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# Additional Nereidids (Polychaeta) from Eastern Australia, together with a Redescription of Namanereis quadraticeps (Gay) and the Synonymising of Ceratonereis pseudoerythraeensis Hutchings & Turvey with C. aequisetis (Augener)

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ABSTRACT. Ceratonereis pseudoerythraeensis Hutchings & Turvey, 1982, an extremely common estuarine nereidid throughout southern and eastern Australia, is synonymised with Ceratonereis aequisetis (Augener, 1913), previously only known from the Swan River, Western Australia. A new record of C. amphidonta Hutchings & Turvey, 1982, from South Australia is given from Victoria. Namalycastis cf. abiuma (Müller, 1871) is described. Material from the type locality of Namanereis quadraticeps (Gay, 1849) is described and compared to N. littoralis Hutchings & Turvey, 1982. The only known record of Pseudonereis masalacensis (Grube, 1878) from Australia is referred to Pseudonereis anomala Gravier, 1901.

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KEYWORDS: taxonomy, Australian polychaetes, estuarine nereidids, redescription, type-species.

In 1982, Hutchings & Turvey published a comprehensive study of the nereidids predominantly of South Australia, in which they described a new species of Ceratonereis, C. pseudoerythraeensis, belonging to a group characterised by giant, simple setae. Following publication of this paper, Dr Hartmann-Schröder drew the senior author's attention to the presence of such setae in Ceratonereis aequisetis (Augener) although Augener (1913) had made no mention of this type of simple setae in the description of the species. Examination of Augener's type confirmed that C. pseudoerythraeensis, an extremely common and widely distributed species. was identical with C. aequisetis. An additional new record of Ceratonereis amphidonta Hutchings & Turvey, 1982, from Westernport Victoria is given; the species was previously only known by a single specimen from South Australia. Some material of Namanereis quadraticeps (Gay) from the type locality became available to us and we have described and designated a neotype of N. quadraticeps, the type-species of the genus. A full description of Namalycastis cf. abiuma (Müller) from southern Queensland is given. Namalycastis abiuma (Müller) is described together with some comments on the genus. The single record of Pseudonereis masalacensis (Grube, 1878) from Australia was found to be misidentified and the material has been reidentified as Pseudonereis anomala Gravier, 1901.

The following abbreviations have been used in the text, Allan Hancock Foundation, Los Angeles (AHF), Australian Museum, Sydney (AM), Zoologisches Institut und Zoologisches Museum der Universität, Hamburg (HZM), Queensland Museum, Brisbane (QM), Universytet Wroclawski Muzeum Przyrodnicze, Warsaw (WM), Museum of Victoria, Melbourne (MV).

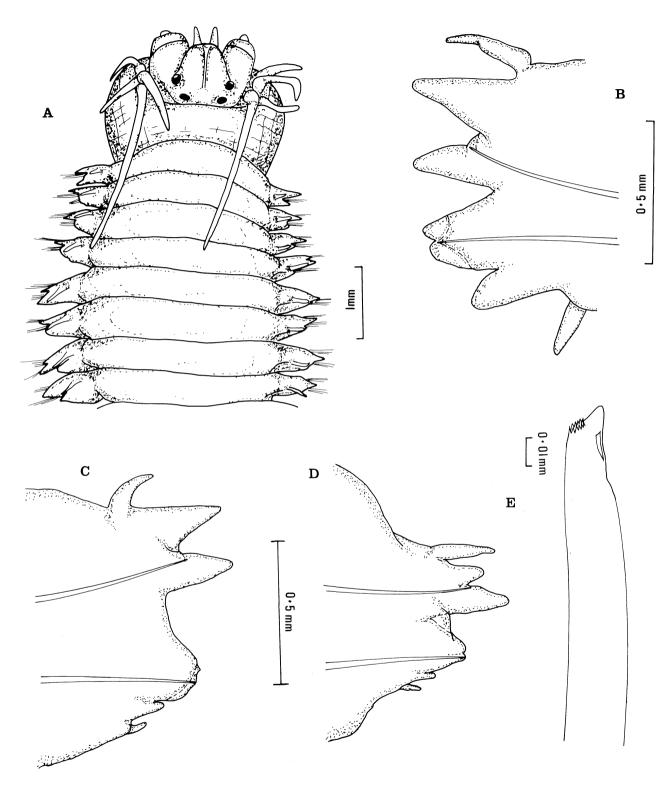


Fig. 1. Ceratonereis aequisetis: a.anterior end, dorsal view; b.left parapodium of setiger 9, posterior view; c.left parapodium of setiger 35, anterior view; d.left parapodium of setiger 68, anterior view; e.giant simple falciger from posterior parapodium. Setae omitted from figures of parapodia.

#### Ceratonereis aequisetis (Augener, 1913) Fig. 1a-e

Nereis (Ceratonereis) aequisetis Augener, 1913: 171-174, pl. III fig. 48u, fig. 49u, text fig. 18a-c. — Hartmann-Schroder.

Ceratonereis near anchylochaeta Hartmann-Schröder, 1979: 112, fig. 183.

Ceratonereis pseudoerythraeensis Hutchings & Turvey, 1982: 98-102, fig. 2a-e. — Hutchings & Murray, 1984: 36.

Material examined. Material identified by Augener as *Ceratonereis aequisetis*, Western Australia, Swan R. Melville Water, St. 4l, coll. 13-10-1905 (HZM V7918), 6 specimens, range of size of complete specimens (length mm/max width mm/nos of setigers) 38/3.5/90, 38/4.0/85, 58/4.5/96, 35/3.5/75. Specimen illustrated from same locality but separated (HZM P.17968); Harvey Estuary, sandspit, 11.6%0, coll. Hartmann-Schröder 4-11-1975 (HZM P.17129), 4 specimens, 2 ♂, 2 ♀.

Holotype of *Ceratonereis pseudoerythraeensis*, South Australia, Onkaparinga Est. (AM W.18510).

**Description.** Preserved specimens pale yellow in colour, some with light brown pigment on dorsum of first 14-17 setigers and on peristomium, prostomium and palps (Fig. 1a).

Body solid, widest mid-anteriorly, tapering slightly posteriorly, somewhat flattened dorsoventrally. Medial groove on dorsum ranging from deep to very shallow depending on degree of expansion caused by coelomic gametes, from setiger 17-22 and continuing to end of body; ventral medial groove throughout.

Prostomium width about equal to length, 2 pairs black eyes, approximately circular in outline, anterior pair slightly larger and further apart than posterior pair, lens visible in anterior pair and sometimes in posterior pair. Palps robust and conical with small spherical palpostyle, lateral groove across palpophore about 3/3 along length. Antennae extend to about level of palps. Four pairs of tentacular cirri: 1 and 3 equal in size, extend to mid peristomium, 2 extending to setiger 1 and 4 extending to setiger 2-8. Pharynx with pair of transparent, brown jaws with 7-8, 9-10 moderately developed teeth. Paragnaths brown, triangular cones, slight variation in size, arranged as follows: I = 4-8in an irregular patch; II = an oblique block of 25/28, 32/37, 28/29, 24/25; III = broad transverse patch of 5-7 irregular rows, consisting of 53-58 cones; IV = reverse Y shaped crescent made of 38, 41, 41/41, 43/43

Parapodia with conical notopodial lobes; dorsal base of ventral notopodial lobe anteriorly with small rounded presetal lobe. Dorsal neuropodial lobe broadly conical, distally with 2 small lobes in anterior parapodia (Fig. 1b); a small supra-acicular lobe, a large subacicular lobe; well developed postsetal lobe absent. Ventral neuropodial lobe initially conical, reduced to a small tubercle by setiger 20–29. Anteriorly, all parapodial lobes similar in size; in middle setigers notopodial lobes similar in size (Fig. 1c), 1–3 times larger than dorsal neuropodial lobe; posteriorly, dorsal notopodial lobe posteriorly reduced; notopodial lobe remains 1–3 times

larger than dorsal neuropodial lobe. Dorsal cirrus similar or slightly shorter in length to dorsal notopodial lobe except in far posterior setigers (Fig. 1d), ventral cirrus extending 1/3 to 1/2 way to tip of ventral neuropodial lobe throughout. Acicula black, brown at extremities. Setae consist of several types: notosetae are homogomph spinigers, neurosetae include homogomph spinigers, heterogomph falcigers and giant, simple falcigers from mid setigers onwards in the supra-acicular fascicle, and heterogomph spinigers and heterogomph falcigers in the subacicular fascicle. Some individuals possess a few homogomph spinigers in subacicular neuropodial fascicle. Giant, simple falcigers with few, poorly developed teeth above main fang (Fig. 1e). For details of ranges of number of setal types along the body, see Table 1. Pygidium with pair of ventrally produced anal cirri, slender extending over last 5-6 setigers.

Some of the individuals gravid females, with no development of epitoky. Glandular ridges developed across dorsum of setigers 27–39 in gravid females but no signs of epitoky.

Comments. Hartmann-Schröder has examined the type specimens of C. aequisetis (St. 41, V10081) which consist of 2 anterior ends and a single complete specimen (pers. comm.). The complete specimen is a gravid female which shows no sign of epitoky. Careful examination of this type reveals the presence of giant, simple falcigers. However, in many parapodia these have been damaged. Heterogomph falcigers are present from setiger 8, specifically in the supra-acicular fascicle of the neuropodia, and in the subacicular fascicle both heterogomph spinigers and falcigers are present. Hartmann-Schröder (1979) also compared these type specimens with the material examined by us (V7918), and she concluded that they are identical. She also synonymised C. cf. anchylochaeta from Port Hedland (Hartmann-Schröder, 1979) with C. aequisetis.

The type material of *C. aequisetis* does, therefore, not totally agree with the description given by Augener (1913). Augener does not mention the occurrence of giant, simple falcigers which, admittedly, are mainly broken in the material examined by him. Similarly, he reported that neurosetal heterogomph falcigers are absent except in far posterior setigers, whereas they are present even in anterior setigers of the type material. However, in all of the Augener material examined a large proportion of the setae are damaged; perhaps this explains why Augener overlooked these two groups of characteristic setae. Hutchings & Turvey (1982) accepted Augener's description and did not examine the type as it was felt that the giant, simple falcigers would be so conspicuous and that they could not be overlooked, and therefore C. aequisetis did not belong to the group of Ceratonereis with giant, simple falcigers. Hutchings & Turvey (1982) then described a series of species of Ceratonereis with simple falcigers, and subsequently Hutchings & Glasby (1982) and Ben-Eliahu et al (1984) described additional species. Hartmann-Schröder

brought it to our attention that *C. aequisetis* did, in fact, have simple falcigers and we then examined the series (V7918) and could not differentiate these specimens from *C. pseudoerythraeensis* Hutchings & Turvey, 1982. Therefore the latter species is here synonymised with *C. aequisetis*.

Ceratonereis aequisetis occurs widely throughout estuarine and shallow, protected coastal waters in Southern Australia. Hartmann-Schröder (1983) has also recorded it from a wide variety of estuarine habitats in Western Australia. Currently, this species has been only reported from Australia.

Augener's material is gravid but shows no sign of epitoky. Hutchings & Turvey (1982) reported that some of their material had been found in fine, sandy tubes surrounded by juveniles or eggs, with the females exhibiting no signs of epitoky, providing additional evidence that *C. pseudoerythraeensis* is synonymous with *C. aequisetis*.

**Habitat.** Protected bays and estuaries, sandy seagrass substrates or in mangroves; salinity range 9.9-35%.

Australian distribution. Western Australia, South Australia, Victoria, New South Wales and Queensland.

#### Ceratonereis amphidonta Hutchings & Turvey

Ceratonereis amphidonta Hutchings & Turvey, 1982: 97-98, fig. 1a-c.

Material examined. Victoria, Westernport Bay, 1 (MV F50049).

**Remarks.** This single specimen agrees very well with the holotype of *C. amphidonta* which was described from South Australia. This is only the second reported specimen.

**Habitat.** Posidonia seagrass beds.

Australian distribution. South Australia (Maston Point, Kangaroo Island), Victoria (Westernport Bay).

Namalycastis cf. abiuma (Müller, in Grube, 1871) Fig. 2a-g

Paranereis abiuma Müller in Grube, 1871: 47-49. – Hartman 1959a: 163-166, pl III. 1-4. Namalycastis abiuma. – Russell, 1962: 6.

**Material examined.** Queensland, Serpentine Creek, Cribb Island, many (QM G7493-500); airport drain, Brisbane (QM G10705).

**Description.** Stout worm, all incomplete, range in size from 35 mm long, 3 mm wide (excluding parapodia) for 55 setigers to individuals 72 mm long, 4 mm wide for 130 setigers. Preserved material with dorsum, including prostomium and palps, uniformly brown pigmented. Some radiation in the intensity of pigmentation with material examined. Parapodia, including dorsal lobe, antennae, palpostyles of palps, tentacular cirri and ventrum, cream coloured.

Prostomium trapezoidal with short squat palps and

small spherical palpostyles. Two small triangular antennae. Two pairs of dark, brownish eyes situated adjacent to one another at the lateral margins of the prostomium. Four pairs of short, stumpy tentacular cirri, longest pair barely extending beyond the posterior margin of the prostomium (Fig. 2a). Segment 1 narrow and achaetous.

Pharynx everted on some specimens (QM G7498), lacking any chitinous paragnaths or papillae. Pair of heavily chitinised dark-brown jaws, with 5-8 teeth arranged in a vertical row, terminal tooth slightly larger (Fig. 2b). Number of teeth similar within an individual but some variation within material examined.

Parapodia sub-biramous with 2 dark-brown to black acicula; noto-aciculum almost emergent. Notopodium absent, represented by large dorsal lobe; dorsal cirrus absent. Dorsal lobe initially triangular with a constricted terminal portion, constriction resembles an articulation; posteriorly the lobe becomes enlarged, lamellar and at least twice the length of the parapodium. Neuropodium consists of a pre- and postsetal lobe: presetal longer and bilobed, postsetal rectangular. Small, elongated, triangular ventral cirrus (Fig. 2c-e).

Notosetae completely absent; neurosetae include about 4 spinigers and 10 falcigers in each fascicle. Spinigers homogomph with long fine blades that are finely denticulate at the base (Fig. 2f). Falcigers heterogomph with finely denticulated blades, denticulations more pronounced at the base of blade. At point of articulation of blade onto shaft, slight extension of shaft to form a collar. Core of shaft strongly granular, and base of shaft with closely spaced transverse striations (Fig. 2g).

Under XI0 magnification, parapodial dorsal lobe with a very prominent series of ducts arising from a larger, central medial canal. This complex arrangement of canals forms a three-dimensional network penetrating throughout the lobe. Similar ducts, but fewer in numbers, occur on the neuropodial lobe. Some individuals with gregarines attached to the external surface of the dorsal lobe. None of the material examined was gravid.

Comments. This species was collected from intertidal and subtidal muddy sediments in mangrove creeks which flow into Moreton Bay, southern Queensland. It seems likely that the well developed ducts observed running through the dorsal and neuropodial lobes are blood vessels, although all the preserved material had colourless parapodia. If this is the correct interpretation, then the almost foliaceous dorsal lobes must considerably facilitate oxygen uptake in an environment low in oxygen. Some other genera of nereidids reported from mangroves, for example Dendronereis, have parapodial branchiae which presumably facilitate oxygen uptake.

**Discussion.** This species has only been recorded from Moreton Bay, Australia (Russell, 1962) the same area from which the present material was collected.

This species was initially described by Müller (1871) from Brazil, and the description is very brief. Hartman

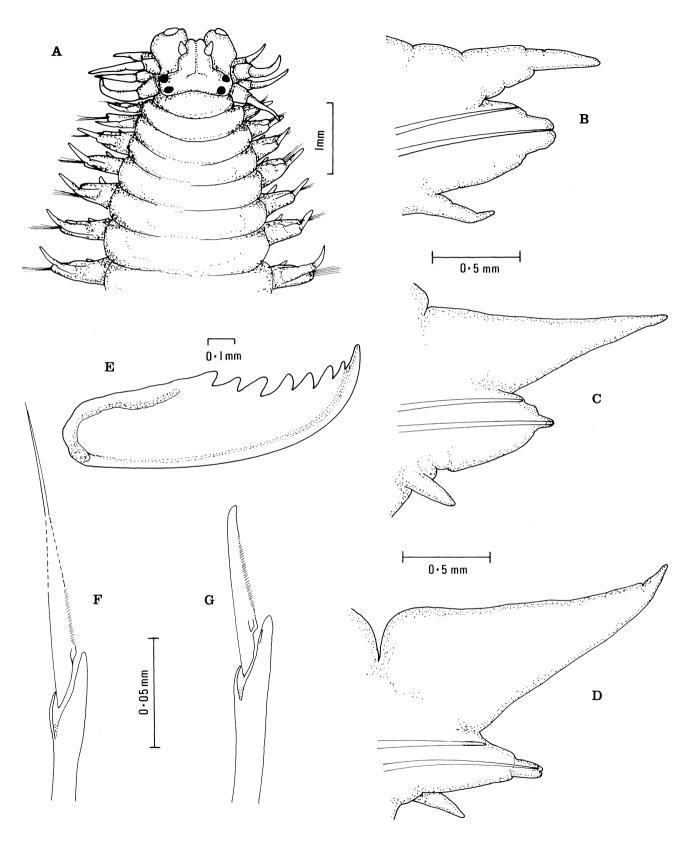


Fig. 2. Namalycastis cf. abiuma: a.anterior end, dorsal view; b.left parapodium of setiger 9, anterior view; c.left parapodium of setiger 54, anterior view; d.left parapodium of setiger 121, anterior view; e.right jaw, ventral view of concave surface; f.heterogomph spiniger; g.heterogomph falciger. Setae omitted from figures of parapodia.

(1959a), in a review of freshwater nereidids, synonymised 11 species with *N. abiuma* although, from her comments, it seems unlikely that she examined any of the material. These 11 species were described from scattered localities around the world and it is difficult to conceive how they could, in fact, be just one species, for many were recorded from isolated freshwater or brackish water environments.

The material from south-eastern Queensland has been fully described as it is probably not *N. abiuma* Müller but, before describing it as a new species, the type material, or at least material from the type locality of *N. abiuma* together with type material or material from the type locality of all the species synonymised by Hartman (1959a) with *N. abiuma*, should be examined. Separation of these species, if they are in fact different, may be very difficult as this genus lacks the characters commonly used to separate nereidid species. These characters are the ornamentation of the pharynx, complex parapodial lobes and the type of notosetae present.

Many other estuarine or brackish water habitats have been examined along the east coast of Australia, and to date this is the only locality from which this species has been recorded. This species is the only representative of the genus found in Australia.

**Habitat.** Estuarine creeks lined with mangroves. **Australian distribution.** Southern Queensland.

## Namanereis quadraticeps (Gay, 1849). Fig. 3a-e

Lycastis quadraticeps Gay, 1849: 24 (in Blanchard, 1849).Ehlers, 1897: 70; 1900: 214-215; 1901: 121; 1913: 498.

Material examined. Chile, *Metula* oil spill study, Straits of Magellan just north of Bahia San Gregorio. Coll. D. Straughan Jan. 1977. Neotype (AM W.198509). Voucher material from the same locality as the neotype has been deposited in (USNM 097377), (BMNH ZB 1984.52–53) and (AM W.198510). Magellan Straits Punta Arenas; beach under stones (HZM V4780) det. Ehlers.

**Additional material.** Santa Rosalie, Bahia, Southern California (AHF).

**Description.** Complete individual, 1 cm long, 1 mm wide, 50 setigers. Preserved body pale cream in colour. Prostomium bluntly triangular with pair of small, blunt antennae. Pair of bulbous, biarticulated palps with small, rounded palpostyles. Four pairs of short, tentacular cirri with swollen bases. Two pairs of semicircular eyes, hidden by prostomial fold (Fig. 3a).

Pharynx dissected. Pair of lightly chitinised jaws with 7 lateral teeth. Chitinous paragnaths and papillae absent.

Parapodia sub-biramous with dark brown acicula. First setiger occurs on the segment following the tentacular cirriferous segment. Small dorsal cirrus rounded; elongated neuropodia with almost equal sized pre- and postsetal lobes; small, globular ventral cirrus. Parapodia similar along entire body (Fig. 3b). Notosetae

consist of a single heterogomph spiniger with finely denticulated blade in each parapodium (Fig. 3c-d). Neurosetae consist of a single heterogomph spiniger and about 6 heterogomph, short-bladed falcigers, with strongly toothed blades. Shaft of falciger with strongly granular core (Fig. 3e).

Pygidium, a rosette with at least one small, triangular anal cirrus, presumably originally paired.

Comments. Variations exhibited in the other material (18 anterior fragments plus some posterior fragments) consist almost entirely of intensity of eye pigmentation. Material, that is all similar in size, is not gravid. Posterior fragments have a pair of anal cirri.

The material identified by Ehlers as *N. quadraticeps* closely resembles the type series, however the specimens are slightly larger, setiger to length (mm), 65, 25; 57, 16; 55, 13.5; 52, 15 and 44, 14.5.

Discussion. The type-species of Namanereis, N. quadraticeps (Gay), was described in 1849 from Calbuco, Chile. Gay originally described his species as Lycastis quadraticeps. However, the name was preoccupied and Chamberlin (1919) proposed the new name of the genus Namanereis with N. quadraticeps as the type-species. The description is very brief and no type material is presumed to have been deposited. Subsequently, the species was recorded by Ehlers (1897, 1900, 1901 and 1913) from the Straits of Magellan in 2.7 fms; Punta Arenas intertidally; and St Paul, Ebbestrand – all in South America. Ehlers provides no descriptions. Benham (1909) also described N. quadraticeps from Campbell Island, and Augener (1924) subsequently reported the same species from Port Ross, Auckland Island which is in the same biogeographic areas as Campbell Island. Hutchings & Turvey (1982) synonymised Augener's and Benham's material with Namanereis littoralis Hutchings & Turvey which they described from intertidal areas of eastern Australia.

Hartman, in 1959b, synonymised Lycastopsis beumeri Augener, 1922, with N. quadraticeps following Wesenberg-Lund's (1959) synonymy of Lycastoides pontica (Bobretzky, 1870 or 1881) with L. beumeri. Bobretzky's description of material from the Black Sea, either in 1870 or 1881, was in Russian and unavailable to Wesenberg-Lund and to the present authors. In her synonymy, Wesenberg-Lund utilised the drawings of La Greca (1949) of L. pontica. It therefore follows that L. pontica is also synonymous with N. quadraticeps. Hartman (1968), realising this, although not referring to it in the text, used La Greca's drawings of L. pontica in her description of N. quadraticeps from southern Calfornia. The figures of La Greca and the description of Wesenberg-Lund clearly indicate that only 3 pairs of tentacular cirri are present.

Material from Chile collected by Straughan and examined by us, has four pairs of tentacular cirri, and this material agrees with that of Ehler's which we have examined. We therefore propose to designate a neotype from the material collected by Straughan, and have redescribed the species.

Material from southern California has been examined

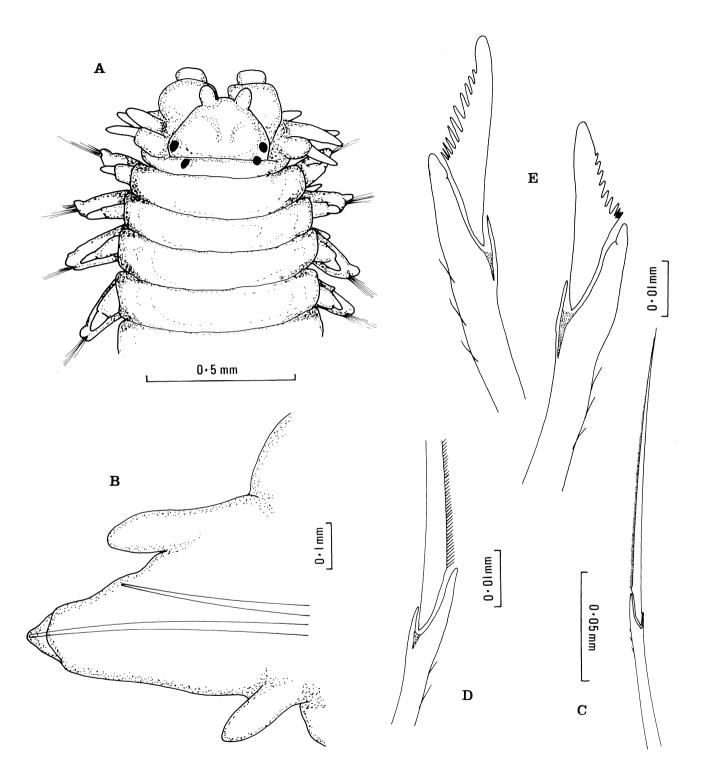


Fig. 3. Namanereis quadraticeps, neotype: a.anterior end, dorsal view; b.right parapodium of setiger 12, anterior view; c,d.neuropodial heterogomph spiniger from setiger 12; e.neuropodial heterogomph falciger from setiger 12. Setae omitted from figures of parapodia.

and agrees closely with that of Hartman's (1968) description, and we suggest that this is not *N. quadraticeps* Gay but is another, possibly undescribed species of *Namanereis*. Fauchald's (1977) definition of the genus states that the genus may have 3-4 pairs of tentacular cirri and that the notopodial lobe is poorly developed so that the Californian material certainly does belong to the genus. Notosetae are completely absent from the southern Californian material, whereas a single one is present in *N. quadraticeps*.

Thirteen species have been tentatively assigned to the genus *Namanereis* by Hartman (1959a) and since then only one additional species *N. littoralis* Hutchings & Turvey, 1982, has been described. Hartman (1959a, b) also suggests that many, if not all, of the 13 species are synonymous with *N. quadraticeps*. However, many of these species occur in isolated areas of the world, and it seems unlikely that we have a widely distributed cosmopolitan species. Certainly Hartman's record from southern California is in doubt. A detailed study of this genus is urgently needed.

Namanereis quadraticeps can be separated from Namanereis littoralis Hutchings & Turvey, 1982, by the almost emergent neuro-aciculum in N. quadraticeps (in N. littoralis it is completely submerged), and by subtle differences in the articulation of the falcigers and spinigers which are strongly heterogomph in N. quadraticeps and only weakly heterogomph in N. littoralis. Finally, there are slight differences in the shape of the postsetal lobes and in the prostomium. The prostomium in N. quadraticeps is broadly T-shaped, whereas in N. littoralis it is almost rectangular. The postsetal parapodial lobe in N. quadraticeps is more pointed than in N. littoralis. However, it is recognised that the two species are very similar. As already commented on in the discussion of the species of Namalycastis, these genera of nereidids which lack any of the traditionally used features to separate species may be extremely difficult to define and we may have to be reliant on ecological data or differences in reproductive methods to separate the species.

**Habitat.** Intertidal, mixed sediments with surface cobbles and intervening sand and gravel. Kelp also present.

**Distribution.** Chile, Straits of Magellan.

#### Pseudonereis anomala Gravier, 1901

Pseudonereis anomala Gravier, 1901: 191-197, pl. 12, figs 50-52. — Fauvel, 1911: 395-397; 1922: 494. — Hutchings & Turvey, 1982: 141-142.

Pseudonereis masalacensis. – Pope, 1943: 244. Not Grube.

Material examined. Pseudonereis anomala: Western Australia — Houtman Abrolhos, Pelsart Is., I(AM W.4862); Rottnest Is., mangroves (AM W.4863); Freemantle, 9(AM W.18476); Cowaramup Bay, I(AM W.4864-65); Albany, 2(AM W.4861). South Australia — Kangaroo Is., Maston Pt, I(AM W.18313), Cape du Couedic, many (AM W.18310-12). New South Wales — Manly, 4(AM W.4316); Long Reef, I(AM

W.4357); 2(AM W.32l9), 2(AM W.4860), collected E.C. Pope, 1938.

**Additional material.** *Nereis* (*Lycoris*) *masalacensis*, Masolac, Philippines, Holotype (WM3ll).

**Comments.** Pope (1943) reported *Pseudonereis masalacensis* from Long Reef, Sydney, and incorrectly cited *P. masalacensis* as having been described by Fauvel instead of Grube (1878). We questioned the identity of this material as this species has not been recorded from Australia before or since the Long Reef survey, despite extensive collections in at least the eastern and southern parts of Australia. Therefore we examined the type of *P. masalacensis*.

The holotype of *Pseudonereis masalacensis* (Grube) is considerably flattened, distorted and, as a result of preservation in formalin, in very poor condition. The numbers and arrangement of paragnaths are generally very difficult to interpret, and paragnaths in Areas VII–VIII are not visible at all. The setae have lost most of their rigidity and are often broken between the shaft and the blade. Grube, unfortunately, does not give an adequate description of the setae. As paragnath patterns and the distribution and types of setae are now recognised as important characters in nereidid taxonomy we therefore suggest that this species is essentially indeterminable unless additional material can be collected from the type locality.

Pope's material was compared to the holotype of *P. masalacensis*, and we found distinct differences in the shape of the posterior notopodial lobes. The holotype shows no posterior changes in the shape of the notopodial lobes, whereas the Long Reef material, especially the larger specimens, shows considerable dorsolateral elongation of the dorsal notopodial lobes in posterior setigers. In this respect Pope's material closely resembles *P. anomala* Gravier. Other authors have, in fact, used this character, along with the paragnath arrangement in Area VI, to facilitate the separation of *P. anomala* from *P. masalacensis* (Gravier, 1901; Fauvel, 1911).

The number of paragnaths is generally fewer in Pope's material than is given in previous descriptions of P. anomala, although the characteristic arrangement of paragnaths in regular, comb-like rows in Areas II, III, IV appears very similar. In Area VI, however, Pope's material has 10–18 cones in 2–3 irregular transverse arcs compared to a single transverse arc of 6 cones in Gravier's description, and a single, transverse arc of 5-9 cones in Hutchings & Turvey (1982). Other specimens examined showing a departure from the single arc of paragnaths in Area VI include one from Pelsart Is., Abrolhos, North West Australia (AM W.4862) which has 6 cones in 1 arc on one side, and 6 comes in 2 arcs on the other side, and one specimen from Cape du Couedic (AM W.18312) which has 6 cones in 1 arc on one side, and 9 cones and I short bar in an irregular patch on the other side. In addition, Fauvel (1922) reports a specimen, also from Pelsart Is., with one transverse row of paragnaths, tending to divide into two.

Considering these variations in paragnath pattern in Area VI, and the considerable variation in paragnath numbers previously attributed to the species (Hutchings & Turvey, 1982), the variation exhibited in Pope's material would seem acceptable. We therefore reassign Pope's material to P. anomala. Certainly, in all other respects, Pope's specimens appear identical to Gravier's description of P. anomala and to the material examined by Hutchings & Turvey. The only other species of Pseudonereis recorded from Australia, P. rottnestiana Augener, 1913, displays the characteristic leaf-like expansion of the dorsal notopodial lobe in posterior parapodia, like P. anomala, but differs in having far fewer paragnaths in the maxillary ring.

**Habitat.** Associated with encrusting fauna, coralline algae and algal holdfasts.

Australian distribution. Western Australia, South Australia and New South Wales.

ACKNOWLEDGEMENTS. We would like to thank Dr Gesa Hartmann-Schröder for drawing our attention to the *C. pseudoerythraeensis* problem, and for checking certain features on some specimens of *Namanereis quadraticeps*, and Dr Kristian Fauchald for discussing the problem with us. Material was kindly loaned by Ms Sue Williams (AHF), Dr Gesa Hartmann-Schröder (HZM), Dr Jadwiga Wiktor (WM) and Dr Patricia Mather (QM). Robin Wilson (MV) kindly drew our attention to the additional record of *C. amphidonta*.

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	Ant.	Mid	Post.
	Setigers	Setigers	Setigers
Notosetae: homogomph spinigers	8–17	4–10	3
Neurosetae: Supra homogomph spinigers heterogomph falcigers giant, simple falcigers	5-14	2-8	4-5
	2-5	0	0
	0	1-2	1-2
Sub heterogomph spinigers heterogomph falcigers	3-18	4-6	1-2
	2-3	3-5	2-3

**Table 1.** Distribution of setal types in the type series of *Ceratonereis aequisetis*. Many of the setae damaged, especially posteriorly and several individuals posteriorly incomplete, so some counts are underestimates of setal types presented.