DESCRIPTION OF TWO NEW SPECIES OF PILARGIIDAE
(ANNELIDA : POLYCHAETA) FROM THE SETO-INLAND-SEA

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From the materials collected by EKMAN-BIRGE grab sampler through the investigations of Seto-Inland Sea, two new species were found out. Up to the present only three species belonged to the Pilargiidae (*Ancistrosyllis gracilis* HESSE¹⁾, *Otopsis longipes pacifica* USCHAKOV²⁾ and *Pilargis verrucosa pacifica* ZACHS³⁾) have been recorded from the adjacent waters of Japan. The present species differs from all of them and other species of the Pilargiidae^{4), 5)}.

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1. *Ancistrosyllis hanaokai* sp. nov.

This species, of which many individuals were taken, was found in the coastal bottom of Seto-Inland-Sea. Complete individuals are 12-22 mm. long and consist of 80-110 segments. Body width reaches maximum at about the 10th segment and then gradually tapers towards the tail, and the body becomes narrower rapidly to the third setigerous segment as *A. constricta* SOUTHERN⁶⁾. The body depressed and parapodia come to be relatively more conspicuous on the posterior half of the body due mainly to the great dorsal projecting hooks and the long dorsal cirri (Fig. 1, E).

The prostomium has a paired lateral lobes and a median one but they are separable by external view with difficulty. Each of them gives a rise to a long tentacular antenna (Fig. 1, A). There are no eye. The posterior margin of the prostomium is nearly straight or only slightly convex. The peristomium or first segment is separated from the prostomium by a shallow groove. At its anterior, lateral margins there are two pairs of long tentacular cirri. The ventral pairs are somewhat smaller and shorter than the dorsal pair and all resemble the prostomial antennae in form. The proboscis is smooth cylindrical and muscular. It terminates distally in a circlet of 14 large, conical papillae as *A. constricta*⁶⁾ and *A. bassi* HARTMAN⁵⁾. There is neither jaws nor other chitinous pieces.

The first setigerous segment is conspicuous by a pair of long, tentacular cirri.

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Fig. 1. *Ancistrostylis hanaokai* sp. nov.

A. Anterior region seen from dorsal $\times 41$	B. First setigerous segment $\times 51.5$
C. Second setigerous segment $\times 51.5$	D. Fourth setigerous segment $\times 51.5$
E. Posterior region $\times 51.5$	F. Acicular spine $\times 157.5$
	G. Shorter seta $\times 312.5$
H. Long slender seta $\times 312.5$	

The ventral cirri are much smaller. The setigerous lobe is provided with two kinds of setae (Fig. 1, A, B). The second foot is very minute, and there is no ventral cirri. Its notopodium is represented by a long cirriform, dorsal cirrus and a yellow, translucent aciculum that extends into the cirrus. Its neuropodium is well developed with an acicular lobe and a full fascicle of simple setae (Fig. 1, C). The setae in the upper group are longer than those in the lower group (Fig. 1, G, H). In typical median parapodia the notopodia are low inconspicuous mounds located at the dorsal base of the long dorsal cirrus: they have a few scattered epithelial papillae as *A. constricta* and *A. bassi*. Dorsal and ventral cirri are long cirriform throughout the body but the dorsal ones are much larger. Furthermore in posterior parapodia the proportional lengths of dorsal and ventral cirri increase (Fig. 1, E). Notoacicular spines (Fig. 1, F) are visible on fourth setigerous segment. They increase rapidly in size in median segments of the body and come to project a considerable distance in the posterior end. The posterior end terminates in a pair of long, slender cirriform structure which is

about as long as the last ten segments (Fig. 1, E).

This species greatly resembles *A. constricta* SOUTHERN (1921)⁶⁾ found from Chilka Lake in many respects, but differs in the following characters: 1) notopodium aciculum is present in the first setigerous segment: 2) notoacicular spines are visible in fourth setigerous segment. And also this species differs from other ten species of this genus^{1),4),5),7),8),9),10),11),12)}, in the following character: body gets narrower rapidly at the third setigerous segment.

It is an expression of the author's gratitude to dedicate this species to Dr. Tasuku HANAOKA. *A. hanaokai* widely distributes in Seto-Inland-Sea and also has been found in Tokyo Bay, Matsushima Bay, Yatsushiro Bay and Minamata Bay.

2. *Pilargis matsunagaensis* sp. nov.

The original account of the interesting species was based on incomplete six specimens, which consist of three anterior parts, two posterior parts and a fragment, taken by the EKMAN-BIRGE grab sampler in Matsunaga Bay, Hiroshima Prefecture, in 1953. The largest anterior part measures 22 mm. long and consists of 68 segments. It measures 2 mm. wide at its broadest width which corresponds to the part from 40th segment to 50th segment of the sample tapering gradually to both extremities. Body is long,

Fig. 2. *Pilargis matsunagaensis* sp. nov.

A. Anterior region seen from dorsal $\times 41$	B. Prostomium seen from ventral $\times 41$
C. First setigerous segment $\times 51.5$	D. Second setigerous segment $\times 51.5$
E. Typical biramous parapodium of 40th segment $\times 51.5$	F. Posterior region $\times 51.5$
G. Long slender seta $\times 312.5$	H. Shorter falcated seta $\times 312.5$

flattened and ribbon-like. Body color preserved in formalin is gray or dark gray. The surface epithelium is more closely papillated (Fig. 2, A).

Prostomium is small and inconspicuous. It is provided with a pair of small biarticulated palpi, which are separated from each other at a median portion, and with a pair of simple antennae. Prostomial eye is absent (Fig. 2, B). In these specimens proboscis did not protrude and could not be ascertained by dissection. Peristomium is provided with two pairs of tentacular cirri, of which the dorsal ones are slightly larger. Peristomium is separated by a shallow groove from prostomium.

The second (or first setigerous) segment is provided with dorsal and ventral cirri and a setigerous lobe between the cirri (Fig. 2, C). Its parapodium is biramous having the notopodium with a conical cirrophore, the length of which is longer than its width. The third segment resembles the second segment (Fig. 2, D). The typical true biramous parapodium appears on each posterior segment than the second setigerous segment. Notopodium has a dorsal cirrophore with a long dorsal cirrus. Neuropodium is provided with a small ventral cirrus. It is provided with a respective aciculum in both notopodium and neuropodium. Notopodium has a curved heavy acicular spine. Aciculum and acicular spine are located above the dorsal cirrophore and acicular spine disappears on 20 segments of posterior end (Fig. 2, E). Neuropodium is provided with one aciculum and two kinds of simple whorled setae. One of the neurosetae is long, slender and distally pointed and the other is shorter distally falcated with flurcated tip (Fig. 2, G, H).

At the posterior end parapodium becomes very small and is absent on last three segments. Pygidium has a pair of short cirri (Fig. 2, F).

P. matsunagaensis n. sp. has an acicular spine in notopodia, showing a character of genus *Ancistrosyllis*, but it should belong to the *Pilargis* through following reasons: 1) present species has a pair of antenna in the prostomium, 2) epithelial papillae are scattered over the most parts of its body.⁴⁾ Only two species (*A. groenlandica* McIntosh⁷⁾, *A. gracilis* Hesse¹⁾) belonged to genus *Ancistrosyllis* have papillated epithelium but the present species differs from these two species in the following points: 1) dorsal eye absent, 2) shorter setae distally falcated with flurcated tip are present on neuropodium, 3) dorsal cirrophore presents. The present species is also at once recognizable from each of the other six species of the genus *Pilargis*.^{3),4),9),13),14)}

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