

POLYDORA BRACHYCEPHALA Hartman, 1936
Spionidae

Voucher #HYP 28

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Literature citation: Hartman, O. 1936. New species of Spionidae (Annelida Polychaeta) from the coast of California. Univ. Calif. Publ. Zool., 41(6): 45-52.

Synonymy: POLYDORA CAULLERYI of auctt., not Mesnil, 1897

Primary diagnostic characters: Bifid prostomium; notosetae on first setiger; branchiae and hooded hooks begin on setiger 7; caruncle extends to setiger 7 (incorrectly noted as to setiger 2 in description: Light, 1978); spines of modified fifth setiger stout, sharply falcate, topped by dense fringe of bristles; notosetae in posteriormost segments form conical fascicles of spines, usually completely retracted within notopodia.

Related species & character differences: P. CAULLERYI Mesnil, 1897, P. ARMATA Langerhans, 1880, P. QUADRILOBATA Jacobi, 1883, and P. ACICULATA Blake & Kudenov, 1978, form a group of species with acicular spines in posterior segments, hooded hooks lacking a shaft constriction, and spines of the modified 5th with a flange on the convex side and/or a crest of bristles. P. CAULLERYI & P. BRACHYCEPHALA are often synonymized because the adult forms appear identical. The larval forms show considerable differences in pigmentation, however, enough that P. BRACHYCEPHALA is now thought to be a distinct species (see Light, 1978).

The major spines of P. ARMATA & P. QUADRILOBATA have a flange on the convex side, P. CAULLERYI & P. ACICULATA have spines similar to those of P. BRACHYCEPHALA, but those of ACICULATA also have a definite lateral flange. The posterior acicular spines of BRACHYCEPHALA (and CAULLERYI) barely protrude from the notopodial lobe, while those of QUADRILOBATA protrude prominently when contracted, ARMATA's spines are usually not emergent except in two posterior setigers where they form highly conspicuous stellate fascicles (in southern California specimens). The stout acicular spines of ACICULATA begin in midbody, and there are only 2-3 per fascicle throughout the rest of the body.

Variability: The pygidium has been described as 4 fleshy lobes and also as a disk with a middorsal notch. The notosetae of the first setiger may be abundant & obvious to sparse & nearly invisible. Hooded hooks may rarely start on setiger 6.

