

Short Communication

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New Records of *Pseudopolydora* Species (Polychaeta, Spionidae) from Pakistan

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Pseudopolydora antennata (Claparede) and *P. paucibranchiata* (Okuda) have been heretofore unreported from Pakistan. *Pseudopolydora* is a genus considered related to the polydorid group of the family Spionidae. They occur typically in mud-flats or organically rich sands and in polluted environments. In Pakistan, these are being reported for the first time from the coastal areas of Karachi, situated at 24° 48' N latitude and 66° 58' E longitude.

Family Spionidae Grube, Genus *Pseudopolydora* (Czerniavsky), *Pseudopolydora antennata* (Claparede) (Fig. 1 A-C)

Polydora antennata Fauvel [1], p.56, Fig.19i-m; [2], p.316, Fig.166i-m; Day, [3], p.473, Fig. 18.4e-g.

Polydora (Pseudopolydora) antennata Hartmann-Schroder, [4], p.50, Figs.115-118.

Pseudopolydora antennata Hutechings and Turvey [5], p.16, Fig.6a-c.

Hawkesbay, intertidal, 20-12-90 (46); 30-1-91 (5); 16-5-91 (12).

Description. A small species measuring up to 10 mm in length for 70 setigerous segment. Prostomium bifid; caruncle reaching the end of segment 5 with an occipital tentacle at the first segmental position (Fig. 1A). Peristomium with a pair of palps reaching a maximum of segment 19. Segment 1 with no notosetae, winged capillaries in the neuropodium. Segments 2-7, with the exception of segment 5, alike in having fascicles of long and short winged capillaries as notosetae and short winged capillaries as neurosetae.

Segment 5 with two types of modified setae arranged in u-shaped double row; 9-12 spoon-shaped setae (Fig. 1B) in the outer row and about as many stout, flat setae (Fig. 1C) in the inner row. Notosetal and neurosetal fascicles present. Size of the segment not different from other body segments.

Branchiae present from segment 7 and hooded hooks from segment 8. Pygidium collar like with dorsal cleft.

Remarks. Specimens were found embedded in shale, exposed at low tide, in thin mucous tubes with clinging and mud particles. They tend to aggregate in patches with barren

areas in between. The local specimens differ from the French (1) and Australian (5) species in caruncular position (2-3 segment and middle of segment 6, respectively) and in pygidium being notched only dorsally. Those reported from elsewhere have dorsal and ventral notches.

The sample collected on 20-12-90 consisted of mostly egg-bearing worms.

Distribution. Atlantic Ocean, South Africa, Mediterranean Sea, Arabian Sea, India, Sri Lanka, Gulf of Mannar,

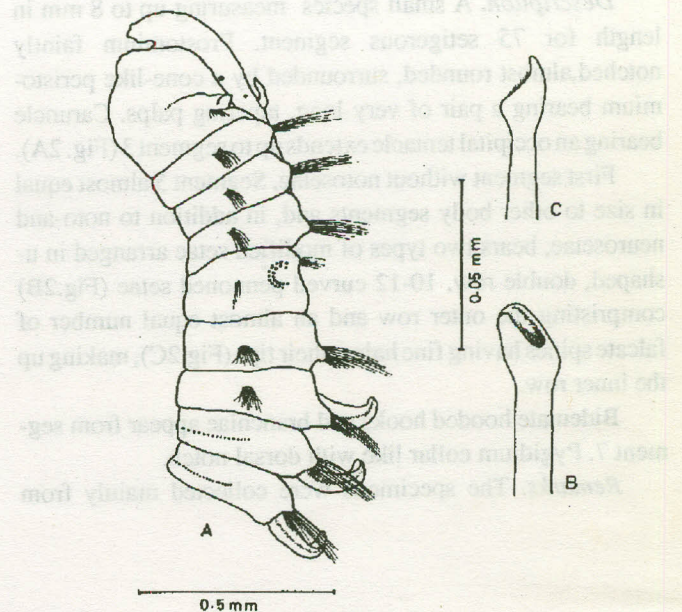


Fig.1. *Pseudopolydora antennata*.
A = lateral view of anterior region, palps not shown;
B-C = modified setae of 5th segment.

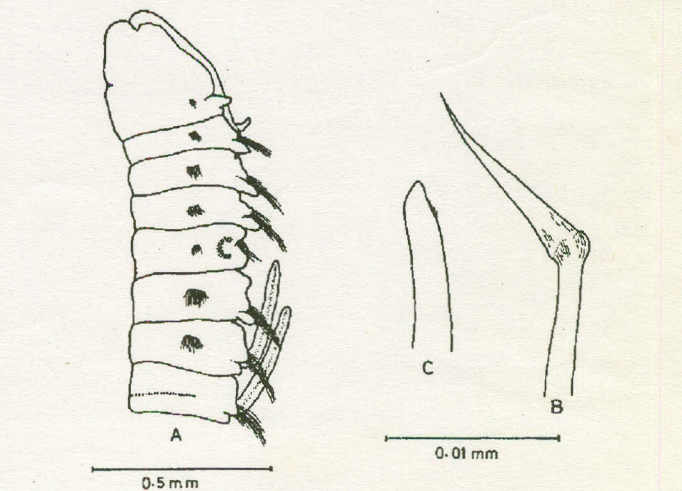


Fig.2. *Pseudopolydora paucibranchiata*.
A = lateral view of anterior region, palps not shown;
B-C = modified setae of 5th segment.

Japan, Australia, Pakistan.

Pseudopolydora paucibranchiata (Okuda) (Fig. 2A-C)

Polydora (*Carazzia*) *paucibranchiata* Okuda, [6], p.231-233, Figs. 11-12

Polydora (*Carazzia*) *kempi* Fauvel, [2], p.317-318, Fig. 167a-c.

Polydora kempi Day, [3], p.473, Fig. 18. 4h-k.

Pseudopolydora paucibranchiata Blake and Kudenov, [7], p.268; Hutchings and Turvey [5] p.17, Fig.7a-c.

Material examined. Manora channel, subtidal (grab sample), 20-10-88 (12); 12-11-88 (21); Manora, intertidal, 3-11-90 (1); Hawkesbay, intertidal, 16-5-91 (3).

Description. A small species measuring up to 8 mm in length for 75 setigerous segment. Prostomium faintly notched, almost rounded, surrounded by a cone-like peristomium bearing a pair of very long, tapering palps. Caruncle bearing an occipital tentacle extends up to segment 3 (Fig. 2A).

First segment without notosetae. Segment 5 almost equal in size to other body segments and, in addition to noto- and neurosetae, bears two types of modified setae arranged in u-shaped, double row. 10-12 curved pinnated setae (Fig. 2B) comprising the outer row and an almost equal number of falcate spines having fine hair at their tips (Fig. 2C), making up the inner row.

Bidentate hooded hooks and branchiae appear from segment 7. Pygidium collar like with dorsal notch.

Remarks. The specimens were collected mainly from

subtidal muddy sands. A few specimens were also collected from rocky area and the muddy-cum-sandy regions; exposed at low tide. Those found intertidally were present in loose stones and in thin mucous tubes. The majority of the specimens were in fragments with only a small number of complete worms.

Distribution. South Africa, India, China (Yellow Sea), Japan, Australia, Pakistan.

Key words: *Pseudopolydora* spp, Taxonomy, New records.

References

1. P. Fauvel, Faune de France, **16**, 495 (1927).
2. P. Fauvel, The Fauna of Indian Including Pakistan, Ceylon, Burma and Malaya, Annelida Polychaeta (Indian Press Ltd., Allahabad, 1953), pp.507.
3. J.H. Day, A Monograph on the Polychaeta of Southern Africa, Part 2, Sedentaria (British Mus. Nat. Hist. Publication 656, 1967), pp.842.
4. G. Hartman-Schroder, Mitt. Hamb. Zool. Mus. Inst., **78**, 19 (1981).
5. P.A. Hutchings and S.P. Turvey, Trans. R.Soc., S. Aust. **108**, 1 (1984).
6. S.Okuda, J. Fac. Sci. Hokkaido Imp. Univ. Ser., **6**, Zool., **5**, 217 (1937).
7. J.A. Blake and J.D. Kudenov, Mem. Natn. Mus. Vict, **39**, 171 (1978).

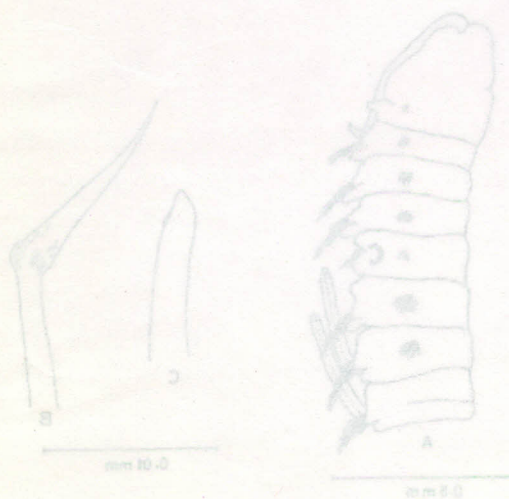


Fig. 2. *Pseudopolydora paucibranchiata*. A = lateral view of anterior region, palps not shown; B-C = modified setae of 5th segment.