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TWO NEW GENERA OF SIGALIONIDAE (POLYCHAETA)

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As pointed out in a recent publication dealing with a revision of some species referred to *Leanira* Kinberg (Pettibone, 1970), the numerous sigalionid species that have been described as members of this genus, or subsequently referred to it, represent a heterogeneous group of species. In the above revision, seven species and one synonym were referred to *Leanira* Kinberg (limited) and one species and three junior synonyms were placed in *Ehlersileanira* Pettibone. In this report, two additional groups are distinguished. This includes two new genera, two new species, three new combinations, and one junior synonym, listed below:

Neoleanira new genus

N. tetragona (Oersted) new combination
(= *Sigalion tetragonum* Oersted, 1845. Norway)

N. areolata (McIntosh) new combination
(= *Leanira areolata* McIntosh, 1885. Japan)
(= *Leanira calcis* Hartman, 1960. Southern California)

N. magellanica (McIntosh) new combination
(= *Leanira magellanica* McIntosh, 1885. Southern Chile)

Horstileanira new genus — *H. vanderspoeli* new species (= *Leanira sibogae* Horst, 1917—part. Dutch East Indies)

H. crosslandi new species (= *Leanira japonica.*—Monro, 1939. Not McIntosh, 1885. Red Sea)

In addition to the sigalionid collections in the Smithsonian Institution (USNM), material was obtained from the British Museum (Natural History), London (BMNH), through J. D. George, the South African Museum Cape Town (SAM), through J. H. Day, and the Zoological Museum Amsterdam (ZMA), through S. van der Spoel. Additional type material was examined at the Allan Hancock Foundation, Los Angeles (AHF), through the courtesy of O. Hartman. I wish to thank the above-mentioned individuals for their cooperation and help. The manuscript benefited from the suggestions of M. L. Jones and H. H. Hobbs, Jr., both of the Smithsonian Institution.

The three closely related species from the North Atlantic, North Pacific and South Pacific off southern Chile, referred herein to *Neoleanira* new genus, are unusual among the sigalionids in having a pair of long dorsal cirri on segment III. The lateral antennae are fused to the inner sides of the tentacular parapodia but are rather long, not inconspicuous as in many sigalionids.

The two new species from the Malay Archipelago and the Red Sea, described under *Horstileanira* new genus, are unusual among the sigalionids in having very prominent ctenidia on the tentacular parapodia as well as on the ceratophore of the median antenna. They also have prominent dorsal tubercles on segment III.

Abbreviations on Figures

I–IV, segments
ac, aciculum
au, auricle
br, branchia
buC, buccal cirrus
ct, ctenidia
ItL, inner tentacular lobe
lAn, lateral antenna
mAn, median antenna
nuO, nuchal organ
OpaS, outer palpal sheath
pa, palp

dC, dorsal cirrus
dTc, dorsal tentacular cirrus
dTu, dorsal tubercle
IpaS, inner palpal sheath
st, stylode
vC, ventral cirrus
vTc, ventral tentacular cirrus

Neoleanira new genus

Type-species: Sigalion tetragonum Oersted, 1845. Gender: feminine.

Diagnosis: Body elongate, depressed, with numerous segments (up to 300). Paired elytra numerous: on segments 2, 4, 5, 7, on alternate segments to 27, and on all succeeding segments. Elytra smooth, lacking tubercles; with or without delicate lateral borders of papillae. Digitiform branchiae and cuplike ctenidia, 3 per parapodium, from about segment VI posteriorly. Segment III with pair of long dorsal cirri on short cirrophores. Prostomium oval, partially fused to tentacular parapodia (I); ceratophore of median antenna stout, cylindrical, with small lateral auricles or ctenidia and long tapered style; lateral antennae rather long, tapered, fused to inner sides tentacular parapodia; palps very long, slender, tapered, emerging ventral to tentacular parapodia between large inner and small outer palpal sheaths. Tentacular parapodia (I) directed anteriorly, each with single aciculum, pair of tentacular cirri, and 2 bundles of capillary setae; inner or medial L-shaped tentacular lobe with thickened glandular ciliated ridge; with or without small dorsal ctenidium and without stylodes. Parapodia of segments II and III directed anteriorly; ventral buccal cirri (II) longer than following ventral cirri. Parapodia biramous. Notopodia with circlet of stylodes; notosetae numerous, capillary, finely to coarsely spinous. Neuropodia with bracts: 2 postsetal with stylodes and low presetal. Neurosetae forming upper vertical groups anterior to upper postsetal bracts, transverse subacicular groups dorsal to lower postsetal bracts, and lower diagonal groups within short presetal bracts. Neurosetae all compound, spinigerous, with blades relatively short and canaliculate; compound spinigers of segments II and III similar to those of following segments except more slender and with longer blades. Ventral cirri short, subulate. Pharynx with 11 pairs papillae and 2 pairs jaws.

Key to the Species of *Neoleanira*

1. Elytra with borders entire, without lateral fringes of papillae. [Ventral ctenidia of middle and posterior segments small, clavate (fig. 7c). Branchiae without prominent basal spurlike processes (fig. 7a, c)] ..... *N. magellanica* (McIntosh) new combination
1′. Elytra with delicate lateral fringes of papillae (absent on more anterior elytra) 2
2. Ventral ctenidia of middle and posterior segments small, clavate (fig. 4b). Branchiae without prominent basal spurlike processes (fig. 4a, b). ..... *N. tetragona* (Oersted) new combination

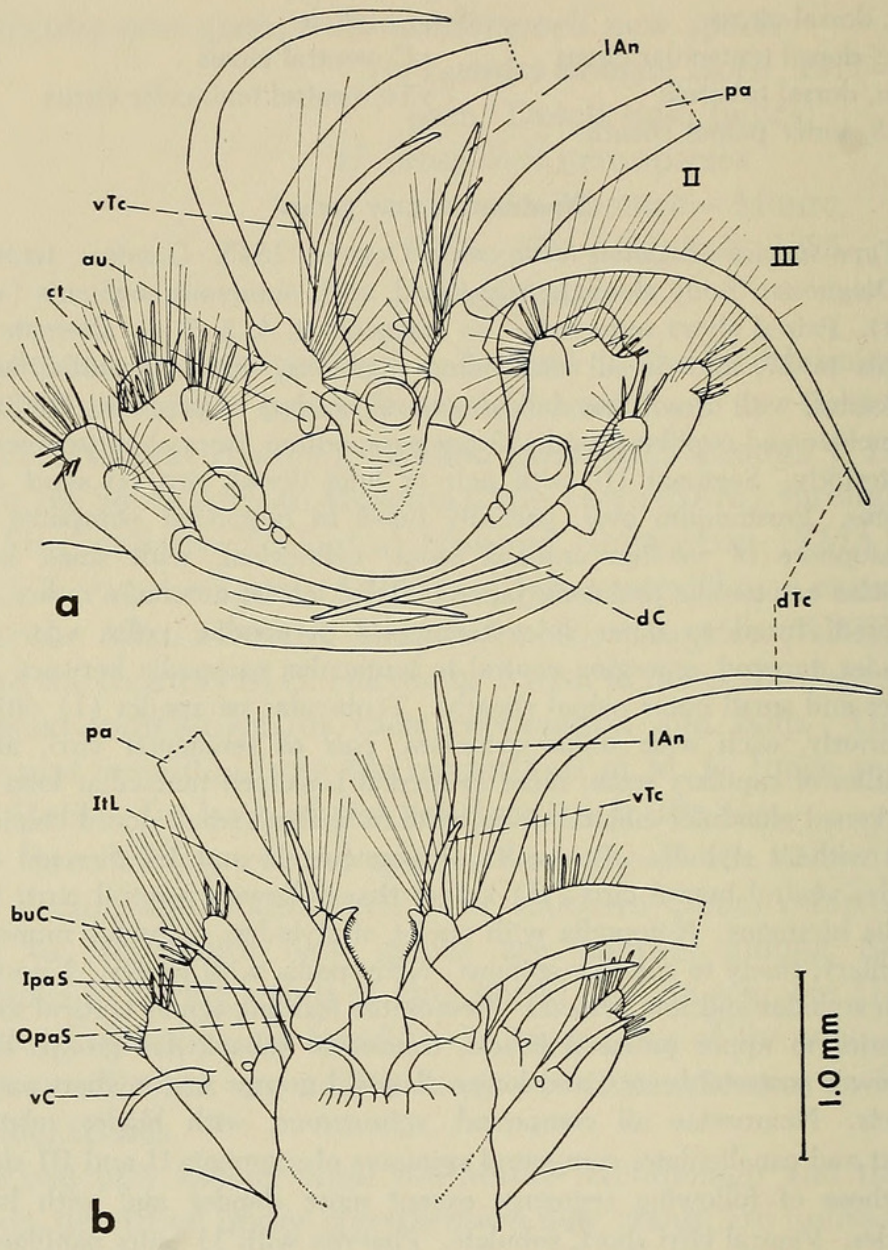

FIG. 1. *Neoleanira tetragona* (Gulf of Maine, USNM 42188): a, Anterior end, dorsal view; style of median antenna and elytra missing; b, anterior end, ventral view.

2′. Ventral ctenidia of middle and posterior segments large, boot-shaped (fig. 6a, b). Branchiae with prominent basal spurlike processes (fig. 6a, b). ____ *N. areolata* (McIntosh) new combination

Neoleanira tetragona (Oersted) new combination
Figures 1–4

Sigalion tetragonum Oersted, 1845, p. 404, pl. 5: figs. 5, 11.
Leanira tetragona.—Malmgren, 1865, p. 88, pl. 11: fig. 14 (synonymy).

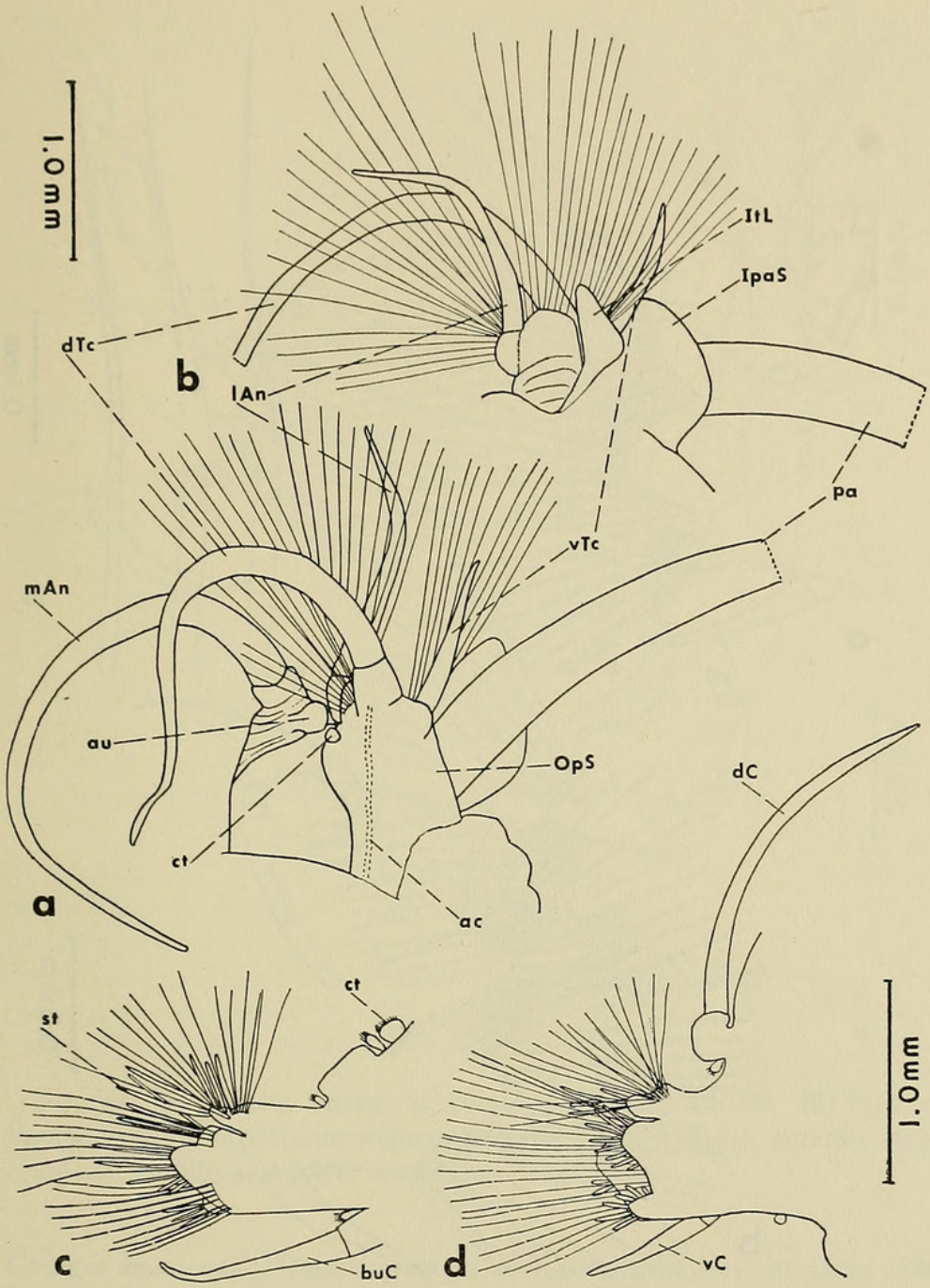

Fig. 2. *Neoleanira tetragona* (Gulf of Maine, USNM 42188): a, Prostomium and right tentacular parapodium, lateral or outer view; b, left tentacular parapodium, inner view; c, parapodium from segment II, anterior view; d, parapodium from segment III, posterior view.

—Kirkegaard, 1961, p. 216.—Pettibone, 1963, p. 53, fig. 10c (synonymy).

Leanira yhleni.—McIntosh, 1874, p. 268, pl. 10: fig. 14. [Not Malmgren, 1867].

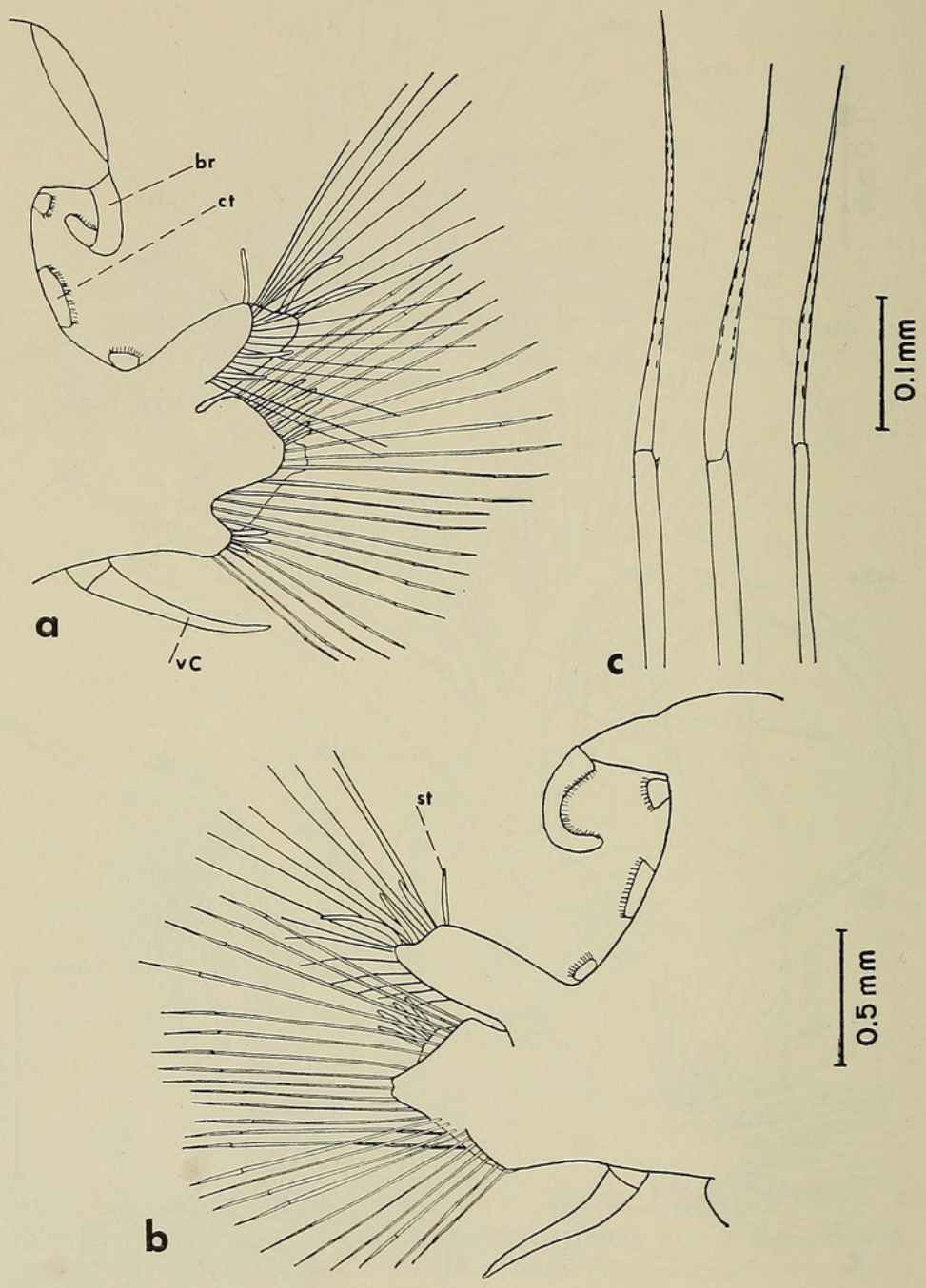

Fig. 3. *Neoleanira tetragona* (Gulf of Maine, USNM 42188): a, Parapodium from anterior region, posterior view; b, same, anterior view; c, upper, middle and lower neurosetae from same.

Sthenolepis tetragona.—Hartman, 1965, p. 55.—Not Day, 1967, p. 113.

Material examined: Anticosti, Gulf of St. Lawrence, Canada, 384 meters [by McIntosh (1874) as *Leanira yhleni*; BMNH 1921: 5: 1: 657]. Numerous specimens from Gulf of St. Lawrence, Gulf of Maine,

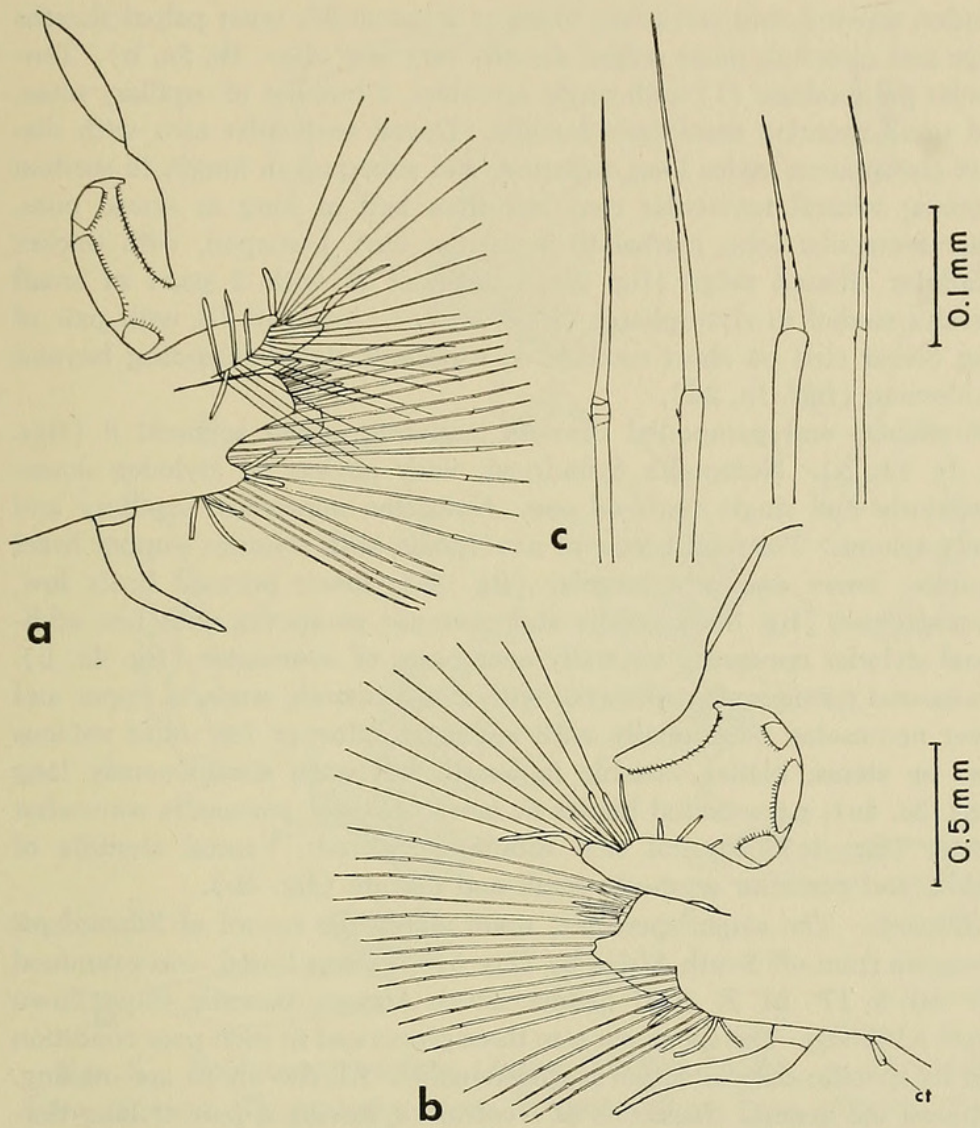

FIG. 4. *Neoleanira tetragona* (Gulf of Maine, USNM 42188): a, Parapodium from posterior region, posterior view; b, same, anterior view; c, upper, middle and lower neurosetae from same.

Georges Bank, and Massachusetts to off Chesapeake Bay, in 40 to 1660 meters; also in plankton (USNM).

Description: Length to 200 mm, width to 8 mm, including setae, segments up to 300. Elytra large, overlapping, covering middorsum except in anterior region, oval to subreniform in shape, transparent, smooth, without tubercles; except in more anterior segments, elytra fringed with delicate papillae on lateral borders. Prostomium wider than long, with stout cylindrical ceratophore of median antenna bearing small lateral auricles or ctenidia; style of median antenna long and slender (figs. 1a, 2a). Lateral antennae rather long—longer than prostomium and ventral tentacular cirri (figs. 1a, b; 2a, b). Eyes lacking. Palps very long,

slender, tapered, and extending to about segment 20; inner palpal sheaths large and rounded; outer palpal sheaths very low (figs. 1b, 2a, b). Tentacular parapodium (I) with single aciculum, 2 bundles of capillary setae, and small rounded ctenidium dorsally. Dorsal tentacular cirri with distinct cirrophores; styles long, tapering, and subequal in length to median antenna; ventral tentacular cirri less than half as long as dorsal ones. Inner tentacular lobe, medial to tentacular cirri, L-shaped, with thicker glandular ciliated ridge (fig. 2b). Segment II with 2 pairs of small ctenidia medial to elytrophores (figs. 1a, 2c). Segment III with pair of long dorsal cirri on short rounded cirrophores; styles extending beyond middorsum (figs. 1a, 2d).

Branchiae and parapodial ctenidia beginning about segment 6 (figs. 3a, b; 4a, b). Notopodia cylindrical, with circlets of stylodes dorsoposteriorly and single terminal one. Notosetae numerous, capillary and finely spinous. Postsetal bracts of neuropodia with stylodes—upper bract truncate, lower one subtriangular (fig. 3a); lower presetal bract low, inconspicuous (fig. 3b); middle and posterior parapodia with few additional stylodes appearing ventrally near bases of neurosetae (fig. 4a, b). Compound spinigerous neurosetae with stems smooth; some of upper and lower neurosetae occasionally with subdistal spine or few faint spinous rows on stems; blades variable in length but none conspicuously long (figs. 3c, 4c); neuropodial blades in more posterior parapodia somewhat shorter (fig. 4c). Ventral cirri subulate, tapered. Ventral ctenidia of middle and posterior segments small and clavate (fig. 4b).

Remarks: The single specimen, upon which the record of *Sthenolepis tetragona* from off South Africa by Day (1967) was based, was examined [33° 50′ S, 17° 21′ E, 1097 meters, South African Museum Cape Town (SAM A19768)]. The specimen is in three pieces and in such poor condition that its specific determination is questionable. All the elytra are missing. It shows the general characters of *Neoleanira*, having a pair of long dorsal cirri on segment III (not shown on Day's figure).

Distribution: Siberian Arctic, Davis Strait, Gulf of St. Lawrence to off Chesapeake Bay, Iceland, Norway to the Azores, Mediterranean, and Adriatic. In 40 to 2200 meters.

Neoleanira areolata (McIntosh) new combination
Figures 5, 6

Leanira areolata McIntosh, 1885, p. 151, pl. 21: fig. 3, pl. 25: figs. 8, 9, pl. 13A: fig. 1.—Moore, 1903, p. 426.—Uschakov, 1950, p. 164, fig. 7; 1955, p. 163, figs. 35, C, 44A-D; 1965, p. 143, figs. 35, C, 44, A-D.—Levenstein, 1961, p. 152.

Sthenolepis areolata.—Moore, 1910, p. 391.—Chamberlin, 1919, p. 90.

Leanira calcis Hartman, 1960, p. 82, pl. 4: figs. 1–5.

Material examined: JAPAN: South of Yedo, 35° 11′ N, 139° 28′ E, 631 meters, green mud, *Challenger* station 232, 12 May 1875—Holotype

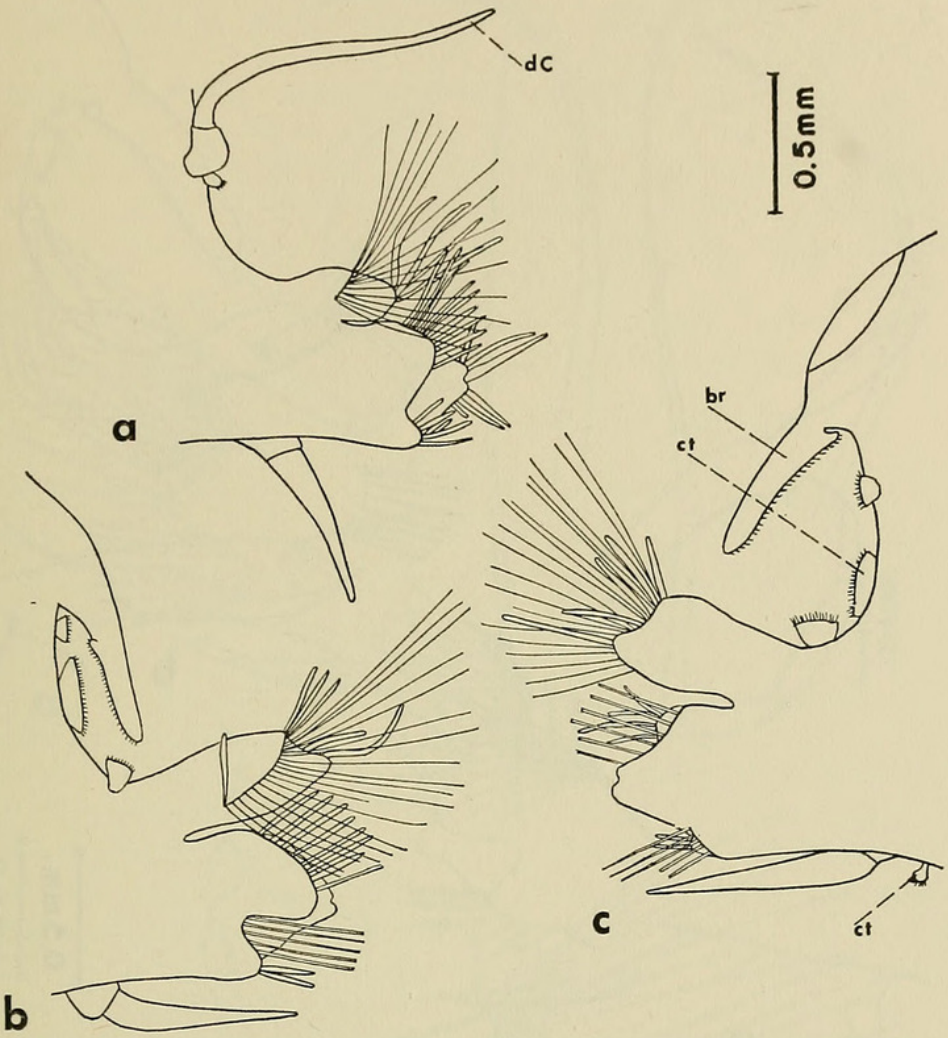

Fig. 5. *Neoleanira areolata* (Japan, USNM 5358): a, Parapodium from segment III, posterior view; b, parapodium from anterior region, posterior view; most of blades of neurosetae missing; c, same, anterior view.

of *Leanira areolata* (BMNH 1885: 12: 1: 116). Sagami Bay, 280 meters, green mud, *Albatross* station 3698, 5 May 1900—1 specimen (USNM 5358); 916-1370 meters, green mud, *Albatross* station 3696, 5 May 1900 —2 specimens (USNM 5357). WASHINGTON: 47° 27′ N, 125° 42′ W, 1390 meters, green mud, *Albatross* station 3069, 28 June 1889—1 specimen (USNM 42192). CALIFORNIA: Off Monterey Bay, 1593 meters, *Albatross* station 4538, 31 May 1904—1 specimen (USNM 16858). Vicinity San Diego, 1174–1208 meters, *Albatross* station 4382, 18 March 1904—1 specimen (USNM 16984). Off southern California, 32° 40′ N, 117° 31′ W, 1503 meters, green mud, *Albatross* station 2923, 19 January 1889—1 specimen (USNM 42191). San Nicolas Basin, 1584 meters, *Velero* station 6340–59—Holotype of *Leanira calcis* (AHF).

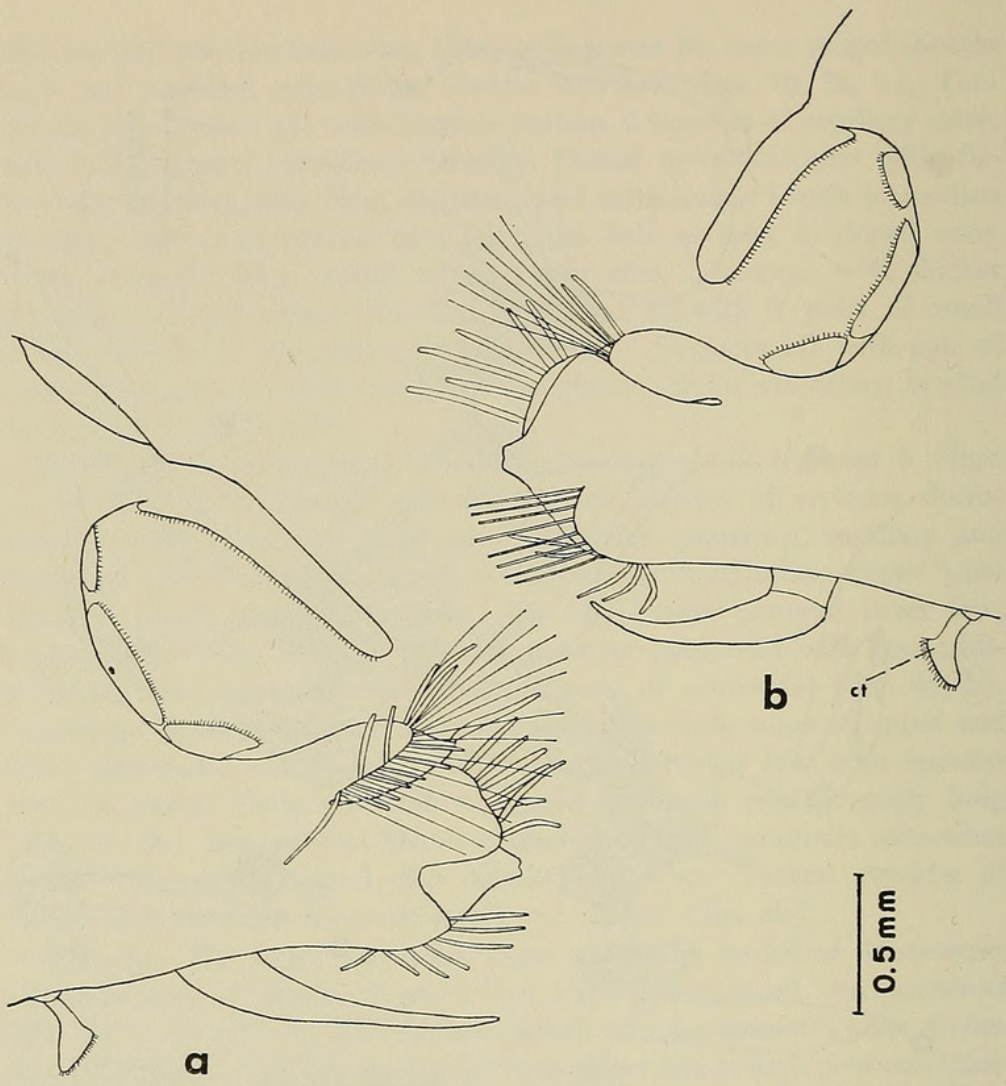

Fig. 6. *Neoleanira areolata* (Japan, USNM 5358): a, Parapodium from middle region, posterior view; most of blades of neurosetae missing; b, same, anterior view.

Type-material: The holotype of *Leanira areolata* (BMNH) is a complete specimen, 160 mm long, 9 mm wide, including setae, and has about 185 segments. Most of the elytra are missing as are most of the blades of the neurosetae. The holotype of *Leanira calcis* (AHF) consists of a middle fragment, 65 mm long, 10 mm wide, including setae, and about 44 segments; anterior and posterior ends and all the elytra are missing.

Description: Length to 200 mm, width to 9 mm, including setae, segments 200 or more. Elytra large, overlapping, nearly covering middorsum, transparent, smooth, without tubercles; except in more anterior segments, elytra fringed with delicate papillae on lateral borders. Prostomium and tentacular parapodia similar to those of *N. tetragona*. Segment II with 2 pairs of small ctenidia medial to elytrophores. Segment III with pair of long dorsal cirri on short globular cirrophores (fig. 5a).

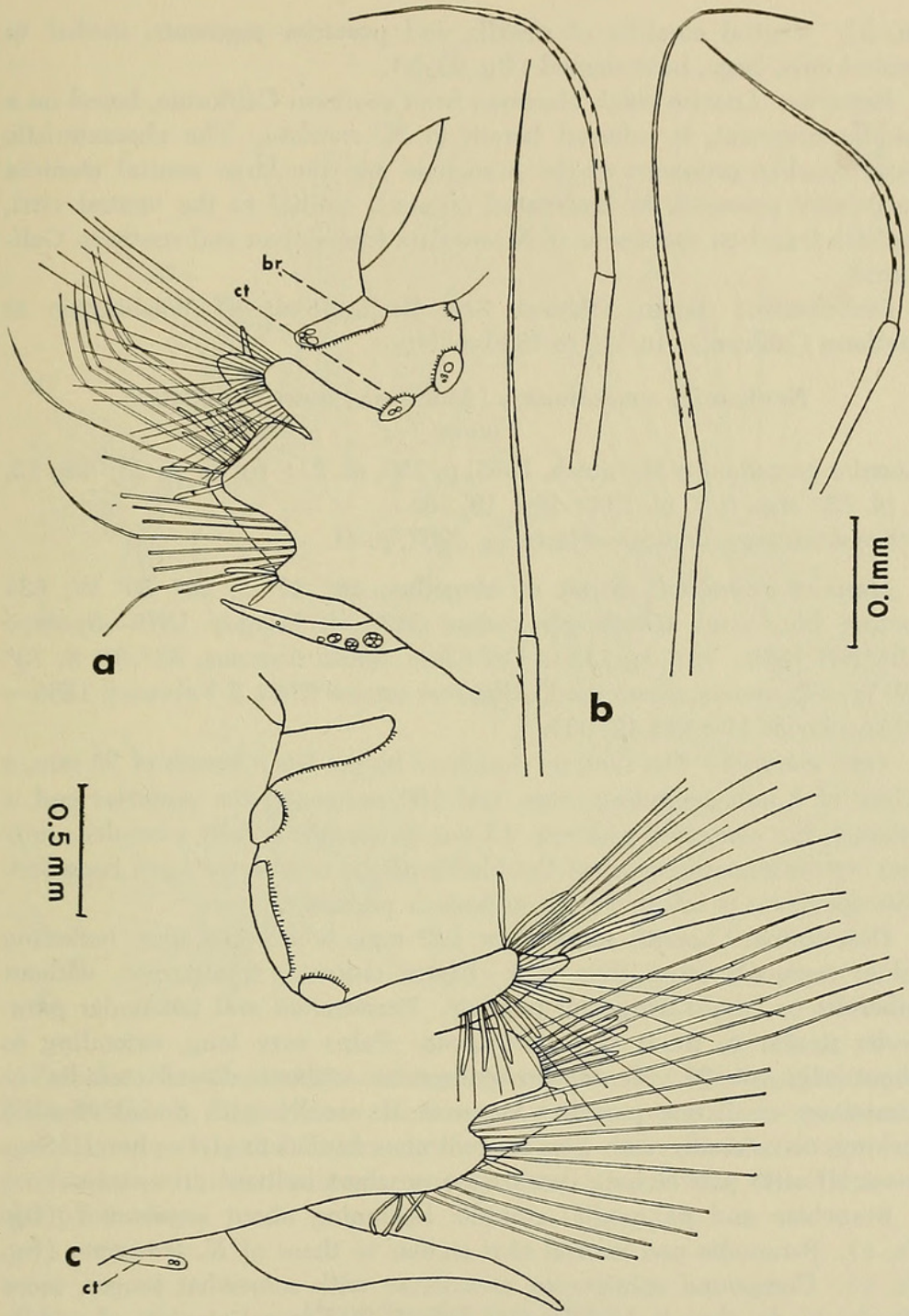

FIG. 7. *Neoleanira magellanica* (Syntype, BMNH 1885: 12: 1: 115): a, *Parapodium* from anterior region, posterior view; some of blades of neurosetae missing; b, upper, middle and lower neurosetae from same; c, parapodium from middle region, posterior view.

Branchiae and parapodial ctenidia beginning about segment 6; branchiae with prominent basal spurlike processes (figs. 5b, c; 6a, b). Parapodia and ventral cirri similar to those of *N. tetragona* (figs. 5b, c;

6a, b). Ventral ctenidia of middle and posterior segments, medial to ventral cirri, large, boot-shaped (fig. 6a, b).

Remarks: *Leanira calcis* Hartman from southern California, based on a middle fragment, is referred herein to *N. areolata*. The characteristic basal spurlike processes of the branchiae and the large ventral ctenidia (accessory processes or fimbriated organs), medial to the ventral cirri, are also found on specimens of *N. areolata* from Japan and southern California.

Distribution: Japan, Okhotsk Sea, Bering Sea, off Washington to southern California. In 110 to 4820 meters.

Neoleanira magellanica (McIntosh) new combination
Figure 7

Leanira magellanica McIntosh, 1885, p. 150, pl. 21: fig. 7, pl. 23: fig. 13, pl. 25: figs. 6, 7, pl. 13A: figs. 19, 20.
Sthenolepis magellanica.—Hartman, 1967, p. 41.

Material examined: Strait of Magellan, 48° 27′ S, 74° 30′ W, 631 meters, blue mud, *Challenger* station 306A, 2 January 1876—Syntype (BMNH 1885: 12: 1: 115). Off Chile, South America, 53° 01′ S, 73° 42′ W, 675 meters, green mud, *Albatross* station 2780, 2 February 1888—32 specimens (USNM 42193).

Type material: The syntype examined by me has a length of 75 mm, a width of 8 mm, including setae, and 100 segments; the posterior end is missing; the elongated pharynx, 13 mm in length, is fully extended; only one elytron remains; most of the blades of the neurosetae have been lost. The specimen is infested with protozoan parasites.

Description: Length more than 140 mm, width 7–8 mm, including setae; segments more than 150. Elytra delicate, transparent, without tubercles or lateral fringes of papillae. Prostomium and tentacular parapodia similar to those of *N. tetragona*. Palps very long, extending to about segment 30. Tentacular parapodia without dorsal ctenidia or sometimes small one present. Segment II usually with dorsal ctenidia lacking, occasionally with 1 or 2 small ones medial to elytrophores. Segment III with pair of long dorsal cirri on short bulbous cirrophores.

Branchiae and parapodial ctenidia beginning about segment 7 (fig. 7a, c). Parapodia and ventral cirri similar to those of *N. tetragona* (fig. 7a, c). Compound spinigerous neurosetae with somewhat longer, more slender blades than in *N. tetragona* (fig. 7b). Ventral ctenidia of middle and posterior segments small, clavate (fig. 7c).

Remarks: Protozoan parasites were present in the syntype of *N. magellanica* and noted by McIntosh (fig. 7a). They were also found in several specimens from off southern Chile (*Albatross* station 2780), penetrating all parts of the body, including the elytra. Those parasites in the elytra were mistakenly described as papillae by McIntosh (1885: 150, pl. 25: figs. 6, 7).

Distribution: South Pacific, off southern Chile. In 485 to 675 meters.

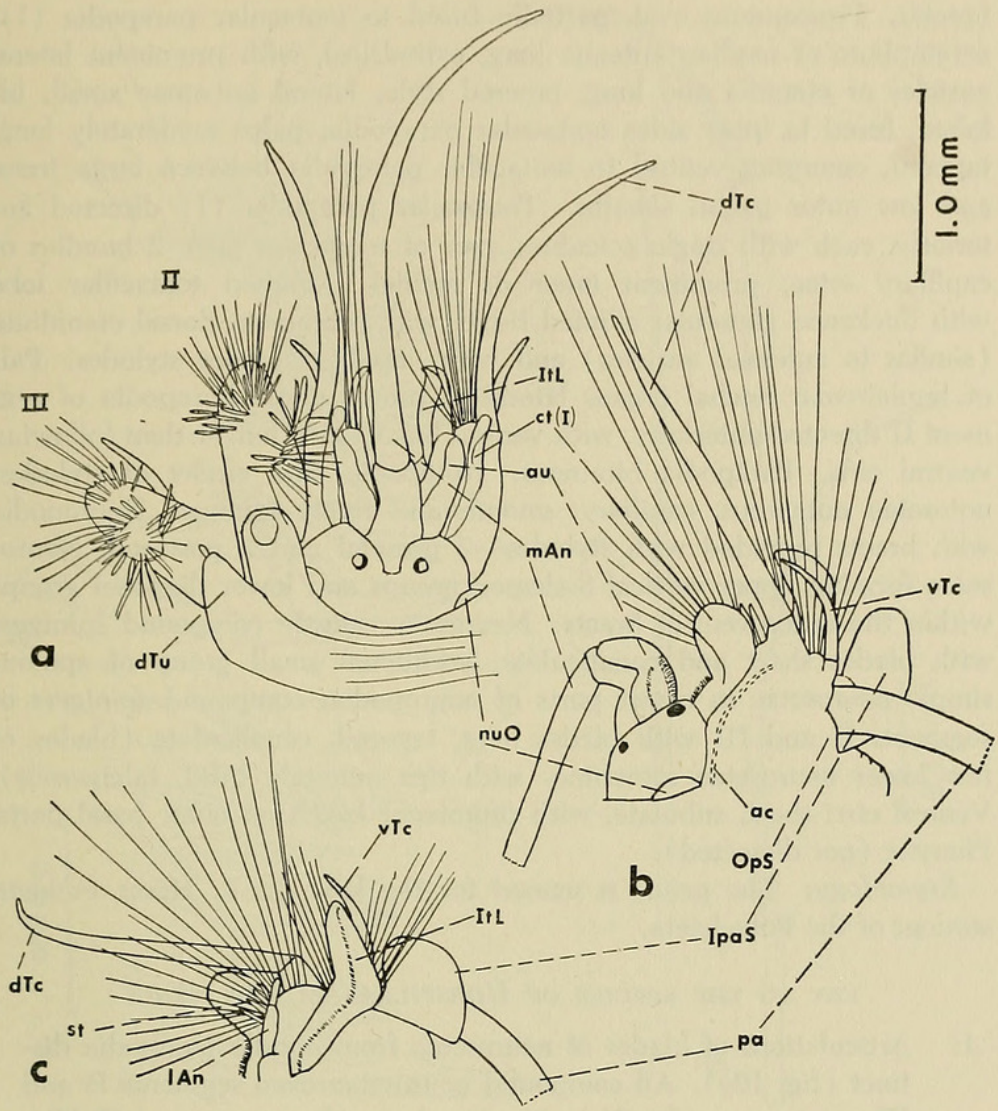

FIG. 8. *Horstileanira vanderspoeli* new genus, new species (Holotype, ZMA 526.6): a, Dorsal view anterior end, right parapodia of segments II and III cut off; palps hidden from view; b, outer or lateral view of prostomium and right tentacular parapodium; c, inner view of left tentacular parapodium.

Horstileanira new genus

Type-species: Horstileanira vanderspoeli new species. Gender: feminine.

Diagnosis: Body slender, depressed, sides nearly parallel, with numerous segments (more than 80). Paired elytra numerous: on segments 2, 4, 5, 7, on alternate segments to 27, and on all succeeding segments. Elytra smooth, lacking tubercles and papillae. Digitiform branchiae and cuplike ctenidia, 3 per parapodium, from about segment IV posteriorly. Segment III without dorsal cirri but with prominent conical dorsal tu-

bercles. Prostomium oval, partially fused to tentacular parapodia (I); ceratophore of median antenna long, cylindrical, with prominent lateral auricles or ctenidia and long, tapered style; lateral antennae small, bilobed, fused to inner sides tentacular parapodia; palps moderately long, tapered, emerging ventral to tentacular parapodia between large inner and low outer palpal sheaths. Tentacular parapodia (I) directed anteriorly, each with single aciculum, pair of tentacular cirri, 2 bundles of capillary setae; prominent inner or medial L-shaped tentacular lobe with thickened glandular ciliated ridge; with prominent dorsal ctenidium (similar to antennal auricles) and with variable number stylodes. Pair of semicircular nuchal organs lateral to prostomium. Parapodia of segment II directed anteriorly, with ventral buccal cirri longer than following ventral cirri. Parapodia biramous. Notopodia with circlet of stylodes; notosetae numerous, capillary, smooth and finely spinous. Neuropodia with bracts provided with stylodes—2 presetal and 2 postsetal. Neurosetae forming upper vertical S-shaped groups and lower diagonal groups within the anteroventral bracts. Neurosetae mostly compound spinigers with blades short and canaliculate; additional small group of spinous simple neurosetae in upper parts of neuropodia; compound spinigers of segments II and III with blades long, tapered, canaliculate (blades of few lower neurosetae sometimes with tips minutely bifid, falcigerous). Ventral cirri short, subulate, with prominent knobs on outer basal parts. Pharynx (not dissected).

Etymology: The genus is named for the late Dr. R. Horst, eminent student of the Polychaeta.

KEY TO THE SPECIES OF *HORSTILEANIRA* NEW GENUS

1. Articulations of blades of neurosetae from middle parapodia distinct (fig. 10e). All compound neurosetae from segments II and III spinigerous (fig. 9b). No dorsal ctenidia on segment II (fig. 8a) ..... *H. vanderspoeli* new species

1′. Articulations of blades of some of neurosetae from middle parapodia obscure (fig. 12d). Some of lower compound neurosetae of segments II and III bifid, falcigerous (fig. 11e). Pair of small mediodorsal ctenidia on segment II (fig. 11a) ..... *H. crosslandi* new species

Horstileanira vanderspoeli new species

Figures 8–10

Leanira sibogae Horst, 1917, p. 115 [in part; *Siboga* station 313].

Material examined: Anchorage east of Dangar Besar, Saleh Bay, sand, coral, and mud, up to 36 meters, *Siboga* station 313, 14/16 February 1900—Holotype (ZMA 526.6, as Syntype of *Leanira sibogae* Horst).

Type material: The holotype consists of two fragments: anterior one 18 mm in length, 4 mm in width, including the setae, and 36 segments;

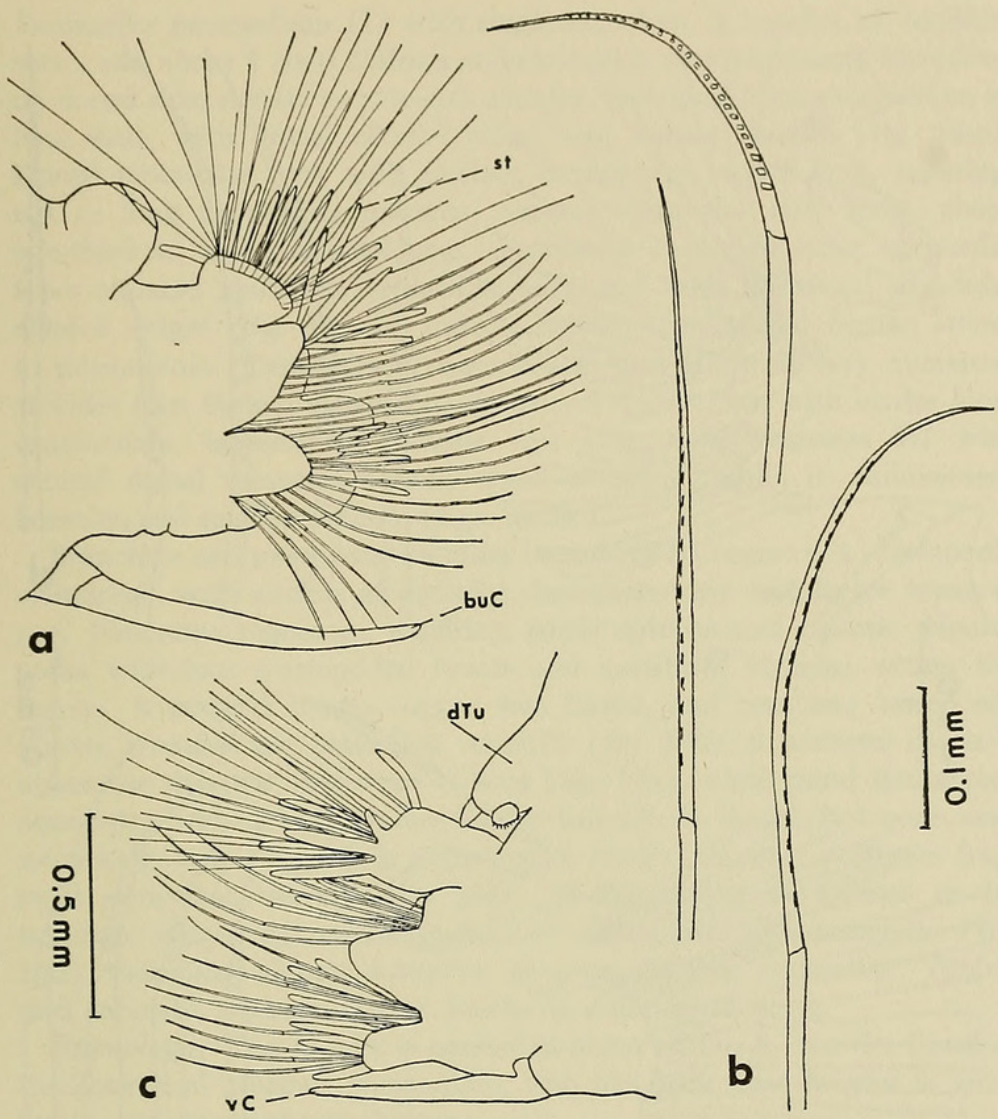

FIG. 9. *Horstileanira vanderspoeli* new genus, new species (Holotype, ZMA 526.6): a, Parapodium from segment II, posterior view; elytron missing; b, upper, middle and lower neurosetae from same; c, parapodium from segment III, anterior view.

middle fragment 12 mm in length, 3.5 mm in width, and 24 segments. It differs from the other syntypes described by Horst (1917) under *Leanira sibogae.*

Description: Length more than 30 mm, width 4 mm, including setae; segments more than 60. Elytra large, overlapping, covering middorsum except in anterior region, oval to subreniform in shape, opaque, milky white with smooth shiny surface, lacking tubercles and papillae. Prostomium wider than long, with long cylindrical ceratophore of median antenna bearing very prominent, somewhat curled auricles, basal half with longitudinal thickened ciliated ridges ventrally; style of median antenna

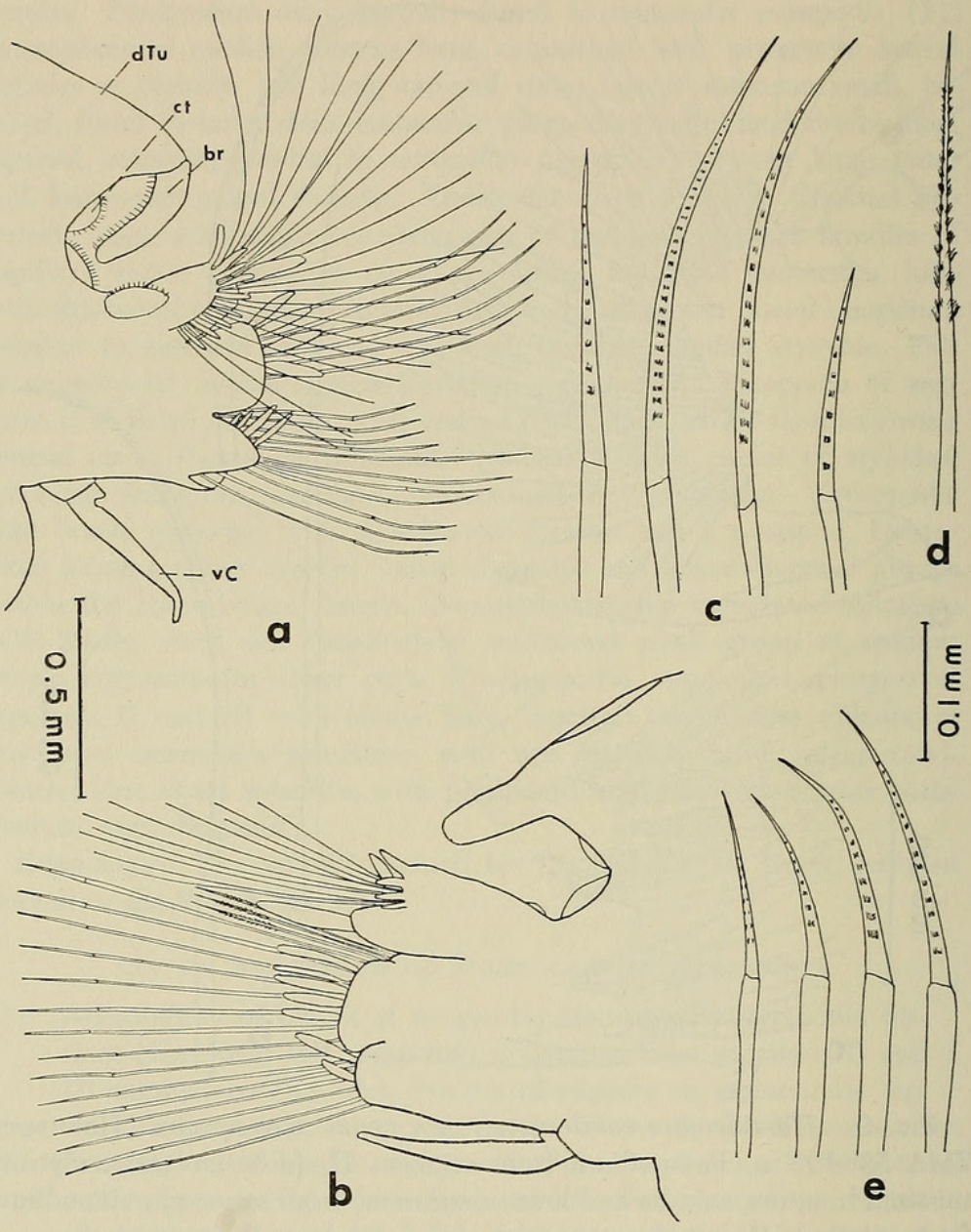

FIG. 10. *Horstileanira vanderspoeli* new genus, new species (Holotype, ZMA 526.6): a, Parapodium from anterior region, posterior view; b, parapodium from middle region, anterior view; c, upper, middle and lower neurosetae from same; d, upper simple neuroseta from same; e, upper, middle and lower neurosetae from separate middle fragment.

long and tapered (fig. 8a, b). Lateral antennae small, bilobed and attached to inner sides of tentacular parapodia (fig. 8c). Eyes 2 pairs: anterior pair twice size of posterior pair, hidden by antennal auricles; posterior pair lateral to base of median ceratophore (fig. 8a, b). Palps moderately long, tapered, extending to about segment 10; inner palpal sheaths large, rounded; outer palpal sheaths very small (fig. 8b, c).

Tentacular parapodium (I) with single aciculum, 2 bundles of capillary setae, and about 4 short filiform stylodes; with very prominent ctenidium on dorsal side, similar to antennal auricles, emerging from prostomium as long stem, with dorsal ciliated ridge, and flaring distally (fig. 8a-c). Dorsal tentacular cirri with distinct cirrophores; styles long, tapering, not so long as median antenna; ventral tentacular cirri short, about one-third as long as dorsal ones. Prominent L-shaped inner tentacular lobes situated medial to tentacular cirri, and with thickened glandular ciliated ridges (fig. 8a, c). Pair of semicircular nuchal organs lateral to prostomium. Parapodia of segments II and III with very numerous stylodes (fig. 9a, c); neurosetae compound spinigerous, with blades long, canaliculate, tapering to delicate tips (fig. 9b). Segment III with conical dorsal tubercles bearing small terminal papilla or rudimentary branchia and small ctenidium (figs. 8a; 9c).

Branchiae and parapodial ctenidia beginning on segment 4. Notopodia cylindrical, with circlets of stylodes dorsoposteriorly and larger terminal one. Notosetae numerous, capillary, finely spinous and smooth. Neuropodia with four neuropodial bracts and numerous stylodes within the bracts: 2 presetal bracts—upper one larger, and truncate; lower one shorter, rounded and extending ventrally (fig. 10b); 2 postsetal bracts—upper one truncate, lower one conical (fig. 10a). Compound spinigerous neurosetae with smooth stems; blades variable in length but none conspicuously long (fig. 10c); neuropodial blades of more posterior fragment somewhat shorter (fig. 10e). Shorter group of spinous or bipectinate simple neurosetae present in upper part of neuropodia (fig. 10d), sometimes absent, however, in more anterior parapodia. Ventral cirri subulate, with prominent knobs on outer basal parts.

Etymology: The species is named in honor of Dr. S. van der Spoel of the Zoological Museum Amsterdam, who has been most helpful in lending me specimens of polychaetes.

Distribution: Dutch East Indies. Up to 36 meters.

Horstileanira crosslandi new species
Figures 11, 12

Leanira japonica.—Monro, 1939, p. 171 [not McIntosh, 1885].

Material examined: Shubuk, Red Sea, 9 meters, C. Crossland, collector, 1904–5—Holotype (BMNH 1941: 4: 4: 225); Paratype (BMNH 1941: 4: 4: 226); Paratype (USNM 42194).

Type material: The three type-specimens are incomplete posteriorly. The holotype has a length of 40 mm, width of 3.5 mm, including setae, and 86 segments. The smaller paratype (BMNH 1941: 4: 4: 226) has a length of 15 mm, width of 4 mm, and 48 segments. The larger paratype (USNM 42194) has a length of 34 mm, width of 5 mm, and 77 segments.

Description: Length more than 40 mm, width 3.5 to 5 mm, including setae, segments more than 90. Elytra large, overlapping, covering mid-

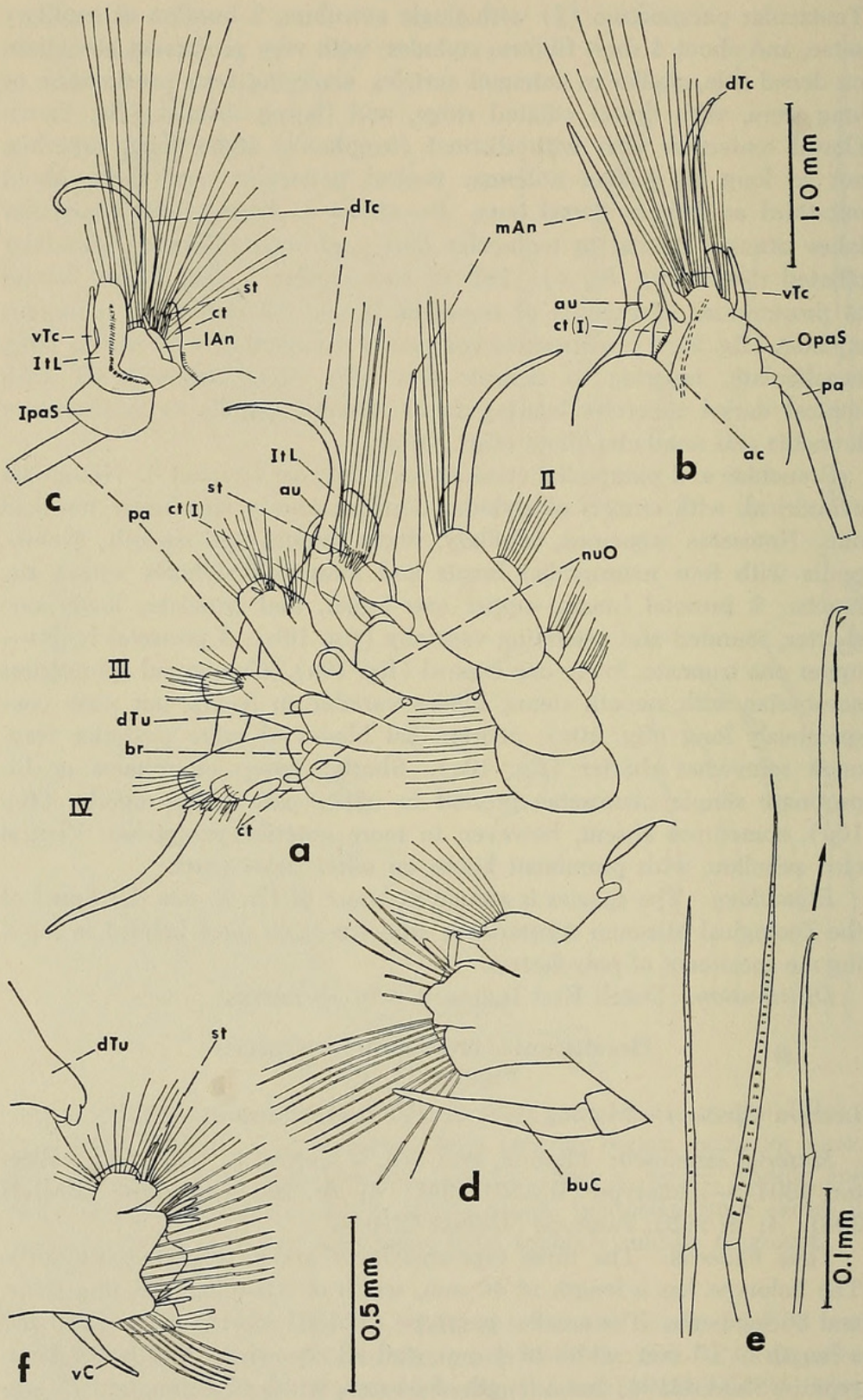

FIG. 11. *Horstileanira crosslandi* new species (Holotype, BMNH 1941: 4: 4: 225): a, Anterior end, dorsal view, elytra on left side removed; b, prostomium and left tentacular parapodium, outer or lateral

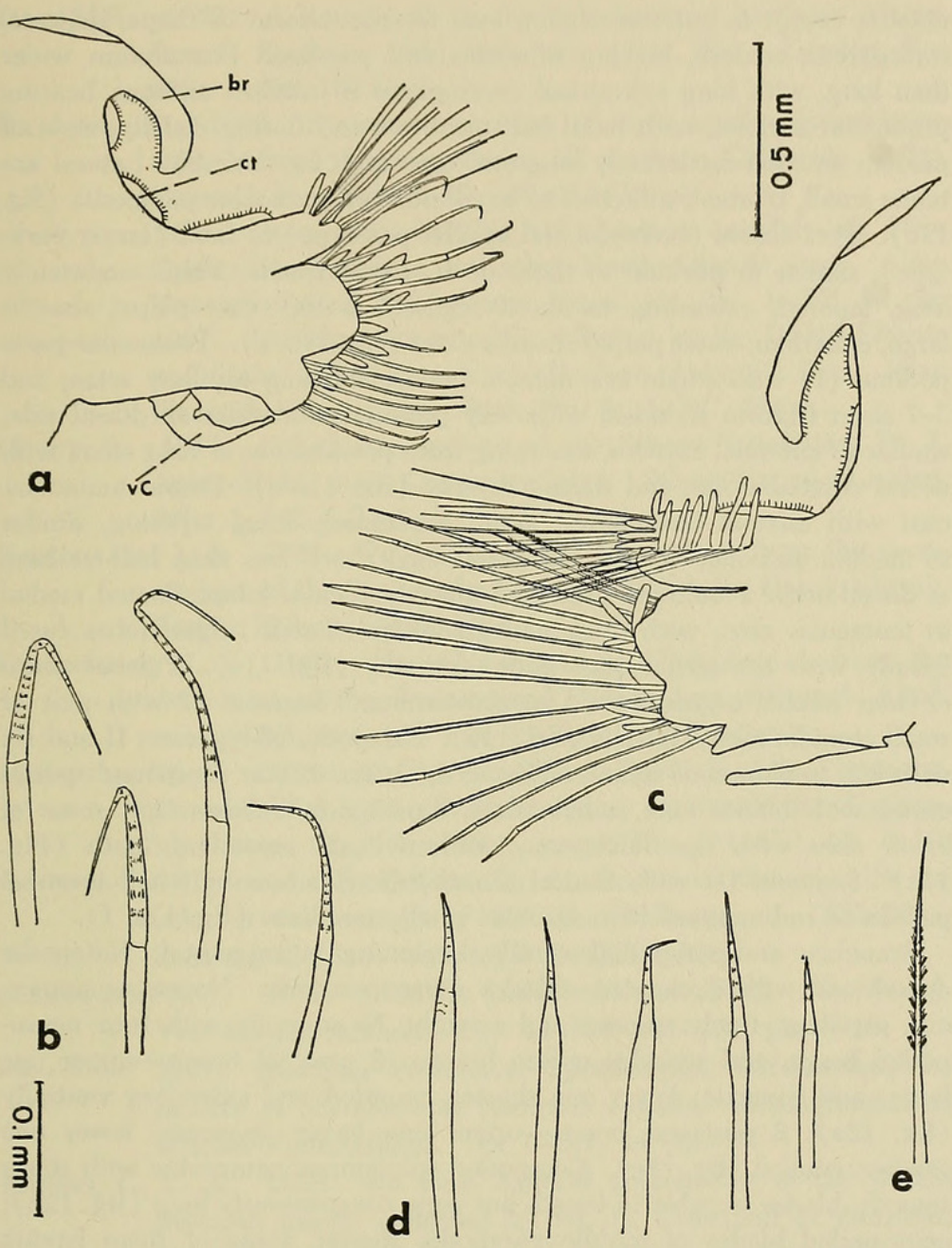

FIG. 12. *Horstileanira crosslandi* new species (Holotype, BMNH 1941: 4: 4: 225): a, Parapodium from anterior region, anterior view; b, upper, middle and lower neurosetae from same; c, parapodium from middle region, posterior view; d, upper, middle and lower neurosetae from same; e, upper simple neuroseta from same.

←

view; c, left tentacular parapodium, inner view; d, parapodium from segment II, anterior view, e, upper, middle and lower neurosetae from same; f, parapodium from segment III, posterior view.

dorsum except in anterior region, oval to subreniform in shape, delicate, transparent, smooth, lacking tubercles and papillae. Prostomium wider than long, with long cylindrical ceratophore of median antenna bearing prominent auricles, with basal half narrower and flaring distally; style of median antenna moderately long and tapering (fig. 11a, b). Lateral antenna small, bilobed, attached to inner sides of tentacular parapodia (fig. 11c). Eyes absent (holotype and smaller paratype) or faint (larger paratype), similar in position to those of *H. vanderspoeli.* Palps moderately long, tapered, extending to about segment 8–10; inner palpal sheaths large, collarlike; outer palpal sheaths short (fig. 11b, c). Tentacular parapodium (I) with single aciculum, 2 bundles of long capillary setae, and 5–7 short filiform stylodes; with very prominent ctenidia on dorsal side, similar to antennal auricles, emerging from prostomium as long stem, with dorsal ciliated ridge, and flaring distally (fig. 11a-c). Dorsal tentacular cirri with distinct cirrophores; styles moderately long, tapering, similar to median antenna; ventral tentacular cirri short, less than half as long as dorsal ones. Prominent L-shaped inner tentacular lobes situated medial to tentacular cirri, with thickened glandular ciliated ridges; lobes fused basally with the large inner palpal sheaths (fig. 11c). Pair of semicircular nuchal organs lateral to prostomium. Segment II with pair of small ctenidia mediodorsally (fig. 11a). Parapodia of segments II and III with few to numerous stylodes (fig. 11d, f); neurosetae compound spinigerous, with blades long, canaliculate, tapering to delicate tips; some of lower ones with tips falcigerous, with delicate secondary tooth (Fig. 11e). Segment III with conical dorsal tubercles bearing small terminal papilla or rudimentary branchia and small ctenidium (fig. 11a, f).

Branchiae and parapodial ctenidia beginning on segment 4. Notopodia cylindrical, with circlets of stylodes dorsoposteriorly. Notosetae numerous, capillary, finely spinous and smooth. Neuropodia with four neuropodial bracts and stylodes within bracts: 2 presetal bracts—upper one larger and truncate; lower one shorter, rounded and extending ventrally (fig. 12a); 2 postsetal bracts—upper one larger, truncate; lower one smaller, conical (fig. 12c). Compound spinigerous neurosetae with stems smooth; blades variable in length but none conspicuously long (fig. 12b); neuropodial blades of middle parapodia shorter, some of them having obscure articulations (fig. 12d). Shorter groups of spinous or bipectinate simple neurosetae present in upper parts of neuropodia (fig. 12e); sometimes absent in more anterior parapodia. Ventral cirri subulate, with prominent knobs on outer basal parts.

Etymology: The species is named for the collector, the late Cyril Crossland.

Distribution: Red Sea. In 9 meters.

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