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Spionidae (Annelida, Polychaeta) from Japan IX. The Genus *Aonidella*

By

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Abstract. *Aonidella aayi* MACIOLEK, 1983 in LÓPEZ-JAMAR 1989 of spionids formerly placed within *Prionospio cirrobranchiata* DAY (1973) is described from Japanese waters. The genus *Aonidella* was proposed by MACIOLEK (1983) and is reported for the first time from Asian area.

During the course of a study on Japanese spionids, a species of the genus *Aonidella* was recorded. This genus has not been previously reported from Japanese waters.

Aonidella was proposed as a new genus by MACIOLEK (1983) based on *Prionospio cirrobranchiata* DAY (1973, not DAY, 1961) from the Continental Shelf off North Carolina because of the difference from the typical *Prionospio* in several characters considered to be of generic importance.

The collection localities mentioned in the text are shown in Fig. 1. The bulk of the collection on described in this paper is deposited in the National Science Museum, Tokyo.

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Genus ***Aonidella*** MACIOLEK, 1983 in LÓPEZ-JAMAR 1989

Diagnosis. Prostomium broad, flattened anteriorly, lacking posterior caruncle; occipital tentacle absent; eyes present or absent. Peristomium partly fused to setiger 1; setiger 1 reduced. Branchiae from setiger 2, limited to anterior setigers, numbering 10–12 pairs; branchiae all simple, apinnate, elongate, separate from notopodial lamellae. Postsetal lamellae triangular, similar along length of body. Setae of 2 types: limbate capillaries anteriorly; bi-, tri- or quadridentate hooded hooks with small secondary hood in posterior noto- and neuropodia. Ventral sabre setae absent. Pygidium with 4–6 subequal anal cirri (quoted from MACIOLEK, 1983: 50).

Aonidella dayi MACIOLEK, 1983 in LÓPEZ-JAMAR 1989

(Fig. 2 a–n)

Aonidella dayi MACIOLEK, 1983, pp. 52–54, fig. 13; LÓPEZ-JAMAR, 1989, pp. 107–110.
Prionospio (Minuspio) cirrobranchiata: DAY, 1973, p. 73 (not DAY, 1961).

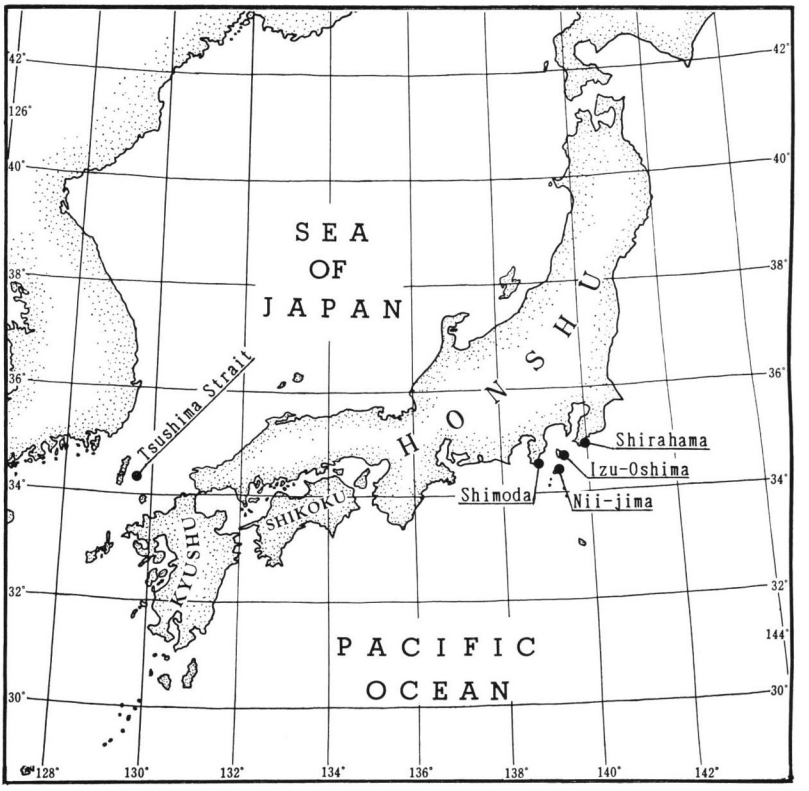
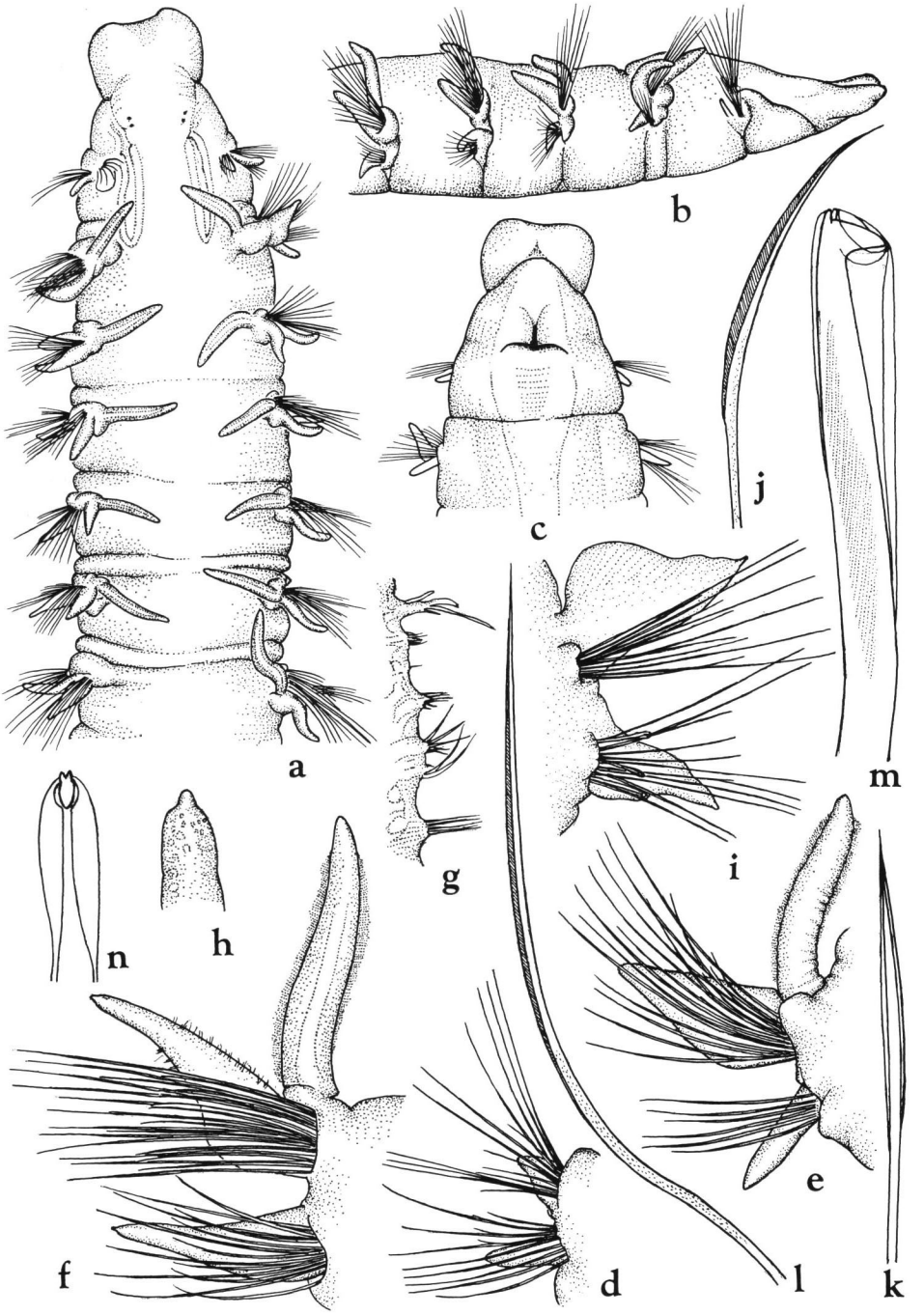


Fig. 1. Map of Japan, showing localities mentioned in the text.

Material examined. Off Shirahama, Boso Peninsula, 34°51.2′N, 139°55.6′E–34°51.1′N, 139°55.2′E, in 100 m (3 specimens), KT–76–16, IX–1976. Off Unonehana, Izu-Oshima, 34°43.0′N, 139°20.3′E–34°43.1′N, 139°20.5′E, in 70–90 m (3), VII–1977. Off Okada, Izu-Oshima, 34°48.2′N, 139°23.7′E–34°48.2′N, 139°23.0′E, in 109–116 m (1), KT–73–15, X–1973. Off Nii-jima, 34°23.5′N, 139°14.5′E–34°23.8′N, 139°14.7′E, in 82–92 m (5), 34°24.2′N, 139°14.4′E–34°24.5′N, 139°14.6′E, in 82–94 m (2), 34°24.2′N, 139°14.8′E–34°24.5′N, 139°15.0′E, in 65–80 m (3), VII–1977. Off Shimoda, 34°37.4′N, 138°57.6′E–34°37.6′N, 138°57.8′E, in 81–83 m (1), IX–1987. Tsushima Strait, 33°49.9′N, 129°29.0′E, in 100 m (2), 33°57.7′N, 129°11.6′E, in 105 m (1), 34°

Fig. 2. *Aonidella dayi* MACIOLEK in LÓPEZ-JAMAR. —— a, Anterior end, dorsal view, ×40; b, same, lateral vew, ×40; c, prostomium and first 2 setigers, ventral view, ×40; d, setiger 1, anterior view, ×100; e, setiger 2, anterior view, ×100; f, setiger 12, anterior view, ×100; g, lateral side of dorsal cirrus, showing cilia-like tufts, ×645; h, distal part of dorsal cirrus, ×360; i, setiger 24, anterior view, ×100; j, k, short notopodial capillary setae in anterior row, ×180; l, long notopodial capillary seta in posterior row, ×180; m, hooded hook, lateral view, ×910; n, distal part of same, frontal view, ×910.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03.3′N, 129°04.5′E, in 125 m (1), 34°17.6′N, 129°48.6′E, in 110 m (1), 34°25.1′N, 129° 59.3′E, in 115 m (1), VII–1968.

Description. Specimens incomplete, consisting of anterior body fragments. Largest 11 mm in length and about 1 mm in width including parapodia, with 35 setigers.

Prostomium flattened and anteriorly broad with slight medial indentation, narrowing slightly posteriorly with bifid nuchal area extending to setiger 2, with 2 pairs of embedded small eyes on sides of prostomium. Posterior caruncle and occipital tentacle absent (Fig. 2a, b). Peristomium inflated ventrally, fused with setiger 1, without lateral wings (Fig. 2c).

Parapodia of setiger 1 distinct, with triangular notopodial postsetal lamellae and digitate neuropodial postsetal lamellae (Fig. 2d). Parapodia of setiger 2 with foliaceous notopodial postsetal lamellae, neuropodial postsetal lamellae larger than those of setiger 1 (Fig. 2e). Starting around setiger 10, parapodia with well-developed noto- and neuropodial postsetal lamellae; notopodial lamellae asymmetrical (Fig. 2f). Surface of notopodial lamellae with scattered cilia-like tufts arising from glandular structures (Fig. 2g). Noto- and neuropodial postsetal lamellae terminating in small nipple-like tip (Fig. 2h). Dorsal ridges connected between parapodia not seen. Noto- and neuropodia decreasing in size, asymmetrical and foliaceous posteriorly (Fig. 2i).

Branchiae from setiger 2, numbering 14–16 pairs; branchiae simple, subequal in length except first branchia; all separated from notopodial lamellae and heavily ciliated (Fig. 2e, f).

Anterior noto- and neuropodial setae all sheathed capillaries, arranged in 2 rows; setae of anterior row short with developed sheath (Fig. 2j, k), setae of posterior row long with more or less narrow sheath, lightly granulated (Fig. 2l). Neuropodial hooded hooks beginning on setiger 18–20, numbering up to 5 per fascicle, accompanied by capillaries; hook with slender hood, a pair of apical teeth arranged in transverse row above main fang, appearing as bidentate in profile (Fig. 2m, n). Notopodial hooded hooks from setiger 22–24, numbering up to 4 per fascicle. Ventral sabre setae lacking. Nature of pygidium unknown.

Remarks. Specimens from Japan agree well with MACIOLEK's (1983) original description of this species from North America, except the new material has branchiae numbering 14–16 pairs rather than 10–12 pairs, neuropodial hooded hooks appearing from setiger 14–20 rather than from setiger 18–20 and notopodial hooded hooks from setiger 20 rather than setiger 22–24.

The species is new to the Japanese fauna.

Distribution. South Africa; North Carolina to the Gulf of Mexico; Mediterranean Sea; Gulf of Cádiz, Iberian Peninsula; Japan; 65–3300 m.

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