

FOUR NEW SPECIES OF POLYCHAETA FROM
SUBANTARCTIC MARION ISLAND

By

MARGO L. BRANCH

Zoology Department, University of Cape Town, Rondebosch, South Africa

(With 5 figures)

[MS accepted 17 August 1995]*

ABSTRACT

Four new species of Polychaeta are described from Subantarctic Marion Island. *Orbiniella dayi* sp. nov. (family Orbiniidae) occurs from mid-tide levels to depths of 15 m and is separated from *Orbiniella minuta* Day, 1954, from Tristan da Cunha, by its larger size and the presence of a small post-setal lobe to the parapodia. *Scolelepis marionis* sp. nov. (family Spionidae) was buried up to 0.5 m in sandy substrata in shallow subtidal depths. It is closely related to *Scolelepis lamellicincta* Blake & Kudenov, 1978, from Australia, but can be distinguished by its notosetae, which are all capillaries, and neurosetae of bifid hooded hooks that occur from setigers 42–46 and posteriorly. *Malmgreniella fimbria* sp. nov. (family Polynoidae) is tentatively placed in the genus *Malmgreniella*, but the presence of a sixteenth pair of elytra distinguishes the species and requires an expansion of the definition of the genus. *Malmgreniella fimbria* was dredged from a depth of 410–644 m between Marion and Prince Edward islands. *Lanice marionensis* sp. nov. (family Terebellidae) was previously referred to as *Lanice flabellum*. *Lanice marionensis* sp. nov. occurs at depths of 5–475 m on soft sediments.

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INTRODUCTION

The polychaete fauna of Subantarctic Marion and Prince Edward islands (MPE) (46°54'S 37°45'E) has been sampled by a number of expeditions. The benthos of these isolated volcanic islands was first sampled by the H.M.S. *Challenger* expedition in 1873 and McIntosh (1885) reported on the 11 polychaete species collected. Further collections were made by dredging from *Discovery II* in 1935 (Monro 1936). Day (1971) reported on 25 species and De Villiers (1976) conducted a thorough study of the intertidal community, finding 21 species of polychaetes. The French ship *Marion Dufresne* sampled

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Ann. S. Afr. Mus. **105** (4), 1998: 249–265, 5 figs.

* The original manuscript was submitted in February 1994. Although the names of the new species were used in another paper by Branch (1994), the present paper provides the formal descriptions of the new taxa.

the offshore benthos during its MD/08 expedition in 1976 and listed 77 species from Marion, Prince Edward and Crozet islands (Gillet 1991). During 1982–89, the University of Cape Town undertook an extensive dredging programme (Branch *et al.* 1993) and, in 1988, a quantitative SCUBA diving survey to a depth of 15 m at three sites (Beckley & Branch 1992). D. Glassom examined the intertidal beach fauna in 1989 (unpublished data).

The author has analysed these recent collections and provided illustrated keys to the 90 species of polychaetes now recognized from Marion and Prince Edward islands, as well as data on species abundance and distribution (Branch 1994). The collections described included three polychaete forms that could not be assigned to any known species and are therefore described here as new species. A fourth species, previously referred to as *Lanice flabellum*, is also described as new. *Lanice flabellum* was originally described from empty tubes and its exact type locality is unknown. As a result the present specimens cannot, with certainty, be attributed to that species.

SYSTEMATICS

Order ORBINIIDA

Family Orbiniidae Hartman, 1942

Orbiniella Day, 1954

Orbiniella dayi sp. nov.

Fig. 1

Orbiniella minuta Day, 1971: 386 (*non* Day, 1954). Beckley & Branch, 1992: 558.

Material examined

Holotype. SAM-A21273: specimen 5 mm long \times 0.4 mm wide, 35 segments, from Bullard's Bay, Marion Island at 5 m depth, collected by SCUBA diving by L. Beckley on 10 April 1988.

Paratypes. SAM-A21393: 2 specimens, 3 mm and 5 mm long, from the same sample as the holotype.

Other material. SAM-A21364: from Transvaal Cove, Marion Island under rocks at mid-tide level, collected by N. Fuller, January 1965 (Day 1971). SAM-A21272: 3 specimens from Cabbage Point, Marion Island, collected with SCUBA at 5 m depth by G. M. Branch.

Several hundred specimens from Transvaal Cove, Bullard's Bay and Trypot Point, collected by SCUBA at 5, 10 and 15 m depths by L. Beckley in April 1988 (unsorted collection).

Etymology

Named *dayi* after Professor J. H. Day from the University of Cape Town, who was well known for his significant contributions to marine biology in southern Africa and particularly for his work on polychaetes.

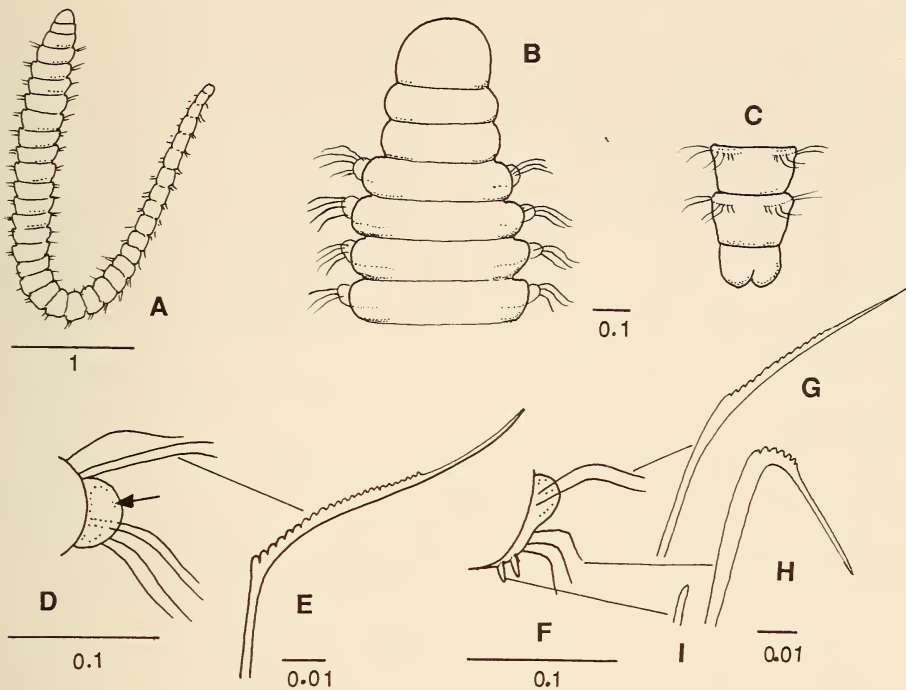


Fig. 1. *Orbinella dayi* sp. nov., holotype, 5 mm. A. Entire worm. B. Head and anterior six segments. C. Posterior end, ventral view. D. Anterior parapodium, post-setal lobe arrowed. E. Notoseta. F. Posterior parapodium. G. Notoseta. H. Capillary neuroseta. I. Neurosetal hook. Scales in mm.

Description (of holotype)

Body length 5 mm, width 0.4 mm, 35 segments, separated by deep intersegmental constrictions. White in alcohol. Prostomium bluntly triangular with rounded tip and no eyes or appendages. Proboscis not extrusible. First two segments asetigerous. Following setigerous segments separated from one another by deep intersegmental constrictions. Gills absent. Parapodia form lateral ridges near the anterior margin of each segment with a small foliose post-setal lobe, largest at the origin of the notosetae (Fig. 1D). Anterior 10 segments shorter and broader than the posterior segments, which are slightly biannular. Four or five notosetae project from the upper margin of the anterior parapodia, which is elongated to form a small posterior lobe. Notosetae crenulate capillaries with distinct teeth and long curved tapering tips. Notosetae of posterior segments similar but shorter. Neurosetae arise from the lower edge of the parapodial ridge. Anterior neurosetae similar to the notosetae but posterior neurosetae are of two types, one or two inferior simple acicular setae, which are short, stout and blunt-tipped, and two or three crenulate setae, which become progressively shortened posteriorly. Pygidium simple with a small terminal slit. Not gravid.

Remarks

Orbiniella minuta Day, 1954, from Tristan da Cunha, is smaller and the parapodia are reduced to a simple parapodial ridge, whereas *O. dayi* sp. nov. has distinct parapodial lobes posterior to the notosetae. *Orbiniella aciculata* Blake, 1985, from the Galapagos rift at 2730 m depth, has prominent acicular spines in both the noto- and neuropodia. *Orbiniella nuda* Hobson, 1974, from off British Columbia, has several acicular spines and capillaries in the neuropodia and lacks the small post-parapodial lobe of *O. dayi*. *Orbiniella uniformis* Hartman, 1967, from Anverse Island, Antarctic Peninsula, was described as being exceedingly plain and unadorned; it is of similar size to *O. dayi* with similar setae, but the segments are uniannulated throughout and there are no post-setal lobes to the parapodia.

Distribution

Subantarctic Marion Island, intertidal to 15 m depth. A quantitative SCUBA survey by Beckley at depths of 5, 10 and 15 m on rocky substrata at Transvaal Cove, Bullard's Bay and Trypot Point produced a total of several hundred specimens of *Orbiniella dayi* at all three stations and depths, with up to 75 specimens.m⁻² at 5 m depth at Bullard's Bay (Beckley & Branch 1992).

Order SPIONIDA

Family Spionidae Grube, 1850

Scolelepis Blainville, 1828

Type species. Lumbricus squamatus Müller, 1806, by monotypy.

Remark

Blainville's (1828) diagnosis of this genus has been revised and emended by various authors (e.g. Pettibone 1963: 91; Blake & Kudinov 1978: 175).

Scolelepis marionis sp. nov.

Fig. 2

Material

Holotype. SAM-A21254: incomplete specimen, 43 mm long × 6 mm wide, 73 segments, from sandy shore at Ship's Cove, Marion Island, buried to depth of 0.5 m in shallow sub-tidal depths; collected by D. Glassom in April 1989.

Paratypes. SAM-A21392: 6 incomplete specimens, anterior regions only; 70 setigers, 45 mm × 6 mm; 63 setigers, 35 mm × 5 mm; 33 setigers, 33 mm × 7 mm; 35 setigers, 25 mm × 6 mm; 14 setigers, 10 mm × 5 mm; 11 setigers, 7 mm × 3 mm width; from the same sample as the holotype.

Etymology

Named *marionis* after the French navigator, Marion Dufresne, who discovered Marion Island, the type locality.

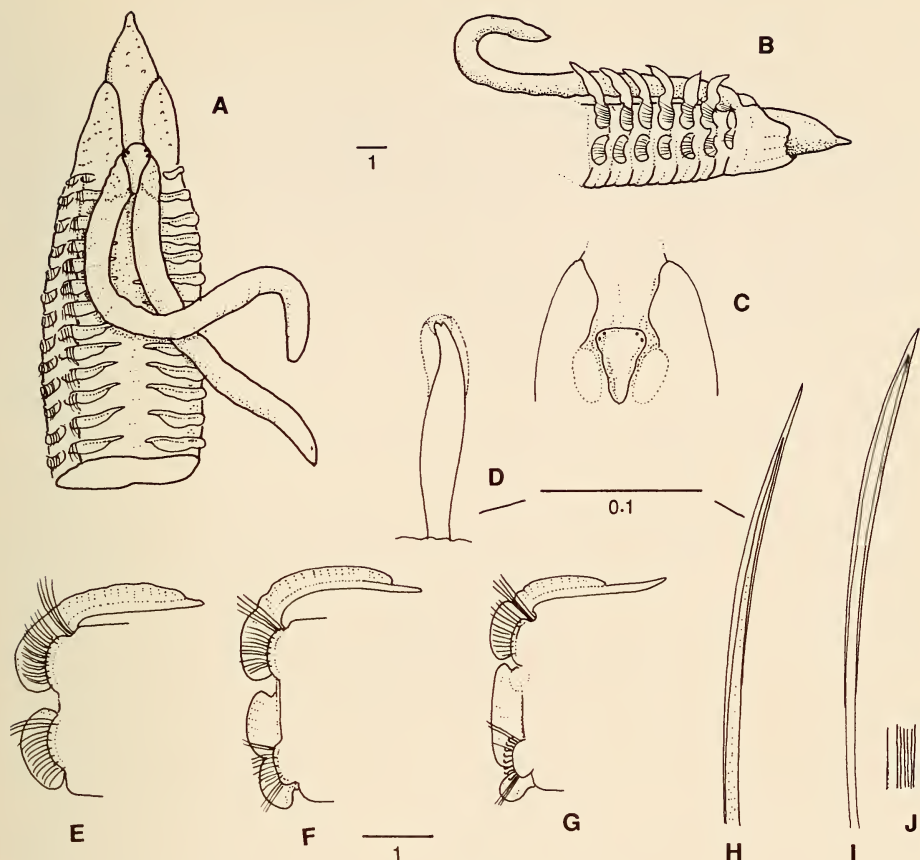


Fig. 2. *Scolelepis marionis* sp. nov., holotype, 43 mm. A. Anterior end, dorsal view. B. Anterior end, lateral view. C. Dorsal view of head caruncle with palps removed. D. Neurosetal hook from posterior setiger. E. Setiger 10. F. Setiger 33. G. Setiger 50. H. Capillary neuroseta. I. Notoseta. J. Detail of notoseta. Scales in mm.

Description (of holotype)

Body very regular, firm, vermiform, rectangular in cross section, incomplete anterior region, length 45 mm, width 5–6 mm, 73 segments. Body regions not marked except by shape of parapodia. Red-brown in alcohol. Prostomium projects anteriorly to narrow point and extends posteriorly as narrow, attached lobe (caruncle) between the palps. Caruncle bears two pairs of small eyes laterally and obscured by anterior base of palps. Proboscis unarmed, with a ventral cushion. Peristomium well developed with lateral wings partially overlapping the prostomium. A pair of large grooved palps arise dorsally from the posterior margin of the peristomium, extending back to the seventeenth segment with a lateral membrane at the base.

Setiger 1 reduced with a leaf-like dorsal lamella and rounded ventral lamella. Dorsal gills from setiger 2. Dorsal lamellae from setiger 2, swollen, foliose, folded over the dorsal body, branchia fused along the outer margin of each lamella for whole length, except near the tip where the free lamella is narrow and pointed. Post-setal neuropodial lamellae in the anterior region form a single rounded lobe, swollen and foliose. Neuropodial lamellae increase in size posteriorly and become notched at about segment 30, and after segment 41 are bilobed with a long, narrow inter-ramal lamella and a small, rounded ventral lamella. There are low, swollen presetal ridges. Notosetae all capillaries in the anterior setigers, about 40 in two to three groups. From setiger 60 the numbers diminish to about 20–30, in two groups, those in the dorsal group are longest, 0.6 mm, ventral setae to 0.5 mm. Anterior neurosetae similar to notosetae, about 40. From setiger 42 three hooded hooks appear in the neuropodia and increase to about 9–11 by setiger 70. Hooded hooks bilobed with a smooth, circular, funnel opening to the hood. It is still uncertain if there are hooded hooks also in the far posterior notopodia. Pygidium unknown.

Remarks

Scolelepis marionis sp. nov. is closely related to *S. lamellicincta* Blake & Kudenov, 1978, from Australia. The structure of their parapodia is very similar, especially with the presence of long inter-ramal lamellae in the middle and posterior segments. This feature separates these two species from all the other species (see Audouin & Milne Edwards 1833; Mesnil 1896; Day 1967; Blake & Kudenov 1978; Blake 1983). The two species are distinguished by their setae: *S. marionis* has bifid hooded hooks from setiger 42–46 increasing from 3 to 11 per ramus, and the notosetae are all capillaries. *Scolelepis lamellicincta* has unidentate hooded hooks from setiger 25–38 with only 5–6 to a ramus, and has hooded hooks in notopodia from setigers 75–80. The posterior lobe, or caruncle, of the prostomium in *S. marionis* is a flat and slender triangle about 1 mm thick, whereas that of *S. lamellicincta* is a blunt lobe that projects from the surface. *Scolelepis eltaninae* Blake, 1983, from the Antarctic Ocean, has triangular inter-ramal lamellae and an occipital tentacle.

Order PHYLLODOCIDA

Family Polynoidae Malmgren, 1867

Subfamily Harmothoinae Willey, 1902

Malmgreniella Hartman, 1967

Type species. *Malmgreniella dicirra* Hartman, 1967: 37, pl. 11A–D, by monotypy.

Remark

Hartman's (1967) diagnosis of this genus was emended by Pettibone (1993: 9–10).

Malmgreniella fimbria sp. nov.

Fig. 3

Material

Holotype. SAM-A21346: body 50 mm long, 20 mm wide for 45 segments, from Marion Island, dredged from Station 44, 46°40.58'S 37°50.20'E, 410–644 m depth, on rocky substrata, collected by D. Gianakouras on 3 September 1988.

Etymology

From the Latin *fimbria* (fringe)—an allusion to the ventral cirrus that carries a dense fringe of hairs.

Description (of holotype)

Body entire, length 50 mm, width 20 mm, 46 segments. Dorsum smooth and convex, ventrum with a deep neural groove, otherwise smooth. Elytrae 16 pairs on segments 2, 4, 5 and 7 then alternate segments until 23, 26, 29, 32 and 33, and last 13 segments with dorsal cirri only. Elytrae subreniform, soft, fleshy and almost smooth apart from a few microtubercles on the posterior region. Elytrae do not overlap in the mid-dorsum and are not easily shed.

Prostomium bilobed, wider than long with an anterior 'V'-shaped notch and anterior lobes produced into cephalic peaks. Two pairs of eyes, anterior pair large and anterolaterally placed, posterior pair small, close to posterior margin. Ceratophore of median antenna large, in anterior notch, style missing. Ceratophores of single pair of lateral antennae inserted anteriorly, below cephalic peaks of prostomium, styles short, broad, tapering. Palps large, stout, tapering, three times length of prostomium. Tentaculophores on segment 1, lateral to prostomium with a pair of dorsal and ventral slender tentacular cirri, four times length of prostomium. Antennae and tentacles covered with fine fleshy papillae.

Segment 2, with first pair of elytraphores and small elytrae, biramous parapodia with long narrow ventral cirrus and a short cirrophore. Remaining parapodia also biramous but with unusual short, fleshy, curved ventral cirri covered with a dense mat of long hairs and a short cirrophore; cirrus broad at the base but with a narrow attenuated tip. Dorsal cirri have a thick, short cirrophore and a long fleshy, hairy style, and alternate with elytrae. Notopodia small with a projection on the lower side. Neuropodia larger with subconical presetal lobes with digitiform tip and short rounded post-setal lobes. Notosetae form dorsally radiating bundles in first eight parapodia, absent from most of the middle parapodia, and present as small bundles in the 13 posteriormost parapodia; slightly stouter than neurosetae, with simple tips and a few fine lateral teeth. Neurosetae in two groups, upper and lower, all setae long-shafted with an expanded terminal third, bifid tips, a very narrow secondary tooth and setal surface finely serrated.

Remarks

This species exhibits some characters associated with the genera *Malmgreniella* Hartman, 1967, *Lepidofimbria* Hartman, 1967, *Subadyte* Pettibone,

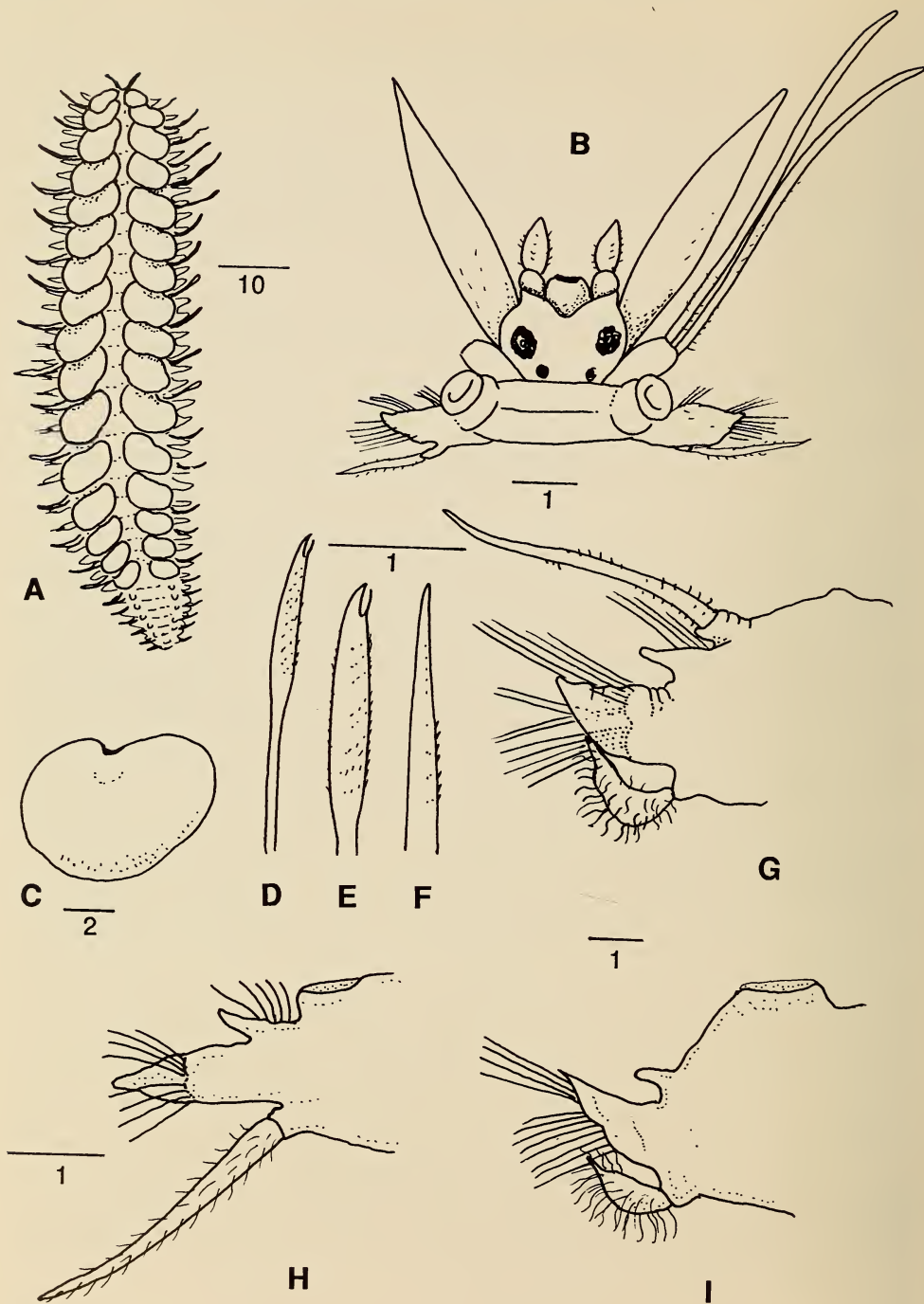


Fig. 3. *Malmgreniella fimbria* sp. nov., holotype, 50 mm. A. Entire worm. B. Head. C. Elytra. D. Neuroseta. E. Detail of neuroseta. F. Notoseta. G. Parapodium 6. H. Elytral parapodium 2. I. Elytral parapodium 17. Scales in mm.

1969, *Scalisetosus* McIntosh, 1885, *Austrolaenilla* Bergström, 1916, and *Leucia* Sars, 1863. The genus *Malmgreniella* Hartman, 1967, was emended by Pettibone (1993) to include *Malmgrenia* and, in the revised diagnosis, the lateral antennae may be inserted subterminally, subventrally or ventrally. The genus *Malmgreniella* was regarded by Fauchald (1977) as belonging to the subfamily Lepidonotinae Willey, 1902, but Pettibone (1993) considered it a member of the subfamily Harmothoinae Willey, 1902.

Species of *Malmgreniella* have 15 pairs of elytrae that are delicate and almost smooth with microtubercles. They differ from species of *Harmothoe*, in which the 15 pairs of elytrae are tough and ornamented. Species of *Malmgreniella* have up to 46 segments, the prostomium is bilobed, usually without distinct cephalic peaks, notosetae are similar in width to neurosetae, which are bifid, or unidentate, or both. The major difference between the present species and previously described species of *Malmgreniella* is that the former have 16 pairs of elytrae, the sixteenth pair occurring on segment 33, the prostomium also has cephalic peaks, the anterior pair of eyes are large, and the ventral cirri are fleshy and fimbriate.

The large eyes and fimbriate ventral cirri of the present species are characters shared with *Lepidofimbria oculata*, the only member of the genus *Lepidofimbria* Hartman, 1967. It has three ventral papillae on the body segments and no elytrae were described. However, the prostomium does not have cephalic peaks and the ceratophores of the antennae are continuations of the prostomium (characteristic of the subfamily Lepidonotinae). The parapodia are also different with reduced notopodia, no notosetae and smooth neurosetae with a smooth unidentate tip. *Lepidofimbria oculata* was collected at abyssal depths in the Weddell Sea and described from a disconnected anterior end and six anteromedian segments.

When considering the feature of 16 pairs of elytrae, five genera of the subfamily Harmothoinae, each with 16 pairs of elytrae and ventral insertion of the lateral antennae, were compared with the present species.

In the genus *Subadyte* Pettibone, 1969, the notosetae and neurosetae have semilunar pockets of spines, which were not evident in the present material.

In the genus *Scalisetosus* McIntosh, 1885, the notosetae are much coarser than the neurosetae; neurosetae are slender and distally entire; and the notopodia as well as the neuropodia have long presetal lobes, not features of the present species.

The monotypic genus *Leucia* Malmgren, 1867 (type species *L. nivea* (Sars, 1863)), is short bodied; the prostomium has peaks; the elytrae possess large spiny tubercles; the notosetae are coarser than the neurosetae and serrated; and the neurosetae are long and slender with unidentate tips and serrated edge—characters that distinguish this genus from the present specimen.

In the genus *Austrolaenilla* Bergström, 1916, there are 15–16 pairs of elytrae; 40–43 segments; ventral cirri are digitate and the ventrum is usually smooth, notosetae thicker than neurosetae with transverse rows of teeth; neurosetae with unidentate or bidentate tips with the distal end penicillate (brush-like). The present material differed with 45 segments, the ventral cirrus curled, fleshy and broad, and the neurosetae with bifid tips, not distally penicillate.

However, *M. fimbria* does have characters in common with *Antinoella antarctica fulgens* (Fauvel, 1936) from Western Antarctica, in which the neurosetae are less plumose in their distal ends than in *A. antarctica antarctica*.

Malmgreniella fimbria has been tentatively placed in the genus *Malmgreniella* on the strength of the similarity in the basic structure of the parapodia, the short antennae, the smooth elytrae and neurosetae with bifid tips, with a slender secondary tooth. The definition of the genus needs to be expanded to give the number of elytrae as 15–16 pairs.

Malmgreniella fimbria can be distinguished from other species of *Malmgreniella* by the presence of 16 pairs of elytrae, fimbriate ventral cirri and the large anterior eyes.

Order TERESELLIDA

Family Terebellidae Grube, 1851

Subfamily Amphitritinae Malmgren, 1866

Lanice Malmgren, 1866

Type species. Nereis conchilega Pallas, 1766: 31, pl. 9 (figs 14–22), by monotypy.

Remark

Malmgren's diagnosis (1866) of the genus was revised and emended by Hutchings & Glasby (1988: 17–18).

Lanice marionensis sp. nov.

Figs 4–5

non *Terebella flabellum* Baird, 1865: 157, pl. 5 (figs 1–2).

Lanice flabellum (Baird) Gillet, 1991: 368.

Lanice conchilega (non Pallas, 1776) Branch *et al.*, 1993: 29–30.

Material examined

Holotype. SAM-A21205: incomplete specimen 40 mm long × 6 mm wide, removed from tube, dredged from volcanic ash and rock substrata at 58–85 m depths, Marion Island, 46°58.6'S 37°45'E, collected by D. Gianakouras, University of Cape Town survey.

Paratypes. SAM-A21209: two incomplete specimens in tubes dredged from rocky substrata, Marion Island, 46°41.20'S 37°49'E, UCT survey. SAM-A20326: one complete specimen 60 mm long × 3 mm wide, 17 thoracic setigers, 104 abdominal setigers; eight incomplete specimens, Marion Island 46°49.8'S 37°52.2'E; Charcot dredge, collected by P. Gillet, *Marion Dufresne* benthos expedition, 1976. SAM-A21207: two complete specimens 50 mm long × 3 mm wide and 50 mm × 4 mm; 11 incomplete worms 28–42 mm long, Marion Island, 46°35'S 37°56'E, dredged from 48–50 m depth, UCT survey.

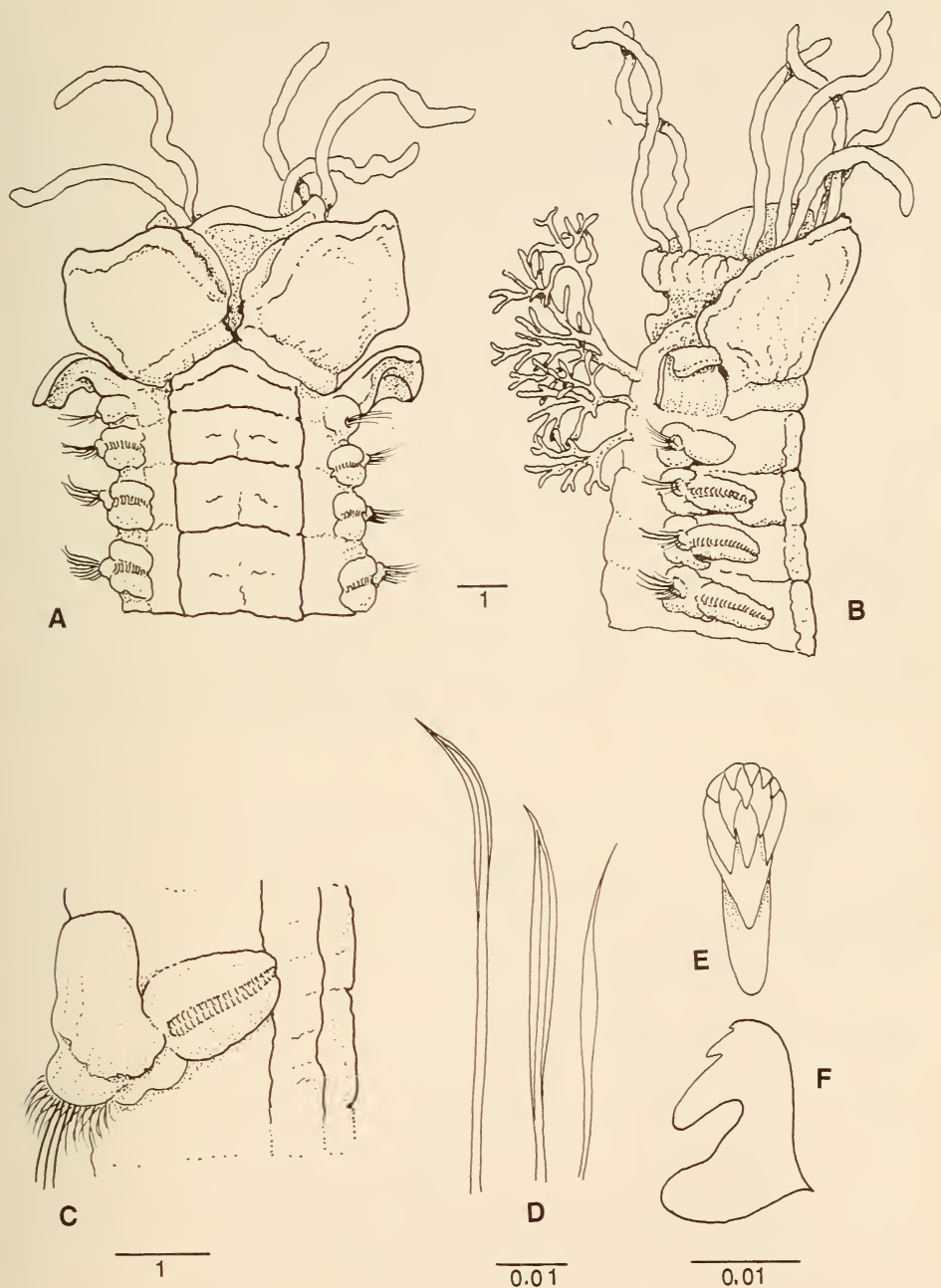


Fig. 4. *Lanice marionensis* sp. nov., holotype, 40 mm. A. Head, ventral view. B. Head, lateral view. C. Parapodium 14. D. Thoracic notosetae segment 14. E. Neuroseta, front view, segment 30. F. Neuroseta, side view, segment 30. Scales in mm.

Other material. SAM-A21204, SAM-A21206, SAM-A21207, SAM-A21208, SAM-A21210 to SAM-21220 (as *Lanice conchilega*—see Branch *et al.* 1993). From Marion Island in depths of 5–475 m, predominantly on soft substrata, UCT survey.

Etymology

Named *marionensis* after Marion Island, the type locality.

Description (of holotype)

Cartilaginous tube, covered with shell fragments and coarse sand. A characteristic fringe of chitinous filaments extends from the ventral side of the tube aperture and forms a fan with a narrow base. There is a smooth semi-circular flap over the dorsal side of the aperture. Body with a swollen thorax, 6 mm wide and slender abdomen 3 mm wide, length over 40 mm, terminal portion missing. Brown in alcohol. Prostomium compact with numerous grooved buccal tentacles and a broad projecting ventral lip. Buccal segment with large, broad ventrolateral lobes that are thick and fleshy and meet at the ventral base. Segment 2 lacks lateral lobes. Segment 3 with smaller, laterally displaced, rectangular lateral lobes that extend forward over segment 2 and curl back at the tip. Gills three pairs on segments 2–4 with short trunks, and many dichotomous branches. Gills unequal, the first pair on segment 2 being larger.

Notopodia from segment 4, continue for 17 segments. Notosetae consist of winged capillaries in groups of about 20. Neuropodia from segment 5 (setiger 2), occur on all following thoracic and abdominal segments present.

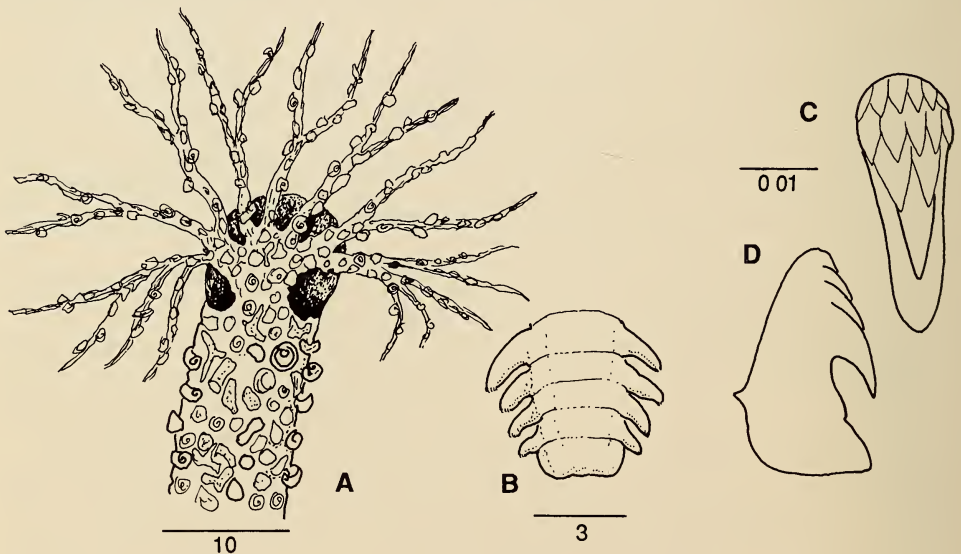


Fig. 5. *Lanice marionensis* sp. nov. A. Holotype, 40 mm. Tube anterior end. B–D. Paratype, 60 mm. B. Posterior abdomen segments 100–104. C. Neuroseta, front view, segment 100. D. Neuroseta, side view, segment 100. Scales in mm.

Uncini initially arranged in single rows, but from seventh uncinigerous thoracic segment to the last thoracic segment uncini arranged in double rows back to back ($2 \times 20\text{--}35$ per neuropodium). Uncini avicular with a large fang surmounted by 3–4 rows of smaller teeth arranged with dental formula MF 3 : 2 : 1 : 5 at thoracic segment 7. The thoracic neuropodial ridges are raised and glandular but do not extend to the ventral glandular pads. About 20 ventral glandular pads form a continuous glandular area anteriorly, which tapers to a glandular streak. Abdominal uncini borne in single row on long pinnules.

Nephridial pore on setigers 3–6 just posterior to the notopodia.

Variation

Some of the larger paratypes had very swollen lateral lobes. The specimen SAM-A21209 was projecting from the tube showing the orientation of the ventral fanned extension to the tube in relation to the animal. The most complete specimen was paratype SAM-A20326 with 17 thoracic setigers and 104 abdominal setigers. The segments became progressively narrower and shorter to the simple last joint with short paddle-like neuropodia bearing 24 uncini at setigers 25–30 and 12 uncini by setigers 80–90. The uncini were similar in shape throughout although the posterior abdominal uncini had a dental formula of MF 2–3 : 4–8 : 4–8. This was not chosen as the holotype as the head appendages were not as complete.

Large numbers of *L. marionensis* were collected from the soft substrata between Marion and Prince Edward islands, consisting of sand, mud and gravel. Sizes up to about 60 mm with 25–35 mm being common, although most of them were posteriorly incomplete.

Remarks

The original description of *Lanice flabellum* (Baird, 1865) was based on tubes only and the exact type locality is unknown. It is considered to be an indeterminate name (Hartman 1959; Hutchings pers. comm.). *Lanice flabellum* from Australia (Baird 1865) and from East Africa (Ehlers 1908) have similar tubes but need to be re-examined. Specimens from the Antarctic labelled *L. flabellum* present in the British Museum (Natural History) collections may also prove to be *L. marionensis* (see Hutchings & Glasby 1988: 18).

As there are no type specimens, only tubes, of *L. conchilega* (Pallas, 1766), Hutchings & Glasby (1988) described a specimen of *L. conchilega* from the type locality, Netherlands, as having a narrow rectangular lobe on segment three with a dorsolateral flag-like extension. Hutchings & Glasby (1988) distinguished the smaller Australian *L. bidewa*, which has tubes with smooth margins, from *L. conchilega*, which has frayed margins.

Day (1967) described *L. conchilega* from South Africa. Day's specimen, SAM-A20350, from South Africa, was examined and compared with *L. marionensis*. The tube was also covered with sand and shell fragments but differed from that of *L. marionensis* in that it was flattened and expanded at the opening with fringe extensions on both the dorsal and ventral edge of the margin, whereas in *L. marionensis* the fan-like fringe extended only on the

ventral edge of the opening. In SAM-A20350, the ventrolateral flaps on the buccal segment were longer and more triangular, whereas the flap on segment 3 was broader than in *L. marionensis*. The thoracic neuropodia were much wider with 2 rows of 40–50 uncini in raised glandular patches that extended almost to the ventral pad. The uncini also had fewer teeth. Day's (1967) specimens referred to *Lanice conchilega* may also be a new species and need to be redescribed, but this is beyond the scope of this paper.

Lanice bidewa Hutchings & Glasby, 1988, from Australia and New Zealand can be distinguished from *L. marionensis* by its small size (up to about 20 mm) and it is colourless when preserved. All pairs of gills are equal in size. The opening of the tube has smooth margins.

Lanice sinata Hutchings & Glasby (1990), an intertidal species from Western Australia, is distinguished by the presence of a deep pocket-shaped sinus formed by a dorsal ridge on segment 4.

Distribution

Subantarctic Marion and Prince Edward islands, 5–475 m depth. Highest densities occur in the area between the two islands on soft substrata, with an average of 50 individuals in each dredge sample and many empty tubes. ?Antarctica, ?East Africa.

ACKNOWLEDGEMENTS

I would like to thank Di Gianakouras, Dave Glassom, Prof. George Branch and Dr Lynnath Beckley for the opportunity to work on material collected by them during the University of Cape Town expeditions. Specimens were also supplied by Dr P. Gillet from the 1976 survey of the *Marion Dufresne*. Prof. Charles Griffiths is thanked for valuable guidance with the description of the new species. Dr Pat Hutchings gave advice regarding the uncertainties relating to *L. flabellum*. I am very grateful to the staff of the Marine Biology unit and Library at the South African Museum for their patience and help. Funding was supplied by the South African Steering Committee for Antarctic Research (SASCAR) and the Department of Environment Affairs.

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