic Ocean, with a revision of the Dorvilleidae. *Proc. Biol. Soc. Wash.*, 74: 167-185.