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POLYCHAETA

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Summary

An account is given of 63 species of polychaetes collected from Port Phillip Bay, Victoria. Of these eight are described as new species, eight represent new records for the Australian region, and a further 21 are recorded from the Victorian coasts for the first time.

Introduction

This paper gives an account of the Polychaeta collected during the ecological survey of Port Phillip Bay. The Polychaeta of the Australian region are as yet incompletely known and there are many gaps in the geographic coverage of studied collections. Port Phillip Bay lies within the cold-temperate Maugean Province as defined by Bennett and Pope (1960) and Knox (1963). This includes the coast E. of Robe in S. Australia, the Victorian coast, and Tasmania. Within the this region, the Victorian coast as a whole is a region of overlap between warm and cold temperate elements, and this is reflected in the polychaetes recorded.

McIntosh (1885), during the course of the 'Challenger' expedition, obtained the first polychaetes from this region, six species from 38 fm in Bass Strait. Benham (1915-16) recorded 24 species from the Victorian coast in his report on the polychaetes obtained by the F.I.S. 'Endeavour'. Augener (1922) in his account of the polychaetes from SE. and S. Australia collected by the Mortensen Pacific Expedition recorded 21 species, mainly from Port Hacking, but also including two species, *Glycera americana* and *Maldane sarsi*, from Port Phillip. In her review of the Nereidae Hartman (1953) included two species from Victoria.

The present collection comprises 63 species of which three have been determined to the genus only. Of the remaining 60 species, 44 have been recorded previously from the Australian region, eight comprise new records for the region and eight are new species. Twenty-one of the 44 species are recorded from the Victorian coast for the first time.

Holotypes and paratypes of new species described in this paper are deposited in the National Museum of Victoria.

Acknowledgements

We are grateful to Mr J. McNally, Director, for the opportunity of reporting on this interesting collection.

Species List

Family POLYNOIDAE
- *Harmothoe spinosa* Kinberg, 1855
- *Malmgrenia phillipensis* n.sp.
- *Paralepidonotus ampulliferus* (Grube, 1878)
- *Polyeunoa* sp.

Family SIGALIONIDAE
- *Sigalion ovigerum* Monro, 1924

Family PHYLLODOCIDAE
- *Eteone platycephala* Augener, 1913
- *Eulalia (Pterocirrus) magalhaesnsis* Kinberg, 1857
- *Notophyllum splendens* (Schmarda, 1861)
- *Phyllodoce duplex* McIntosh, 1885

Family HESIONIDAE
- *Nerimyra longicirrata* n.sp.

Family SYLLIDAE
Subfamily EUSYLLINAE
- *Eusyllis brevicirrata* n.sp.

Subfamily SYLLINAE
- *Syllis kinbergiana* Haswell, 1885
- *Trypanosyllis zebra* (Grube, 1860)

Family NEREIDAE
- *Ceratonereis costae* (Grube, 1840)
- *Ceratonereis mirabilis* Kinberg, 1866
- *Nereis cockburnensis* Augener, 1913
- *Nereis (Neanthes) caudata* Delle Chiaje, 1841
- *Perienereis amblyodonta* (Kinberg, 1865)
- *Perinereis nuntia brevicirris* (Grube, 1857)
- *Platynereis australis* (Schmarda, 1861)

Family NEPHTYDAE
- *Nephtys picta* Ehlers, 1868

Family Glyceridae
Glycera americana Leidy, 1855
Hemipodus australiensis n.sp.
Family Goniadidae
Goniada emerita Audouin & Milne Edwards, 1883
Family Eunicidae
Subfamily Eunicinae
Eunice antennata (Savigny, 1820)
Eunice australis Quatrefages, 1865
Eunice tentaculata Quatrefages, 1865
Eunice (Palolo) siciliensis Grube, 1840
Lysidice ninetta Audouin & Milne-Edwards, 1883
Subfamily Onuphinae
Diopatra aciculata n.sp.
Onuphis (Nothria) holobranchiata Marenzeller, 1879
Subfamily Lysaretinae
Oenone fulgida (Savigny, 1818)
Subfamily Lumbrinerinae
Lumbrineris latreilli Audouin & Milne Edwards, 1834
Subfamily Arabellinae
Arabella iricolor iricolor (Montagu, 1804)
Subfamily Dorvillelnae
Dorvillea australiensis (McIntosh, 1885)
Family Cirratulidae
Cirriformia filigera (Delle Chiaje, 1825)
Cirriformia tentaculata (Montagu, 1808)
Family Chaetopteridae
Chaetopterus variopedatus (Renier, 1804)
Family Orbiniidae
Haploscoloplos kerguelensis (McIntosh, 1885)
Family Opheliidae
Armandia lanceolata Willey, 1905
Family Maldanidae
Asychis glabra n.sp.
Family Pectinariidae
Pectinaria antipoda Schmarda, 1861
Family Terebellidae
Subfamily Trichobranchinae
Terebellides stroemi Sars, 1835
Subfamily Polycirrinae
Polycirrus porcata n.sp.
Subfamily Thelepinae
Thelepus setosus (Quatrefages, 1865)
Subfamily Terebellinae
Amphitrite rubra (Risso, 1828)
Artacamella dibranchiata n.sp.
Axionice harrissoni (Benham, 1916)
Eupolymnia nebulosa (Montagu, 1818)
Lanice conchilega (Pallas, 1776)
Pista typha (Grube, 1878)
Family Sabellidae
Subfamily Sabellinae
Branchiomma cingulata (Grube, 1870)
Sabellastarte indica (Savigny, 1826)
Sabellastarte longa (Kinberg, 1867)
Subfamily Fabricinae
Myxicola infundibulum (Renier, 1804)
Family Serpulidae
Subfamily Spirorbinae
Spirorbis (Paralaeospira) antarcticus Pixell, 1913
Spirorbis (Paralaeospira) sp.
Subfamily Serpulinae
Pomatoceros terraenovae Benham, 1927
Salmacina dysteri (Huxley, 1855)
? *Serpula* sp.
Temporaria polytrema (Phillippi, 1884)
Vermiliopsis acanthophora Augener, 1914
Vermiliopsis infundibulum Linnaeus, 1788

Family Polynoidae Malmgren 1867

Genus **Harmothoe** Kinberg, 1885

Harmothoe spinosa Kinberg, 1855

Harmothoe spinosa Kinberg, 1857-1910: 21, Pl. 31, fig. 31.
Harmothoe spinosa: Fauvel, 1916: 421, Pl. 8, figs. 8-9.

Material: Areas 5 (169) 17 (= number of specimens) (53) 1, 6 (137) 19, 7 (123) 8, (204) 5, 9 (178) 20, 10 (103-6) 4, 11 (190) 2, (195) 8, 12 (112-4) 2, 13 (92) 15, 14 (8) 1, (95) 2, 17 (170) 1, 19 (306) 1, 23 (7) 3, 24 (122) 1, 27 (47) 3, (138) 3, 28 (286) 2, 31 (10) 3, 31 (310) 1, 49 (237) 2, 51 (270) 6, 55 (148) 2, 59 (214) 1, 61 (239) 3, 63 (16) 2, (19-21) 9, (162) 2, 67 (216) 1, 69 (97) 7.

Remarks: There are numerous specimens of this highly variable species. The maximum size is 50 mm. This is much smaller than the size range of the specimens recorded from Antarctica, which measure up to 120 mm. The development of the elytral fringe is highly variable both in the elytra on any one specimen as well as between elytra on different individuals. Only a few individuals have elytra with the globular vesicles which are often characteristic of the Antarctic specimens.

Genus **Malmgrenia** McIntosh, 1874

Malmgrenia phillipensis n.sp.

Figs. 1-6

Material: Areas 14 (175) 2, 31 (10) 1.

Description:

Size: Length of body up to 20 mm, width including parapodia 6 mm, segments number 38.

Colour in Alcohol: Dorsum reddish brown to cream, ventrum pale cream, lateral antennae and dorsal cirri brown.

Prostonium: Fig. 1. Slightly broader than long, without peaks; two pairs of eyes, the posterior pair small, circular, and situated dorsally at the hind margin of the prostomium; the anterior pair larger, oval and more widely spaced, situated in the middle region of the prostomium and on the extreme lateral margins.

Lateral antennae short, tapering to fine points, inserted subterminally and sparsely covered with fine papillae; median antenna with a large ceratophore, stout, tapering to a fine point and nearly 2·5 times the length of the laterals. Palps large, very stout at the base and tapering sharply.

Elytra: Fig. 2. 15 pairs, completely covering the dorsum and overlapping middorsally. They are oval with lateral notches, translucent in the smaller specimens, and with an anterior pigment patch and pigmented border in the larger specimens, the pigment composed of hexagonal granules (Fig. 3). In all specimens the elytra are characterized by having two longitudinal parallel ridges running two thirds the length of the dorsal surface (Fig. 5). Elytral tubercles absent, except for a small number of minute tubercles on the posterior quarter. Elytra without fringe.

Parapodia: Fig. 4. Dorsal cirri long and tapering, sparsely covered with fine papillae; ventral cirri short and finger-like with a fine tip. Notopodium short with a projecting acicular lobe; neuropodium with a prominent distal acicular lobe.

Setae: Notosetae 20-30 in number, translucent, moderately stout, slightly curved, tapering gradually to somewhat blunt conical tips, and with transverse rows of fine serrations (Fig. 5). Neurosetae 30-40 in number, slender, translucent; the upper supra-acicular ones with long spinous regions and faintly bifid tips; lower supra-acicular ones stouter with a more prominent secondary distal tooth. Subacicular neurosetae with shorter, somewhat enlarged spinous regions and more pronounced claw-like bifid tips (Fig. 6).

Holotype G1736 and Two Paratypes G1737: Nat. Mus. Vict. Coll.

Type Locality: Area 31 (10).

Remarks: Species of this genus are usually commensal with echinoderms, but in this case there is no information available on its habitat. It most closely resembles *M. marquesensis* in general appearance but differs in having papillae on the lateral antennae and dorsal cirri, in the shape and number of spinous rows on the setae, and in having pronounced longitudinal ridges on the elytra; this lattermost character is not found in any other species.

Malmgrenia phillipensis n.sp.
Fig 1—Prostomium and first segment in dorsal view.
Fig. 2—Typical elytral surface.
Fig. 3—Enlarged view of elytral pigment spots.
Fig. 4—Typical parapodium in posterior view.
Fig. 5—Two typical notosetae.
Fig. 6—A subacicular neuroseta.

Genus **Paralepidonotus** Horst, 1915

Paralepidonotus ampulliferus (Grube, 1878)

Lepidonotus ampulliferus Gravier, 1901: 214, Pl. 7, figs. 111-113.
Paralepidonotus ampulliferus: Day, 1967: 47-48, Figs. 1.4a-f

Material: Area 5 (169) 1.

Remarks: The single specimen agrees perfectly with Gravier's and Day's descriptions. The elytra have the characteristic large flask shaped vesicles along their posterior margins. This is the first record of this species from Australia.

Genus **Polyeunoa** McIntosh, 1885

Polyeunoa sp.

Material: Area 5 (169) 2.

Remarks: Two anterior fragments which cannot be positively identified. The elytra have a broad band of brown pigment on their inner margins.

Family Sigalionidae Malmgren, 1867

Genus **Sigalion** Audouin & Milne Edwards, 1832

Sigalion ovigerum Monro, 1924

Sigalion ovigerum Monro, 1924: 47, Figs. 10-12.

Material: Area 69 (222) 1.

Remarks: Typical. Recorded previously from Port Jackson.

Family Phyllodocidae Williams, 1852

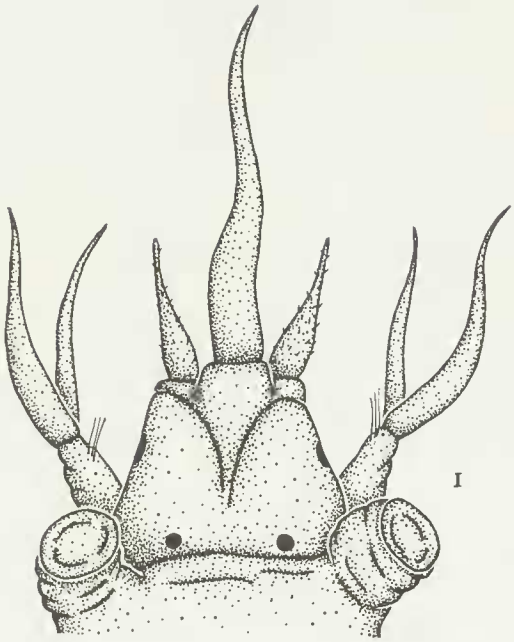
Genus **Eteone** Savigny, 1818

Eteone platycephala Augener, 1913

Eteone platycephala Augener, 1913: 136, Pl. 3, figs. 44-45, Fig. 9a-b.

Material: Area 5 (169) 2.

Remarks: Typical. Recorded previously from W. Aust.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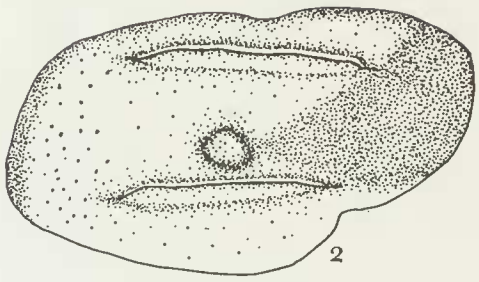
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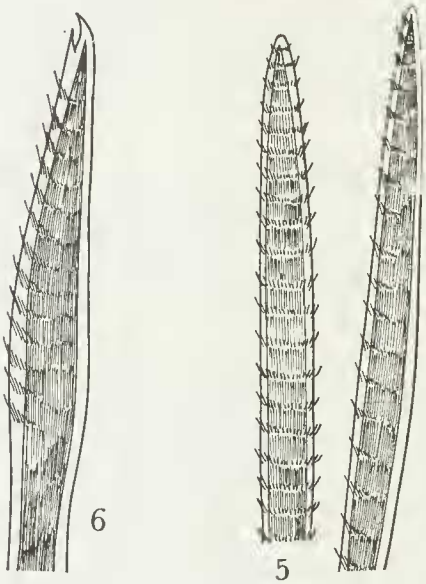
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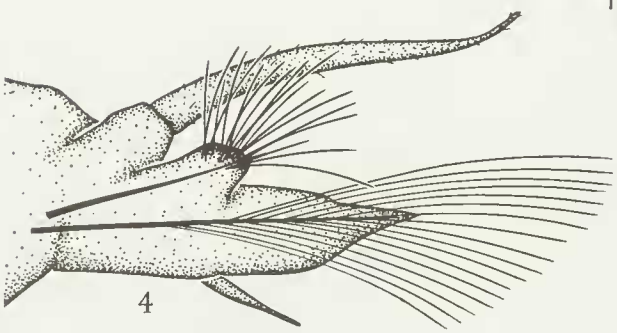
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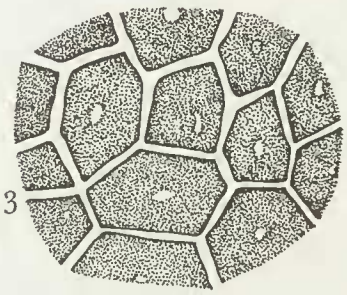
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Genus **Eulalia** Savigny, 1818
Eulalia (Pterocirrus) magalhaensis Kinberg, 1857

Eulalia magalhaensis Kinberg, 1857-1910: 55, Pl. 33, fig. 1.
Eulalia (Pterocirrus) magelhaensis: Fauvel, 1932: 77.

MATERIAL: Areas 14 (95) 1, 61 (37) 1.

REMARKS: Typical. Recorded previously from Port Jackson, N.S.W., Spencer's Gulf and St. Vincent's Gulf, S. Aust., and Derwent River, Tasm.

Genus **Notophyllum** Oersted, 1843
Notophyllum splendens (Schmarda, 1861)

Macrophyllum splendens Schmarda, 1861: 82, Pl. 9, fig. 227.
Notophyllum splendens: Augener, 1913: 140, Fig. 2.

MATERIAL: Area 66 (292) 1.

REMARKS: Typical. This is an Indo-Pacific species previously recorded from Sharks Bay.

Genus **Phyllodoce** Savigny, 1818
Phyllodoce duplex McIntosh, 1885

Phyllodoce duplex McIntosh, 1885: 167, Pl. 27, fig. 8; Pl. 32, fig. 9; Pl. 15A, fig. 1.
Phyllodoce duplex: Augener, 1913: 126.

MATERIAL: Area 69 (222) 1.

REMARKS: Typical. Previously recorded from Two Fold Bay, N.S.W., by McIntosh (1885) in 150 fm.

Family HESIONIDAE Malgram, 1867
Genus **Nerimyra** Blainville, 1828
Nerimyra longicirrata n.sp.
Figs. 7-10

MATERIAL: Area 39 (314) 1.

DESCRIPTION:

Size: Length of body 12 mm, width including parapodia 5 mm, segments number 36.

Colour in Alcohol: Cream, with green markings on the dorsal surface in the median region.

Prostomium: Fig. 7. Broadly rounded; about twice as broad as long; two pairs of prominent brown eyes, the anterior pair being much the larger and more widely spaced. A pair of slender bi-articulate palps tapering to fine points and a pair of prostomial tentacles about equal in size to the palps. Anterior segments fused dorsally and possessing six pairs of tentacular cirri about one and a half times the length of the prostomial tentacles.

Parapodia: Fig. 8. Uniramous, but with the dorsal cirri supported by a pair of acicula from which arise a small number of fine capillary setae. Parapodial lobe tapering to a point and supported by a single aciculum; dorsal cirri long, thin and tapering arising from short cirrophores; ventral cirri short, extending just beyond the tip of the parapodial lobe.

Setae: A small number of capillary notosetae (Fig. 9); neurosetae compound heterogomph falcigers with long pieces terminating in fine hooks and serrated along the lateral edge (Fig. 10).

HOLOTYPE: G1738 Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 39 (314).

REMARKS: This is a small genus with nine recorded species of which only two, *N. blacki* (Knox 1960) and *N. crinita* (Haswell 1886) have been recorded from the southern hemisphere. The present specimen differs from *N. blacki* in the shape of the prostomium, in possessing prominent eyes, in the shape of the prostomial antennae, and the length of the dorsal cirri; the parapodia are similar in general shape but *N. longicirrata* differs in having bidentate and pieces to the compound setae. *N. longicirrata* differs from *N. crinita* in the general shape of the prostomium, in lacking a median antenna, in having longer dorsal cirri, and in the size of the notopodium.

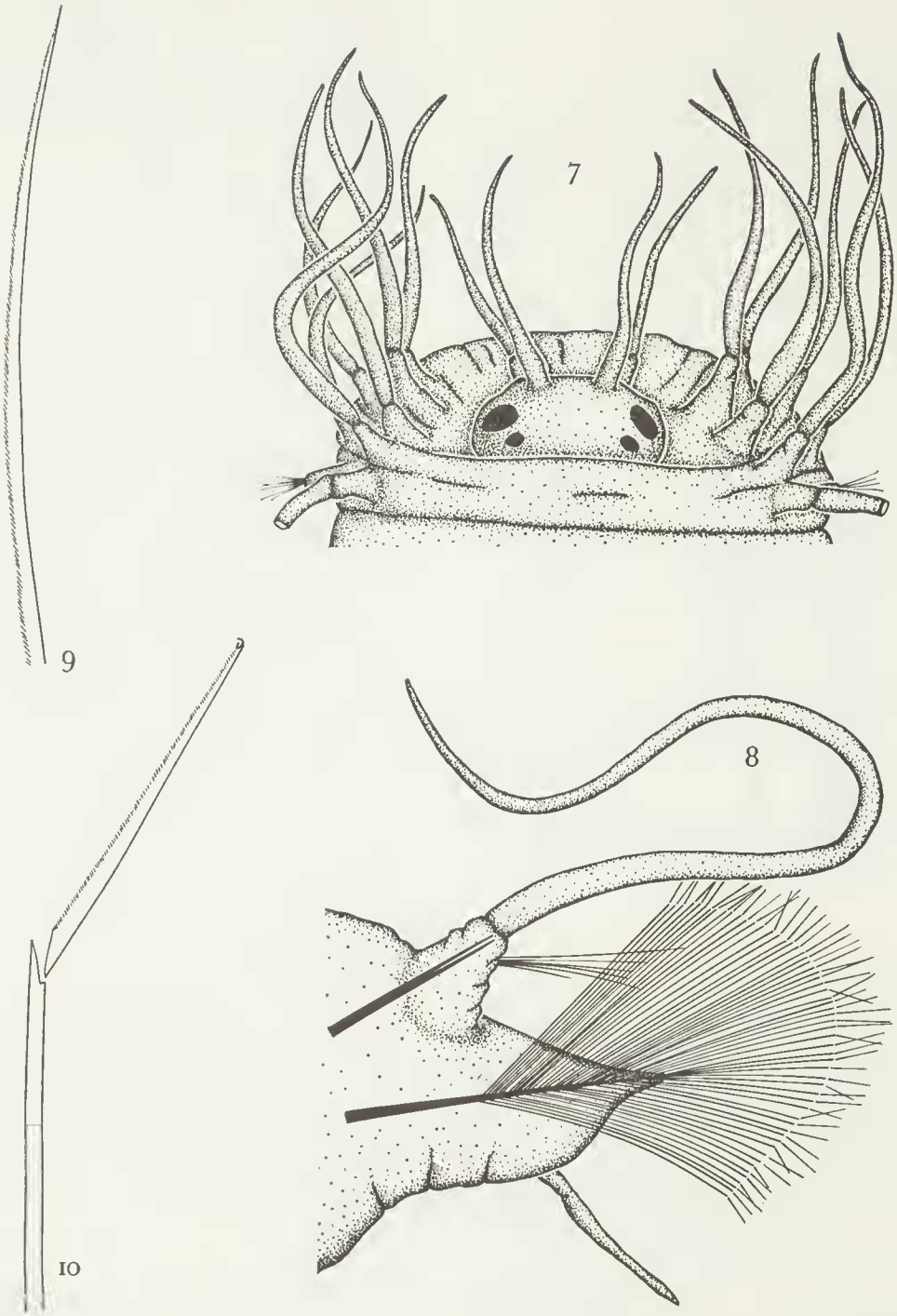
Nerimyra longicirrata n.sp.
Fig. 7—Anterior end in dorsal view.
Fig. 8—Typical parapodium in posterior view.
Fig. 9—Notoseta.
Fig. 10—Compound neuroseta.

Family SYLLIDAE Grube, 1850
Sub-family EUSYLLINAE Rioja, 1925
Genus **Eusyllis** Malmgren, 1867
Eusyllis brevicirrata n.sp.
Figs. 11-14

MATERIAL: Areas 9 (178) 3, 16 (283) 2, 25 (129) 4, 28 (286) 1, 37 (40) 1, 51 (270) 1.

DESCRIPTION:

Size: None of the specimens is complete but the longest fragment measures 20 mm for about 100 anterior segments; width including parapodia up to 3·5 mm.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Colour in Alcohol: Uniformly light cream to yellow.

Prostomium: Fig. 11. About three times as broad as long, rounded in front and partially obscured posteriorly by the first segment; two pairs of eyes, also partially obscured, in a straight line across the hind margin of the prostomium. Median antenna wrinkled, tapering to a blunt tip and equal in length to about four segments; lateral antennae similar but slightly shorter; a pair of large ventrally directed palps, united at the base.

Pharynx: Chitinised with a single large anterior tooth, an entire rim, and a ring of large soft papillae.

Peristomium: With two pairs of tentacular cirri, slightly shorter than the succeeding dorsal cirri.

Parapodia: Fig. 12. Dorsal cirri stout, slightly tapering, faintly annulated and equal in length to about two thirds the body width. Ventral cirri short, pointed, not extending beyond the tip of the setigerous lobes.

Setae: All compound falcigers, the end pieces varying from short and stout (Fig. 14) to long and thin (Fig. 13); all bidentate.

HOLOTYPE G1739 and 11 PARATYPES G1740-5: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 9 (178).

REMARKS: This species has the strongly rounded dorsum which is characteristic of the genus. It is distinguished from the other described species by its larger size, greater number of segments (40-70 being characteristic of typical species), more elongated and pointed ventral cirri, and the relatively short dorsal cirri.

Sub-family SYLLINAE Rioja, 1925

Genus **Syllis** Savigny, 1818

Syllis (Typosyllis) kinbergiana Haswell, 1885

Syllis (Typosyllis) kinbergiana Haswell, 1885: 7, Pl. 5, figs. 1-3.
Syllis (Typosyllis) kinbergiana: Haswell, 1920: 98, Pl. 11, figs. 23-27; Pl. 12, figs. 1-2.

MATERIAL: Area 55 (39) 1.

REMARKS: Typical. Previously recorded from Port Jackson.

Genus **Trypanosyllis** Claparde, 1864

Trypanosyllis zebra (Grube, 1860)

Trypanosyllis taeniaeformis: Augener, 1931: 230.
Trypanosyllis taeniaeformis: Monro, 1936: 217, Fig. 19.
Trypanosyllis zebra: Day, 1967: 256, Fig. 12.6 a-b.

MATERIAL: Area 55 (148) 1.

REMARKS: The present specimen is a small immature one and it proved impossible to determine whether there was a subterminal dorsal tooth on the pharynx. In all other respects it agrees with specimens described as *T. zebra. T. taeniaeformis*, originally described by Haswell from Port Jackson, Australia, has either been regarded as a distinct species or synonymized with *T. zebra.* Imajima and Hartman (1964: 127) have redescribed *taeniaeformis,* placing it in the sub-genus *Trypanedenta* which is characterized by the absence of a sub-terminal mid dorsal tooth. The present specimen differs in having dorsal cirri with about 20 or 50 annulations, not 15 or 25. There appears to be some confusion over the status of *T. taeniaeformis* but this matter cannot be resolved until a representative collection of specimens from various geographic localities can be examined.

Family NEREIDAE Johnston, 1865

Genus **Ceratonereis** Kinberg, 1866

Ceratonereis costae (Grube, 1840)

? *Nereis (Ceratonereis) lapinigensis* Augener, 1913: 166-168.
Ceratonereis costae: Fauvel, 1923: 349, Figs. 136a-f.
Nereis (Ceratonereis) costae: Kott, 1951: 107, Figs. 5p-s, 6j-l.
Ceratonereis costae Day, 1967: 325, Fig. 14.10 h-l.

MATERIAL: Areas 7 (207) 1, (123) 1, 11 (21) 1, 28 (316) 1, 29 (107) 2, 69 (97) 1.

REMARKS: The present specimens agree with the description given by Day (1967) for *C. costae* from S. Africa. Kott (1951) has recorded this species previously from Rottnest Island, W. Aust.

Ceratonereis mirabilis Kinberg, 1866

Nereis mirabilis: Ehlers, 1887: 117, Pl 37, figs. 1-6.
Nereis (Ceratonereis) mirabilis: Augener, 1913: 168.
Ceratonereis mirabilis: Hartman, 1954: 3.

MATERIAL: Areas 39 (43) 2, 63 (19) 1, 67 (217) 2.

REMARKS: Typical. This species is widely distributed from W. Aust. to the Great Barrier Reef, Qd.

Genus **Nereis** Linnaeus, 1758

Nereis cockburnensis Augener, 1913

Nereis cockburnensis Augener, 1913: 153, Figs. 15 a-c.
Nereis cockburnensis: Hartman, 1954: 33, Figs. 30-32.

MATERIAL: Area 57 (294) 1.

REMARKS: The specimen agrees with Hartman's (1954) description in the arrangement of the paragnaths on the proboscis, and in having two kinds of notopodial falcigers.

Nereis (Neanthes) caudata Delle Chiaje, 1841

Nereis arenaceodonta Moore, 1903: 720, Pl. 40, figs. 1-10.
Nereis (Neanthes) caudata: Fauvel, 1923: 347, Fig. 135a-e.
Neanthes cricognatha: Knox, 1951: 217, Pl. 45, figs. 6-8.
Nereis (Neanthes) arenaceodonta: Pettibone, 1963: 162 + 165, Figs. 44i, 45e.
Nereis (Neanthes) caudata Day, 1967: 321, Fig. 14.9 f-j.

MATERIAL: Area 59 (36) 1.

REMARKS: This species under the name *Nereis (Neanthes) cricognatha* has been recorded previously from S. Australia and W. Australia, and as *Nereis arenaceodonta* from Tasmania. The present specimen agrees with the description given by Day (1967) for *Nereis (Neanthes) caudata* from South Africa. Specimens from New Zealand, previously described as *Neanthes cricognatha* (Knox 1951) agree in every respect with those described by Pettibone (1963) as *Nereis (Neanthes) arenaceodonta* from eastern United States of America.

Genus **Perinereis** Kinberg, 1866

Perinereis amblyodonta (Kinberg, 1865)

Perienereis novae-hollandiae Kinberg, 1866: 175.
Perinereis amblyodonta: Hartman, 1954: 33.

MATERIAL: Areas 42 (38) 3, 5 (148) 2.

REMARKS: Typical. This species is widely distributed around temperate Australian shores.

Perinereis nuntia brevicirris (Grube, 1857)

Perinereis nuntia var. *brevicirris*: Knox, 1951: 218, Figs. 14-18.
Perinereis brevicirris: Hartman, 1955: 4, 10.

MATERIAL: Area 9 (84) 1.

REMARKS: Typical. This species is widely distributed around Australian shores.

Genus **Platynereis** Kinberg, 1866

Platynereis australis (Schmarda, 1861)

Platynereis magalhaensis Kinberg, 1866: 177.
Platynereis australis: Hartman, 1954: 36.

MATERIAL: Areas 5 (53) 1, 5 (169) 1, 9 (178) 2, 14 (175) 2, 31 (10) 1, 40 (101) 1, 42 (38) 5, 55 (148) 1, 59 (24) 1, (36) 1, 43 (20) 1, 68 (155) 3.

REMARKS: Typical. This widely distributed S. hemisphere cold water species has been recorded previously from Sellick beach, S. Aust., and the Great Australian Bight.

Eusyllis brevicirrata n.sp.
Fig. 11—Anterior end in dorsal view.
Fig. 12—Typical parapodium in posterior view.
Fig. 13—Distal end of a long-bladed compound seta.
Fig. 14—Distal end of a short-bladed compound seta.
Nephtys picta Ehlers, 1868
Fig. 15—5th parapodium.
Fig. 16—Median parapodium.
Hemipodus australiensis n.sp.
Fig. 17—Proboscis papillae.

Family NEPHTYIDAE Grube, 1850

Genus **Nephtys** Cuvier, 1817

Nephtys picta Ehlers, 1868

Figs. 15-16

Nephtys picta Ehlers, 1868: 632, 635; Pl. 25, figs. 9, 35.
Nephtys picta: Hartman, 1950: 103,105.

MATERIAL: Anglesea, Vict. (1).

REMARKS: Three species of the genus *Nephtys (N. gravieri, N. microcirrus, N. australiensis)* have been recorded from Australia. The present specimen differs from all these in many respects, especially in the size and shape of the branchiae (Figs. 15, 16). In almost all respects it agrees with the description given by Hartman (1950: 103) for *N. picta* which has been recorded previously only from the E. shores of N. America. However, as many species of this genus are known only from limited records, it is possible that its distribution is far more widely spread.

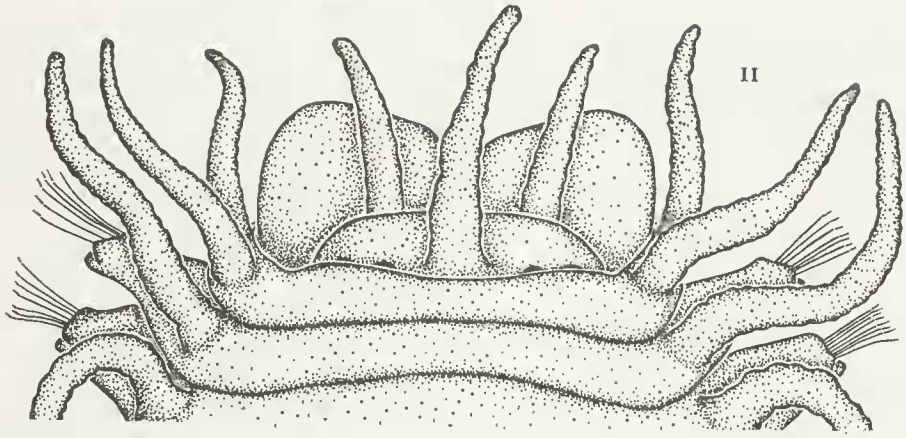
Family GLYCERIDAE Grube, 1850

Genus **Glycera** Savigny, 1818

Glycera americana Leidy, 1855

Glycera americana: Augener, 1922: 29.
Glycera americana: Knox, 1960: 221-223, Figs. 1-3.

MATERIAL: Areas 2 (201), 1, 11-13 (210-212) 2, 26 (300) 5, 28 (286) 1, 29 (317) 1, 42 (108) 1, 61 (242) 1, 63 (245) 1.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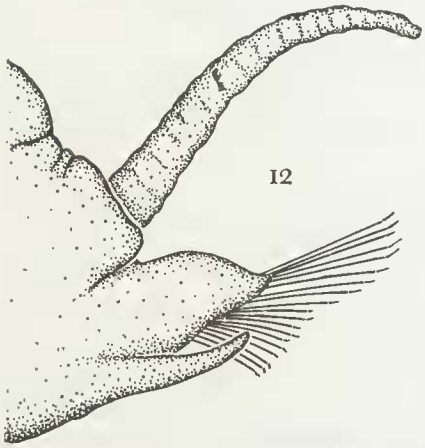
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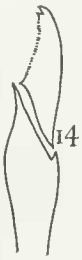
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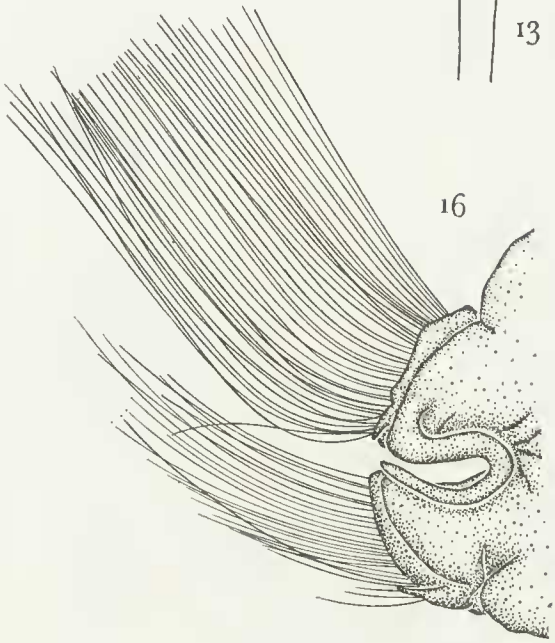
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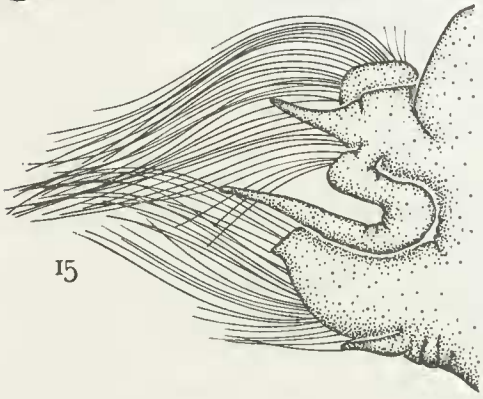
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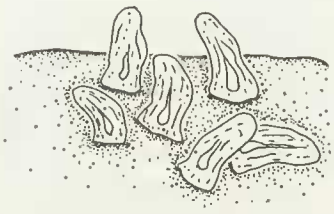
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REMARKS: Typical. Widespread on temperate Australian shores, having been recorded previously from Port Phillip Bay by Augener (1927).

Genus **Hemipodus** Quarefages, 1865

Hemipodus australiensis n.sp.

Figs. 17-19

MATERIAL: Beau Beach (2).

DESCRIPTION:

Size: Length 100 mm, width including parapodia 4 mm.

Colour in Alcohol: Light brown to cream.

Prostomium: Longer than broad, tapering to a fine point; no visible annulations; terminal antennae very small; no eyes visible.

Proboscis: 10-15 mm long when everted; covered with a single type of papillae, short squat, irregular cones (Fig. 17); four terminal jaws, each with a rod-like aileron attached at right angles to the axis of the jaw.

Segments: Biannulate with the parapodia on the posterior annulation.

Parapodia: Fig. 18. First four or five very small, reaching full size by segment 10; presetal lobe large, rounded, with a small globular extension reaching halfway along the length of the setae; a postsetal lamella slightly longer than the presetal lobe can be seen in anterior view. Dorsal and ventral cirri similar, small and globular, attached to the body wall near the base of the parapodia.

Setae: Fig. 19. All are homogomph spinigers, the end pieces with very fine lateral serrations.

HOLOTYPE G1746 and PARATYPE G1747: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Beau Beach, Port Phillip.

REMARKS: Only one species of *Hemipodus* (*H. simplex*) has been recorded previously from Australia. The present specimens differ from *H. simplex* and all other described species in the shape of the parapodia, especially the presetal lobe and dorsal and ventral cirri, and in the single type of short squat irregular cone shaped papillae on the proboscis.

Family GONIADIDAE Kinberg, 1866

Genus **Goniada** Audouin and Milne Edwards 1833

Goniada emerita Audouin and Milne Edwards, 1833

Goniada emerita: Ehlers, 1868: 718, Pl. 24, figs. 49-51.
Goniada emerita: Fauvel, 1914: 211, Pl. 19, figs. 7-10.

MATERIAL: Area 42 (109) 1.

REMARKS: Typical. Previously recorded by Augener (1927) from Port Jackson, N.S.W., as *Goniada australiensis.*

Family EUNICIDAE Savigny, 1818

Subfamily EUNICINAE Savigny, 1818

Genus **Eunice** Cuvier, 1817

Eunice antennata (Savigny, 1820)

Eunice antennata: Crossland, 1904: 312, Pl. 22, figs. 1-7, Figs. 56-60.
Eunice antennata: Fauvel, 1953: 240, Figs. 118f-g.

MATERIAL: Area 58 (79) 1, 58 (91) 1, 59 (36) 1, 66 (292) 1

REMARKS: Typical. This species has been widely recorded from both tropical and temperate Australian shores.

Eunice australis Quatrefages, 1865

Eunice murrayi McIntosh, 1885: 288, Pl. 39, figs. 7-8; Pl. 20, figs. 19-20.
Eunice australis: Fauvel, 1917: 228, Figs. 21a-d.

MATERIAL: Areas 24 (122) 1, 51, (270) 2, 69 (222) 2.

REMARKS: This species has been widely reported from W. and S. Australian shores.

Eunice tentaculata Quatrefages, 1865

Eunice pycnobranchiata McIntosh, 1885: 294, Pl. 24, figs. 13-15.
Eunice tentaculata: Fauvel, 1917: 209, Fig. 18a-d.

MATERIAL: Areas 42 (109) 2, 57 (217) 1, 55 (148) 1, 59 (24) 1, (36) 4, 64 (164) 3.

REMARKS: Typical. This species is widely distributed around Australia especially on temperate shores.

Eunice (Palolo) siciliensis Grube, 1840

Eunice siciliensis: Fauvel, 1923: 405, Fig. 159e-m.
Eunice (Palolo) siciliensis: Day, 1967: 382, Fig. 17.2 a-f.

MATERIAL: Areas 5 (56) 1, 13 (92) 2, 17 (170-2) 1, 30 (130) 1, 31 (10) 1, 55 (148) 1, 59 (24) 2, (36) 4, 69 (222) 1.

REMARKS: Typical. This species is widely distributed around Australian shores.

Genus **Lysidice** Savigny, 1818

Lysdice ninetta Audouin and Milne Edwards, 1834

Lysidice ninetta Audouin and Milne Edwards, 1834: 161, Pl. 36, figs. 1-8.
Lysidice ninetta: Fauvel, 1917: 275, Figs. 23a-f, 24a-b.

MATERIAL: Areas 17 (170) 1, 55 (148) 1.

REMARKS: Previously recorded on temperate shores from W. Australia to N.S.W.

Hemipodus australiensis n.sp.
Fig. 18—Posterior parapodium in posterior view.
Fig. 19—Distal end of typical compound seta.
Diopatra acidulata n.sp.
Fig. 20—Anterior end in dorsal view (two prostomial tentacles removed).
Fig. 21—Median parapodium in posterior view.
Fig. 22—Pseudocompound hook from 3rd setiger.
Fig. 23—Comb setae from median parapodium.

Subfamily ONUPHINAE Kinberg, 1865

Genus **Diopatra** Audouin and Milne Edwards, 1833

Diopatra aciculata n.sp.
Figs. 20-25

MATERIAL: Area 2 (201) 1.

DESCRIPTION:

Size: Length of the incomplete specimen 48 mm; width including parapodia 5 mm; segments number 67.

Tube: Composed of successive layers of parchment-like material, white with patches of brown pigment; there is no sign of any attached shell fragments or sand grains.

Colour in Alcohol: Dorsum marked with transverse bands of brown pigment, more dense in the median region of the anterior segments; dorsal antennae and gills white; ventrum pale cream.

Prostomium: Fig. 20. With a pair of raised, eye-like prominences, each with a small eyespot. Frontal antennae cirriform, smooth, tapering to a fine point; occipital antennae smooth, long and slender, the median one about as long as the first 12 segments; ceratophores with up to 15 nearly equal rings plus a longer distal one.

Peristomium: About equal in length to the succeeding segments with a pair of widely spaced slender tentacular cirri.

Parapodia: Three anterior prebranchial parapodia larger than the following and directed forward with elongated dorsal cirri, and similar, though smaller, ventral cirri. In the succeeding parapodia the dorsal cirri are slender, elongated and extend beyond the tip of the gills; ventral cirri pad-like; post-setal lobe elongate, triangular. Gills commence on the third segment; they are closely spiralled with numerous brachial filament forming a bushy top (Fig. 21). They extend to about the 45th segment, gradually decreasing in size and number of whorls until they are reduced to a single filament.

Setae: First three setigers with pseudo-compound hooks (Fig. 22), distally bidentate, the secondary tooth forming a rounded knob; setiger four onwards with a dorsal bundle of capillary setae, median segments also with a small number of comb setae (Fig. 23) each with about seven stout teeth. Neuro-aciculae typically five per segment in the median region, dark brown in colour and tapering to a point which curves sharply upwards (Fig. 24). Subacicular hooks two in number, first present from segment 14, yellow in colour and distally bidentate (Fig. 25).

HOLOTYPE G1748: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 2 (201).

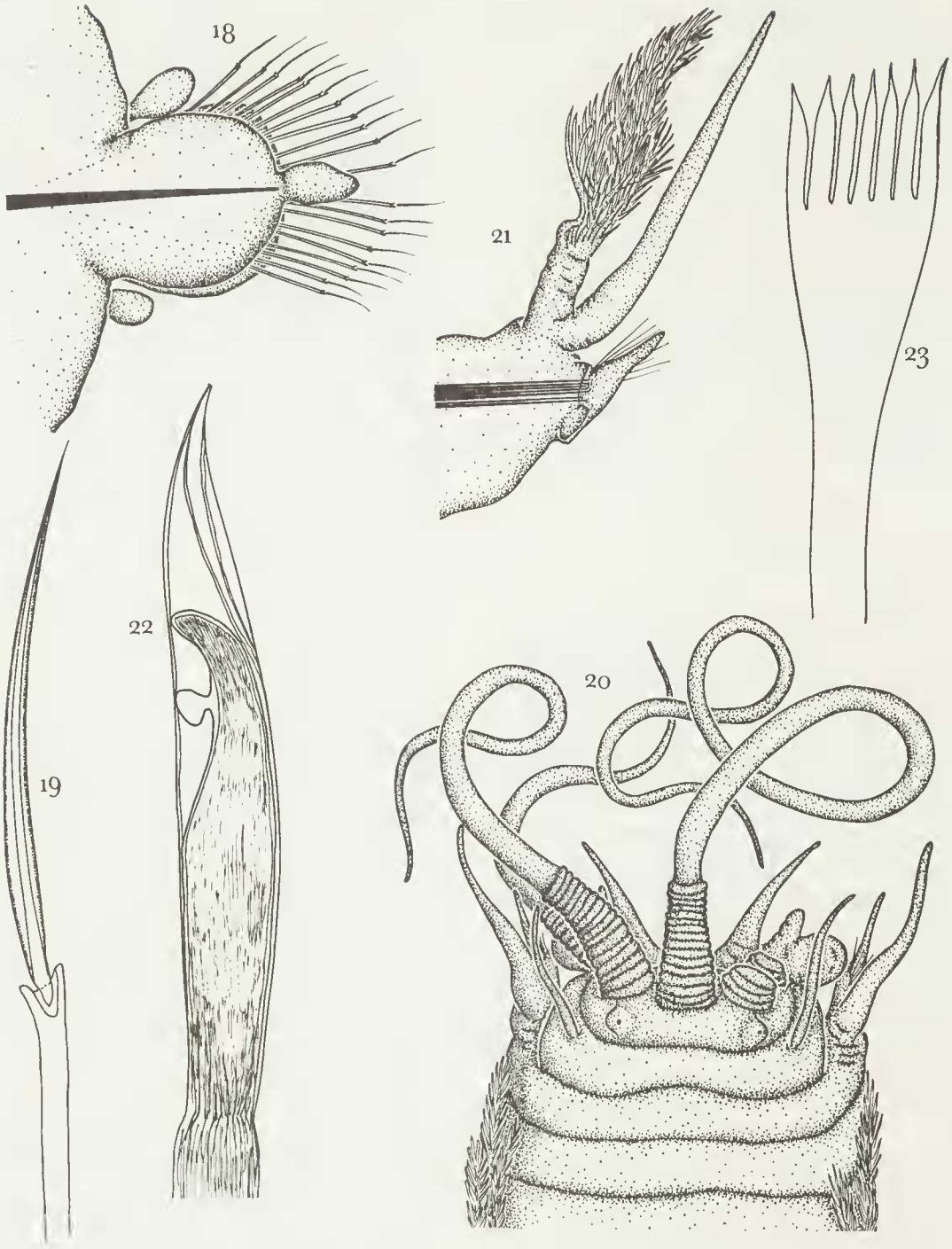
REMARKS: *D. aciculata* belong to the section of the genus with few teeth on the comb setae including such species as *D. neapolitana, D. variabilis, D. dentata* and *D. splendidissima*. It differs from those previously described in the pseudo-compound setae with their knob-like secondary tooth and elongate pointed guard, and in the neuroaciculae with their sharply upwardly curved distal ends. Other combinations of characters also serve to separate it, such as the smooth tube, the widely spaced tentacular cirri, and the elongate dorsal cirri projecting beyond the tip of the gills.

Genus **Onuphis** Audouin and Milne Edwards, 1883

Onuphis (Nothria) holobranchiata Marenzeller, 1879

Onuphis (Nothria) holobranchiata Marenzeller, 1879: 132.
Onuphis (Nothria) holobranchiata: Day, 1967: 424, Fig. 17.13f-g.

MATERIAL: Area 42 (289) 1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REMARKS: The present specimen agrees with the description of *O.* (*N.*) *holobranchiata* given by Day (1967) for specimens from SW. Africa. This is the first record from Australian shores.

Subfamily LYSARETINAE Kinberg, 1865

Genus **Oenone** Savigny, 1820

Oenone fulgida (Savigny, 1818)

Oenone diphyllidia Ehlers, 1887: 190, Pl. 34, figs. 1-7.
Oenone fulgida: Augener, 1913: 290.

MATERIAL: Area 69 (221) 1.

REMARKS: This species has been recorded previously from Cape York, Qd., to W. Aust.

Subfamily LUMBRINERINAE Malmgrem, 1867

Genus **Lumbrineris** Blainville, 1828

Lumbrineris latreilli Audouin and Milne Edwards, 1834

Lumbrineris latreilli Audouin and Milne Edwards, 1834: 168.
Lumbriconereis latreilli: Fauvel, 1923: 431, Fig. 171m-r.

MATERIAL: Areas 14 (175) 1, 28 (286) 1, 42 (665) 1, 59 (24) 1, (36) 1

REMARKS: The present specimens agree in all respects with the description given by Fauvel (1923: 431). There are winged capillaries in the anterior parapodia, long bladed compound hooks are present in the anterior feet, being gradually replaced by simple hooks with a characteristically club shaped appearance. The aciculae are yellow.

This is the first record of this cosmopolitan species from Australia.

Subfamily ARABELLINAE Hartman, 1944

Genus **Arabella** Grube, 1950

Arabella iricolor iricolor (Montagu, 1804)

Arabella multidentata Ehlers, 1887: 112, Pl. 34, figs. 8-10; Pl. 35, figs. 1-4.
Arabella iricolor: Augener, 1927: 191.
Arabella iricolor iricolor: Day, 1967: 446, Fig. 17.18i-m.

MATERIAL: Areas 9 (178) 1, 11 (190) 1,

REMARKS: This species has been recorded previously from W.A. and N.S.W.

Subfamily DORVILLEINAE Chamberlain, 1919

Genus **Dorvillea** Parfitt, 1866

Dorvillea australiensis (McIntosh, 1885)

Staurocephalus australiensis McIntosh, 1885: 232, Pl. 32, fig. 6; Pl. 17a, figs. 9-10.
Dorvillea australiensis: Augener, 1913: 296.

MATERIAL: Area 59 (24) 1.

REMARKS: This species is widely distributed on temperate shores of Australia.

Family CIRRATULIDAE Carus, 1863

Genus **Cirriformia** Hartman, 1939

Cirriformia filigera (Delle Chiaje, 1825)

Cirratulus australis Whitelegge, 1889: 210.
Cirriformia filigera: Day, 1967: 518, Fig. 20.4p-q.

MATERIAL: Areas 5 (169) 3, 6 (65) 3, 7 (204) 1, 11 (190) 2, 14 (8) 1, 25 (128) 1, 27 (138) 1, 31 (276) 1, 42 (289) 1, 61 (37) 1.

REMARKS: This species has been recorded previously only from N.S.W.

Cirriformia tentaculata (Montagu, 1808)

Audouinia tentaculata: Fauvel, 1927: 91, Fig. 32a-g.
Cirriformia tentaculata: Day, 1967: 515, Fig. 20.4a-d.

MATERIAL: Areas 6 (200) 2, 7 (207) 1, 9 (178) 7, 13 (92) 1, 25 (129) 3, (128) 1, 27 (138) 38 (311) 7, 37 (40) 1, (296) 1, 42 (109), 1, 49 (236-8) 4, 51 (270) 6, 53 (256) 3, 67 (216), 4.

REMARKS: This species is widely distributed on temperate Australian shores.

Family CHAETOPTERIDAE Malmgren, 1867

Genus **Chaetopterus** Cuvier, 1827

Chaetopterus variopedatus (Renier, 1904)

Chaetopterus lutrens Whitelegge, 1889: 201.
Chaetopterous variopedatus: Imajima and Hartman, 1964: 291-292.

MATERIAL: Areas 11-13 (209-12), 19 (306) 1, 20 (309) 2, 31 (276) 1, 43 (263) 2, 47 (259) 1, 49 (237) 2, 53 (253) 1, 55 (256) 1, 61 (242) 1, 62 (244) 2, 63 (246) 2.

REMARKS: This species has been recorded previously only from W. Aust. and N.S.W., but is probably much more widespread.

Family ORBINIIDAE Hartman, 1942

Genus **Haploscoloplos** Monro, 1933

Haploscoloplos kerguelensis (McIntosh, 1885)

Scoloplos kerguelensis McIntosh, 1885: 355, Pl. 43, figs. 6-8; Pl. 22a, fig. 19.
Haploscoloplos kerguelensis: Monro, 1936: 160.

MATERIAL: Areas 16 (283) 1, 24 (122) 1, 25 (128) 6, 27 (139) 1, 28 (286) 1, 61 (242) 2.

REMARKS: This species has been recorded only from W. Aust. but is probably widespread on temperate Australian shores.

Family OPHELIIDAE Malmgren, 1867
Genus **Armandia** Filippi, 1861
Armandia lanceolata Willey, 1905

Armandia lanceolata: Fauvel, 1932: 189.
Armandia lanceolata: Augener, 1914: 33.

MATERIAL: Areas 39 (314) 1, 49 (236) 3.

REMARKS: This species has been recorded previously from Western Port, Vict. to W. Aust.

Diopatra aciculata n.sp.
Fig. 24—Distal end of 3 typical aciculae.
Fig. 25—Distal end of a subacicular hook from a median parapodium.
Asychis glabra n.sp.
Fig. 26—Anterior end in right lateral view.
Fig. 27—Cephalic plaque and first setiger in dorsal view.
Fig. 28—Anal plaque in dorsal view.
Fig. 29—Hook from 2nd setiger.

Family MALDANIDAE Malmgren, 1867
Genus **Asychis** Kinberg, 1861
Asychis glabra n.sp.
Figs. 26-29

MATERIAL: Areas 16 (283) 1, 19 (306) 1, 25 (128) 1, 26, (126) 1, 28 (286) 2, 31 (276) 1, 37 (40) 2, 42 (109) 10.

DESCRIPTION:

Size: Length up to 90 mm, width 3 mm.

Colour in Alcohol: Pale yellow to white.

Prostomium: Broad and flattened from above, tapering to a blunt point anteriorly; with a pair of prominent nuchal grooves; eyespots absent (Fig. 27). Cephalic plaque broadly oval without obvious keel but with the centre arched in convex manner in lateral view (Fig. 26). Cephalic rim deep, forming a sheath or hood over the posterior quarter of the cephalic plate; the rim deeply incised laterally.

Segments: First segment with a collar on its anterior margin. (Fig. 26). The body consists of 19 setigerous segments behind the asetigerous peristomial segment, and one or possibly two poorly marked asetigerous preanal segments. The first seven or eight segments increase in length; the median segments equal in length, and becoming shorter again after the 15th.

Pygidium: Fig. 28. Anal plaque forming about a 45 degree angle to the rest of the body, its raised margins deeply incised laterally but otherwise entire.

Setae: Simple winged capillaries, uncini with narrow necks and eonsisting of one main fang with three or four rows of small teeth on the hind margin (Fig. 29).

HOLOTYPE G1749 and 18 PARATYPES G1750-6: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 16 (283).

REMARKS: There is only one species of this genus previously recorded from Australia, *A. victoriae* from 1,100 fm, S. of Cape Nelson, Vict. (Benham 1916). Benham's species, however, lacked a posterior end and differs from the present specimens in the arrangement of the setae and in other minor details. The present specimens show certain affinities with *A. capensis* Day, 1961; this latter species, however, has an anal plaque which is at right angles to the body and notched ventrally to form a series of about nine scallops.

Family PECTINARIIDAE Quatrefages, 1865
Genus **Pectinaria** Savigny, 1818
Pectinaria antipoda Schmarda, 1861

Pectinaria antipoda: Pruvot, 1930: 78, Pl. 3, figs. 93-95.
Pectinaria antipoda: Fauvel, 1932: 214.

MATERIAL: Areas 13 (192) 2, 36 (75-77) 2, 55 (256) 2; Nat. Mus. Vict. Coll. Albany, W. Aust., clean sand flat, intertidal (1).

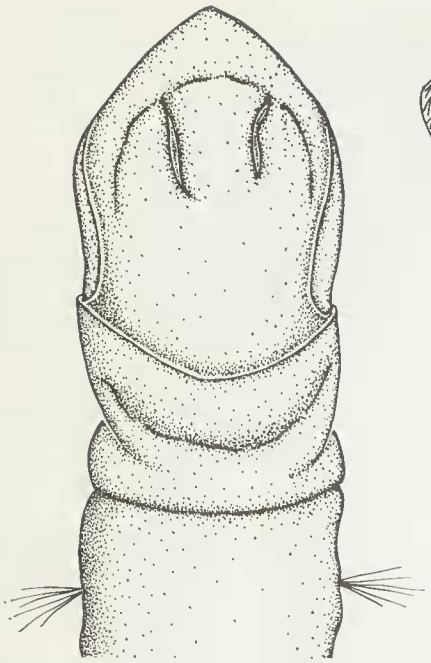
REMARKS: This species has been recorded previously from Great Barrier Reef, Qd., and N.S.W.

Family TEREBELLIDAE Grube, 1851
Subfamily TRICHOBRANCHINAE Malmgren, 1866
Genus **Terebellides** Sars, 1835
Terebellides stroemi Sars, 1835

Terebellides stroemi: Augener, 1927: 258.
Terebellides stroemi: Fauvel, 1927: 291, Fig. 100i-q.

MATERIAL: Areas 25 (128) 1, 38 (311) 2, 27 (302) 1, 28 (285) 1, (286) 8, 31 (10) 1, 39 (312) 18, (48) 4, 43 (274) 12, 53 (253) 6.

REMARKS: This cosmopolitan species has been recorded previously from Western Port and Port Phillip, and is probably widespread around Australian shores.



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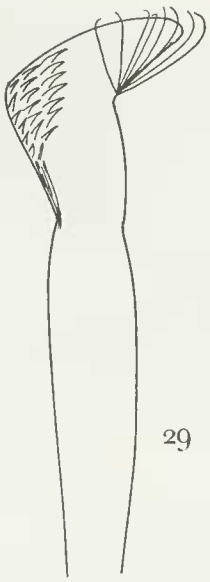

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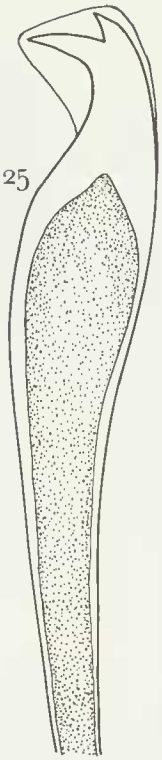

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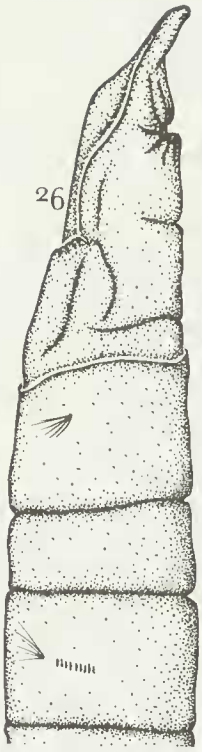

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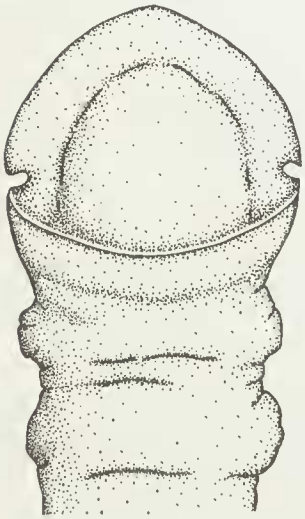

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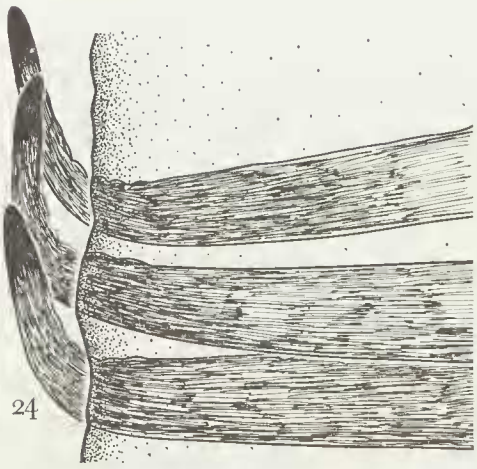

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Subfamily POLYCIRRINAE Malmgren, 1865
Genus **Polycirrus** Grube, 1850
Polycirrus porcata n.sp.
Figs. 30-31.

MATERIAL: Area 14 (175) 1.

DESCRIPTION:

Size: Length of body 45 mm excluding the prostomial tentacles; segments number about 45.

Colour in Alcohol: Pale yellow to white.

Head: Tentacular lobe somewhat rectangular in shape with two types of tentacles, numerous short fine tentacles ventrally and numerous larger and elongated tentacles dorsally. There are prominent rounded lateral lobes on the buccal segment.

Thorax: There are twelve segments bearing notosetae with the uncini beginning on the eighth of these segments. Thoracic parapodia are borne on prominent ventro-lateral ridges separated by a deep median groove (Fig. 30); there are nine pairs of prominent elongated nephridial papillae.

Abdomen: Comprises about 30 segments; inflated posteriorly, tapering to a fine point; the uncinigerous pinnules are borne ventrally on a pair of ridges which are a continuation of the thoracic ridges but reduced in size.

Setae: Thoracic notosetae are finely serrated winged capillaries. Thoracic uncini have a broad base and six or seven secondary teeth above the main fang (Fig. 31); abdominal uncini similar but with slightly fewer secondary teeth.

HOLOTYPE G1757: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 14 (175).

REMARKS: Only one species of this genus, *P. boholensis* has been recorded previously from Australia. It differs from the present species in a number of respects including the shape of the uncini; Augener (1914) figures uncini with a single apical tooth. The present species is distinguished by the absence of glandular swellings and their replacement by two smooth longitudinal ridges with a deep groove in between. Another unique feaure is the presence of nine pairs of prominent nephridial papillae.

Subfamily THELEPINAE, Malmgren, 1886.
Genus **Thelepus** Leuckart, 1849
Thelepus setosus (Quatrefages, 1865)

Thelepus throcicus Augener, 1914: 99.
Thelepus setosus: Fauvel, 1916: 268, Figs. 3-4.

MATERIAL: Areas 14 (175) 1, 31 (10) 1, 42 (38) 1.

REMARKS: This species has previously been recorded from W. and S. Aust.

Subfamily TEREBELLINAE Grube, 1850
Genus **Amphitrite** Muller, 1771
Amphitrite rubra (Risso, 1828)

Amphitrite rubra: Fauvel, 1917: 265, Fig. 27a-f.
Amphitrite rubra: Fauvel, 1927: 249-250, Fig. 85h-l.

MATERIAL: Areas 5 (53) 20, 5 (169) 1, 6 (118) 5, 7 (207) 1, (123) 2, 10 (13-14) 3, 11-13 (210-2) 3, 11 (212) 2, 13 (93) 7, (94) 1, 14 (8) 2, 16 (142) 1, 17 (170) 1, 19 (306), 2, 25 (128) 1, 26 (126) 3, 27 (138) 4, (284) 1, 28 (286) 13, 29 (107) 14, 31 (10) 5, 33 (177) 1, 35 (72), 36 (75, 77) 9, 38 (127) 8, 42 (265) 1, (281) 3, 49 (236-8) 6, 55 (144) 1, 59 (24) 12, (36) (65) 61, (37) 3, 63 (21) 9, 64 (163) 1.

REMARKS: This cosmopolitan species was easily the most comon terebellid in the collections. It has been reported previously from N.S.W., S. Aust. and Vict. coasts.

Polycirrus porcata n.sp.
Fig. 30—Anterior end in ventral view.
Fig. 31—Thoracic uncinus.
Artacamella dibranchiata n.sp.
Fig. 32—Anterior end in left lateral view.
Fig. 33—Thoracic notoseta.
Fig. 34—Thoracic uncinus.
Fig. 35—Abdominal uncinus.

Genus **Artacamella** Hartman, 1955
Artacamella dibranchiata n.sp.
Figs 32-35

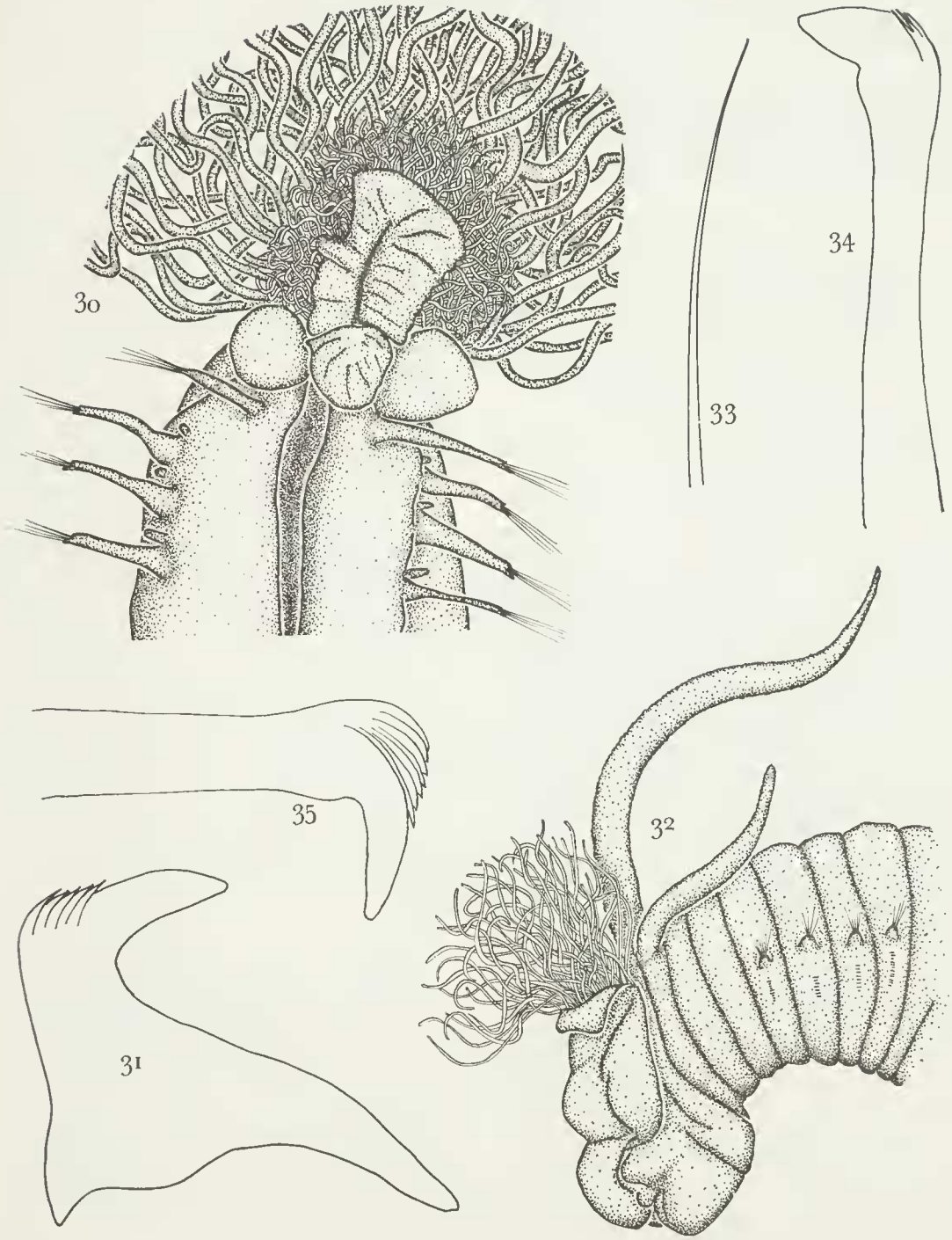
MATERIAL: Area 61 (242) 2.

DESCRIPTION:

Size: Length of body 10 mm excluding tentacles; width 3 mm; segments number over 50 of which 15 are thoracic.

Colour in Alcohol: Pale yellow.

Prostomium: Fig. 32. An inconspicuous lobe with a mass of fine bushy tentacles, including a few longer, elongated, longitudinally grooved ones, arising from the dorsal surface.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Peristomium: Prolonged forward ventrally to form the characteristic proboscis, the surface of which is folded into an irregular series of grooves (Fig. 32); no peristomial eyes are visible.

Branchiae: Two pairs, inserted on segments one and two; both pairs are wrinkled in appearance and taper gently to blunt tips, the first pair being nearly twice the length of the second.

Setae: Uncini and notosetae both begin on segment five; thoracic notosetae (Fig. 33) are simple capillaries; thoracic uncini are long handled with one main fang and two or three small insignificant teeth (Fig. 34); abdominal uncini similar but with seven or eight more conspicuous secondary teeth (Fig. 35).

HOLOTYPE G1758 and ONE PARATYPE G1759: Nat. Mus. Vict. Coll.

TYPE LOCALITY: Area 61 (242).

REMARKS: This genus was erected by Hartman (1955) for a single species *A. hancocki*. No other members of the genus have subsequently been reported. The present specimens agree with the generic definition except that there are two pairs of branchiae instead of three. The generic definition would therefore have to be amended to allow for two or three pairs of branchiae. Other differences include the absence of both prostomial eyes and the pronounced longitudinal ridges of the proboscis-like organ.

Genus **Axionice** Malmgren, 1866

Axionice harrissoni (Benham, 1916)

Scione harrissoni Benham, 1916: 146-148, Pl. 47 fig. 26-31.

MATERIAL: Areas 56 (295) 1, 57 (294) 1.

REMARKS: The present specimens agree in all respects with the specimens described by Benham (1916) as *Scione harrissoni* except that there are eyespots present which apparently were absent on Benham's type specimen. There are characteristic lateral folds on three anterior segments, a single pair of aborescent gills with a pair of conical processes on the segment anterior to the gill bearing segment; there are 15 thoracic segments with notopodial setae.

Augener (1922) suggested that *Scione harrissoni* might be the same species as *Nicolea cetrata*, however, the latter species has two pairs of gills and differs in other characters. It appears that a single pair of gills is a character of the species and that a second anterior pair are not missing as Augener suspected.

Genus **Eupolymnia** Verrill, 1900

Eupolymnia nebulosa (Montagu, 1818)

Polymnia nebulosa: Fauvel, 1917: 267, Fig. 28a-n.
Eupolymnia nebulosa: Day, 1967: 744, Fig. 36, 9f-h.

MATERIAL: Areas 5 (169) 5, 6 (118) 21, (208) 5, 9 (178) 6, 10 (13-15) 3, 11 (212) 1, 13 (95) 1, 16 (142) 6, 17 (170-171) 5, 18 (307) 11, 19 (306) 1, 24 (122) 1, 26 (126) 2, 27 (139) 1, 31 (131) 2, 49 (236) 10, 59 (24) 1, 59 (213) 2, 61 (240) 1, 67 (217) 11.

REMARKS: This species is widely spread around Australian coasts.

Genus **Lanice** Malmgren, 1886

Lanice conchilega (Pallas, 1766)

Lanice conchilega: Fauvel, 1927: 255, Fig. 88a-h.
Lanice conchilega: Day, 1967: 743-744, Fig. 36, 8n-r.

MATERIAL: Areas 59 (36) numerous.

REMARKS: This species has been recorded previously only off the coast of Victoria.

Genus **Pista** Malmgren, 1866

Pista typha (Grube, 1878)

Pista typha: Augener, 1927: 254, Fig. 17a-b.
Pista typha: Monro, 1931: 30, Fig. 15a-c.

MATERIAL: Area 28 (286) 1.

REMARKS: Previously recorded from Low Isles, Great Barrier Reef, Qd., and Eden, N.S.W.

Family SABELLIDAE Malmgren, 1867

Subfamily SABELLINAE Rioja, 1923

Genus **Branchiomma** Kolliker, 1858

Branchiomma cingulata (Grube, 1870)

Dasychone cingulata: Augener, 1914, p. 213.
Branchiomma cingulata: Imajima and Hartman, 1964: 355.

MATERIAL: Areas 7 (123) 1, 9 (178) numerous, 11 (190) 3, 11 (212) tubes only, 19 (306) 2, 20 (124) 2, 31 (10) 3, 52 (252) 2, 53 (253) 2, 66 (292) 1.

REMARKS: Previously reported from W. Aust. and N.S.W.

Genus **Sabellastarte** Kröyer, 1856

Sabellastarte indica (Savigny, 1826)

Sabellastarte indica: Augener, 1914: 115, Pl. 1, fig. 20.
Sabellastarte indica: Fauvel, 1953: 445, Fig. 235a-h.

MATERIAL: Areas 58 (80) 1, 58 (89) 1, 59 (24) 13, 67 (217) numerous.

REMARKS: This large species of sabellid is widely distributed in the Indo-Pacific and tropical Atlantic Ocean. It has been widely reported from N. Aust. to Bass Strait.

Sabellastarte longa (Kinberg, 1867)

Sabellastarte longa: Johannson, 1925: 10, Figs. 3, 5-7.
Sabellastarte longa: Day, 1967: 771, Fig. 37.5a-e.

MATERIAL: Areas 10 (103) 1, 18 (307-8) 1, 104 (103) 1.

REMARKS: This species has been recorded previously from Madagascar and S. Africa. It differs from *S. indica* in having a double row of eyespots on the outer whorl of radioles. The present specimens agree with the description given by Day (1967) for specimens from S. African shores.

Subfamily FABRICIINAE Rioja, 1923

Genus **Myxicola** Koch (in) Renier, 1847

Myxicola infundibulum (Renier, 1804)

Myxicola infundibulum: Fauvel, 1927: 342, Figs. 119a-i.
Myxicola infundibulum: Day, 1967: 773, Fig. 375j-o.

MATERIAL: Areas 11-13 (210-2) 1, 24 (122) 1, 31 (131) 2, 32 (272) 1, 39 (43) 4, 43 (28) 1, 44 (262) 4, 52 (252) 1, 53 (253) 1, (256) tube only, 62 (244) 1, 64 (163) 1, 67 (217) 1, 68 (156) 1.

REMARKS: This is the first record of this cosmopolitan species from Australia. Present specimens agree with the description given by Day (1967).

Family SERPULIDAE Savigny, 1818

Subfamily SPIRORBINAE Chamberlin, 1919

Genus **Spirorbis** Daudin, 1800

Spirorbis (Paralaeospira) antarcticus Pixell, 1913

Spirorbis antarcticus Pixell, 1913: 351, Fig. 3.
Paralaeospira antarctica: Hartman, 1966: 138, Pl. 46, figs. 10-12.

MATERIAL: Area 31 (10) numerous.

REMARKS: The specimens agree in all respects with the description given by Pixell (1913) for *S. antarcticus*. The tubes are coiled clockwise when viewed from above, the coil forming a concave dish dorsally; in cross-section the tubes have the characteristic triangular shape with the edges of the triangle prolonged forward at the mouth to form three large teeth in most specimens. The operculum is slightly convex with a variable number of small spines arising from it; collar setae have simple short curved blades with very fine lateral teeth down one side; eight finely branched radioles are present.

S. (*P.*) *antarcticus* differs from the unidentified species below in a number of respects including the shape and ornamentation of the operculum, the shape and size of the collar setae, and in lacking the 5-8 longitudinal ridges on the tube.

Spirorbis (Paralaeospira) sp.

MATERIAL: Area 66 (292) numerous.

REMARKS: Tubes coiled clockwise when seen from above (sinistral); dense chalky white with a variable number (5-8) of prominent longitudinal ridges produced into a series of prominent teeth around the aperture. Operculum oval with a concave surface; there are no spines or prominences of any kind. Seven branched radioles; collar separate dorsally. The tubes are growing attached to algae or bryozoans.

Seven species of *Spirorbis* have been recorded from Australia, some being of doubtful status. The present specimens do not appear to agree with any of the described species but specific determination of these specimens is not possible without a complete revision, based on adequate material, of the Australian representatives of the genus.

Subfamily SERPULINAE MacLeay, 1840

Genus **Pomatoceros** Philippi, 1844

Pomatoceros terraenovae Benham, 1927

Pomatoceros terranovae Benham, 1927: 151, Pl. 5, figs. 174-180.
Pomatoceros terraenovae: Dew, 1959: 39, Fig. 13.

MATERIAL: Area 31 (131) 1.

REMARKS: A single specimen which agrees with the descriptions given for the species except that the violet stripes along the tube are not present. The specimen, however, is a juvenile and these may develop later in life or be lost in preservation.

Genus **Salmacina** Claparede, 1870

Salmacina dysteri (Huxley, 1855)

Salmacina dysteri: Dew, 1959; 50, Fig. 19.
Salmacina dysteri: Pillai, 1960: 3, Figs. A-H.

MATERIAL: Area 58, Pt. Lonsdale (numerous).

REMARKS: This cosmopolitan species has been widely reported around Australian shores.

Genus **Serpula** Linnaeus, 1758

Serpula sp.

MATERIAL: Area 26 (300) fragments.

REMARKS: A number of fragmented tubes, circular in cross-section; colour whitish with flecks of brown. Most of the tubes are empty apart from two fragments of the abdominal region. From the material it is impossible to be certain even of genus, but they probably belong to a species of *Serpula*.

Genus **Temporaria** Straughen, 1967

Temporaria polytrema (Philippi, 1884)

Pomatostegus polytrema: Saint-Joseph, 1906: 252, Pl. 5, figs. 118-9.
Pomatostegus polytremea: Fauvel, 1927: 369, Figs. 127-ul.

MATERIAL: Area 27 (284) tube only.

REMARKS: An empty tube only, with the characteristic flattened triangular shape, dorsal keel, and rows of pores along the side.

Genus **Vermiliopsis** Saint-Joseph, 1894

Vermiliopsis acanthophora Augener, 1914

Vermiliopsis acanthophora Augener, 1914: 155, Pl. 11, figs. 21-24.
Vermiliopsis acanthophora: Dew, 1959: 33, Fig. 9.

MATERIAL: Areas 13 (175) tube only, 14 (95), 59 (24) 1.

REMARKS: The present specimen from Picnic Point resembles that figured by Fauvel (1953), in that there are two horny rings on the operculum, whereas that figured by Dew (1959) shows six tiers of horny rings.

Vermiliopsis infundibulum Linnaeus, 1788

Vermiliopsis infundibulum: Fauvel, 1927: 362-363, Fig. 124a-g.
Vermiliopsis infundibulum: Straughen, 1967a: 233.

MATERIAL: Area 55 (148) 1.

REMARKS: The present specimen has the characteristic chitinous conical operculum with a toothed cap and the succession of peristomes on the tube. This is the first record of the species from Victoria, it having been recorded previously from Qd. and N.S.W.

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