PYCNOGONIDA FROM PRYDZ BAY, EAST ANTARCTICA

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A small but rich collection of pycnogonids was gathered by personnel of the R/V 'Aurora Australis' of the South Australian Museum, in Prydz Bay (stations from 68°50'E to 78°11'E), eastern Antarctica. The Collection is listed by station number with 300+ specimens consisting of 25 species (2 additional species remain identified only to genus) in 12 genera and 6 families. There is one new species, *Colossendeis adelpha*, which is described, illustrated, and compared with its congeners. An aberrant hirsute specimen of *Decolopoda australis* Eights is illustrated and compared with typical specimens of that species.

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These collections were made on the R/V 'Aurora Australis' during February and March, 1991, while in Prydz Bay, eastern Antarctica (68°50'E to 78°11'E). This pycnogonid collection is diverse and includes specimens of 6 of the 9 described families with twelve genera and twenty five species (2 remain unnamed for lack of adult or undamaged material). It contains about 300+ specimens. A single new species, *Colossendeis adelpha*, is described, illustrated, and compared with a very similar congener. An aberrant hirsute specimen of *Decolopoda australis* Eights, the first example of this in the genus, is described, illustrated, and compared with more typical specimens of that common species.

MATERIALS

This material is deposited in the South Australian Museum (SAM), Adelaide, and has been given SAM registration numbers. Several surplus specimens have been retained at the National Museum of Natural History (NMNH), Smithsonian Institution, and exchanged for Antarctic specimens not represented in the SAM collections.

The literature cited under each species is abbreviated because the recently published Antarctic survey reports by Child (1994a, b, 1995a, b, c) contain most pertinent literature and bibliography. Its duplication under the pertinent species in this report was not thought necessary.

SYSTEMATICS

Class PYCNOGONIDA

Family AMMOTHEIDAE

This family contains the most heterogeneous group of genera found amongst the pycnogonids. All species have palps of from 4 to 10 segments, most have cheliphores and chelae in various stages of reduction or atrophy to complete loss, and all have ovigers carried by both sexes, although those of females are of reduced size.

Genus ***Achelia*** Hodge, 1864

Ammothea Leach, 1814 [part]

Ammothea (*Achelia*) Giltay, 1934.

Aduncorostris Fry & Hedgpeth, 1969

Diagnosis

Trunk discoid in dorsal outline, partially to fully unsegmented. Proboscis usually pyriform. Ocular tubercle usually low, with eyes. Abdomen short, erect. Cheliphores with short scape, chelae atrophied, reduced to knobs. Palps 7- to 9-segmented. Legs spinose, femur often inflated, cement gland with single tiny dorsodistal tube. Tarsus short, propodus very curved, with larger heel spines, smaller sole spines, robust main claw, and usually long auxiliary claws.

Achelia spicata (Hodgson, 1915)

Austrothea spicata Hodgson, 1915: 147.

Achelia spicata.– Calman, 1915: 57–60, figs. 13–14.– Child, 1994a: 10–11 [recent literature].

Achelia (*Ignavogriphus*) *spicata*.– Fry & Hedgpeth, 1969:109–110 [early literature], figs. 152–154, 157, 168–170, tables 13–14.

Material Examined
Sta. 25B (SAM E2930, 1♂).

Distribution
A common circumpolar species found from the intertidal to 1138 m.

Remarks
Species of this genus are known to be variable and this species is one with extreme variation. It even has two different morph groups in which the lateral processes are either crowded together or well separated. There are only two unvarying major characters in this species and both concern tubercles. The dorsolateral corners of the cephalic segment are smooth and do not have any form of tubercle, while tubercles are present more often than absent on these corners. The legs are also without tubercles except for the first coxae. These have only two dorsolateral setose tubercles instead of a more usual four found in many other species.

Genus ***Ammothea*** Leach, 1814

Lecythorhynchus Böhm, 1879

Leionymphon Möbius, 1902

Magnammothea Fry & Hedgpeth, 1969

Thavmastopycnon Fry & Hedgpeth, 1969

Athernopycnon Fry & Hedgpeth, 1969

Ecleipsothremma Fry & Hedgpeth, 1969

Anammothea Fry & Hedgpeth, 1969

Diagnosis
Habitus much larger than *Achelia*, trunk more slender, lateral processes well separated. Posterior rims of trunk segmentations expanded, often with tall conical dorsomedian tubercles. Ocular tubercle usually small, eyes well pigmented. Abdomen usually long. Cheliphores from fully chelate with reduced chelae, or atrophied chelae reduced to knobs, or scapes only without chelae, to no cheliphores whatsoever. Palps from 6- to 9-segmented, well developed. Ovigers 10-segmented in both sexes. Legs usually moderately long, cement gland small, with single dorsodistal pore.

Some species have small differences between the 4 anterior and 4 posterior propodi. These are: differences in heel spine number, overall length of the propodus, and length of the main and auxiliary claws.

Ammothea adunca Child, 1994a

Ammothea adunca Child, 1994a: 13–15, fig. 2.

Material examined
Sta. 52 (SAM E2931, 1♂).

Distribution
This species is known from a few localities in the vicinity of Heard Island on the Kerguelen Plateau, southern Indian Ocean, in depths of 175–800 m. The origin of this specimen, Prydz Bay, is due south of the type locality in the high Antarctic and extends its known distribution to that area.

Remarks
This recently described species is one of the few in this genus of mostly Antarctic species which has fully chelate cheliphores rather than having the chelae atrophy to become knobs in adults. Along with fully functional chelae, it also has very small palps which are shorter than the proboscis, while most species have palps longer than the proboscis.

There are four species of Antarctic and Subantarctic *Ammothea* which retain their chelae fingers in some form, whether functional or not, as adults. These are *A. longispina* Gordon, 1932, *A. gigantea* Gordon, 1932, *A. striata* (Möbius, 1902), and the present species. Of these four chelate species, only *A. longispina* and *A. adunca* have palps of reduced size and shorter than their narrowed proboscis. The palps sometimes have a reduced segment number (7, 8, or the usual 9 in *longispina*) from most other species which have nine. The present species also has palps with a reduced segment number (6 or 7), suggesting that the palps, at least in these two species, are in a transitional phase progressing toward reduced segment numbers. No specimens with the usual 9 segments of others have been found in this species.

The proboscis of both species is peculiar among ammotheids. In *A. longispina*, it is long, very

slender, and tapering to a narrow distal tube. The taper is even longer and narrower in juveniles. In *A. adunca*, it is swollen in its basal third and downcurved with its distal two thirds having a smaller diameter and a banana shape. The genus *Ammothea* is unique among the genera of pycnogonids in having such a diversity or reduction of cheliphore and palp segments. Its species range from having no cheliphores in any form to those with fully chelate cheliphores in conjunction with palps of 6 to 9 segments. The latter character of reduced palp segment number is not unique to *Ammothea*, but is shared by many species of the ammotheid genus *Tanystylum*.

Ammothea allopodes Fry & Hedgpeth, 1969

Ammothea spinosa var. Gordon, 1944: 50–51, figs. 16a–16e, 17.

Ammothea (*Mathoma*) *allopodes* Fry & Hedgpeth, 1969: 85–87, figs. 104, 105, 126–129.

Ammothea allopodes.– Clark, 1977: 174–175 [key].–Child, 1994a: 12–13 [key], 15.

Material examined

Sta. 52 (SAM E2932, 1♂, 2♀).

Distribution

This species has been taken at only a few localities which appear to encircle the Antarctic continent. It is known from depths of 210–540 m. It cannot be considered common.

Remarks

The bulbous chelae with atrophied fingers dorsal to the short egg-shaped proboscis help identify this relatively small species. Its dorsomedian trunk tubercles are almost square distally in lateral view and its moderately tall ocular tubercle is about equal to the height of these tubercles. This is one of the few *Ammothea* species which have shorter, more robust anterior propodi with an additional heel spine. The posterior four propodi are more slender, longer, and have only two heel spines in *A. allopodes*.

Ammothea glacialis (Hodgson, 1907)

Leionymphon glaciale Hodgson, 1907: 50–52, pl. VII, fig. 3.

Ammothea (*Ammothea*) *glacialis*.– Fry & Hedgpeth, 1969: 75–77 [literature], figs. 104, 105, 109–111.

Ammothea glacialis.– Clark, 1977: 174–175 [key].– Child, 1994a: 12–13 [key], 23–24.

Material examined

Sta. 52 (SAM E2933, 1♂); sta. 53 (SAM E2934, 1♂ with eggs, 1♀); sta. 54 (SAM E2935, 1♀).

Distribution

Distribution of this species is disjunct and is probably an artefact of uneven collecting efforts. It has been captured in the vicinity of South Georgia Island and along the eastern quadrants of the Antarctic continent in 0–500 m. It would be expected to occur in the vicinity of the Antarctic Peninsula and Palmer Archipelago, but the intensive American collecting efforts in these areas have not brought to light any additional specimens. Fry and Hedgpeth (1969:76, fig. 111) record this species as collected on the Antarctic Peninsula at one station (66°S, 67°W), but I have not found this specimen in the National Museum collections. There are not enough records for this species to provide significant distributional information.

Remarks

This rather large species has a massive, long, and inflated proboscis with very short cheliphores. Its dorsomedian tubercles are slightly taller than the low ocular tubercle but the dorsodistal tubercles on the lateral processes are very low or are lacking. All eight propodi are similar and do not vary in anterior and posterior pairs.

Ammothea spinosa (Hodgson, 1907)

Leionymphon spinosum Hodgson, 1907: 49–50, pl. VII, fig, 2.

Ammothea spinosa.– Child, 1994a: 12–13 [key], 27–28 [literature].

Material examined

Sta. 44 (SAM E2936, 3♂, 3♀, 3 Juv.); sta. 45 (SAM E2937, 1♂), sta. 53 (SAM E2938, 1♂ with eggs, 1♀).

Distribution

Records for this uncommon species extend from the Magellanic regions to the Antarctic Peninsula and Ross Sea in 73–1119 m. Its distribution is

distribution is scattered and inconsistent which possibly represents a collecting artefact rather than a true range of distribution.

Remarks

This small species has rather long anterior-pointing dorsomedian trunk tubercles and its ocular tubercle is slightly taller than these tubercles. It has conspicuous paired dorsodistal lateral process tubercles. The proboscis is a short cylinder and its slender cheliphores are almost as long as its proboscis. This is another species with variation between anterior and posterior propodi. The propodi of the first and second leg pairs are short, robust, and have more sole and heel spines than the slender and longer third and fourth propodi pairs.

Genus ***Austroraptus*** Hodgson, 1907

Habitus small, trunk compact, ovoid in dorsal aspect, without segmentation lines. Dorsum without median tubercles (except for 1 species), ocular tubercle usually low, eyes well developed. Proboscis small, shorter than trunk, distally tapered with tiny terminal diameter. Cheliphore scapes short, chelae reduced but some retain fingers in adults. Palps 5- to 8-segmented. Ovigers 10-segmented in both sexes. Tarsus very short. Propodus with 3–4 heel spines, long main claw, and short auxiliary claws often lost.

Austroraptus polaris Hodgson, 1907

Austroraptus polaris Hodgson, 1907: 54–56, pl. VII, fig. 2.– Fry & Hedgpeth, 1969: 116–117 [literature], figs. 174–186.– Child, 1994a: 31 [key], 33.

Material examined

Sta. 47 (SAM E2939, 1 ♀).

Distribution

This is another of many Antarctic genera and species with disjunct or scattered distributional records, most undoubtedly reflecting collecting situations rather than true geographic range. It is known from South Georgia, the South Shetlands, Antarctic Peninsula, Ross Sea, and a few localities in the eastern Antarctic quadrant in 50–569 m.

Remarks

Species of this genus all have very short proboscides which are usually bottle-shaped with a 'neck' which tapers to a small point. They otherwise have many of the characters of the variable genus *Achelia*. The palps often have fewer segments: 5-, 6-, or 8-segmented (this species has 6). Their trunks can have dorsomedian tubercles, but most, including this species, have none, and the chelae fingers in this species are atrophied into tiny bumps.

Family AUSTRODECIDAE Stock

This family of only two genera contains extremely small species which are predominantly Antarctic and Southern Hemisphere residents. The species in the genus represented herein all have tubular pipette-like proboscides which have rings or annulations over most of their surface. Their ocular tubercles are slender anterior-pointing cones with distal eyes. They lack cheliphores entirely. The palps originate on lateral extensions of the cephalic segment, are very long and 5-segmented, although more than one species has the distal two segments coalesced. Their ovigers are reduced to very tiny nonfunctional appendages of 1, 2, 3, 4, or 6 segments. None have been described with 5 oviger segments. The ovigers form the basis, along with the presence or absence of auxiliary claws, for dividing species into Sections for easier identification.

Genus ***Austrodecus*** Hodgson, 1907

Species in this genus are among the smallest of all Pycnogonida with trunk lengths of 4–5 mm. They lack cheliphores entirely as adults, and have very reduced tiny ovigers of 1 to 4, or 6 segments with few setae or none. Only one species is included in this collection.

Austrodecus glaciale Hodgson, 1907

Austrodecus glaciale Hodgson, 1907: 53, pl. VIII, fig. 1.– Child, 1994b: 54–56 [key], 63–67 [literature], fig. 6.

Material examined

Sta. 61 (SAM E2940, 1 specimen).

Distribution

This is the most common species of a predominantly Antarctic genus (Child, 1994b: 63–

67, lists 2300+ specimens). It has been collected on the Campbell Plateau of New Zealand, in the vicinity of South Georgia and in most commonly collected areas of the Antarctic continent in sublittoral depths to 2100 m.

Remarks

Austrodecus specimens are easily separated from other genera and families but difficult to separate among themselves. This is a rather generalized species among many with more or less conspicuous tubercles and other architectural characters. It has broad conical dorsomedian trunk tubercles each with 1–2 short apical setae. The proboscis is slightly longer than its rather robust palps. This group of species can sometimes be separated by use of the first coxae dorsodistal tubercles. The anterior pair of coxae have a single tubercle and the other six coxae have two in this species where first coxae tubercles vary from one to two in various combinations (all first coxae with paired tubercles, or 1: 2: 2: 1 tubercle arrangement, or 1: 1: 2: 2, and some with 1: 2: 2: 2, as in this species).

Males have a broadly pointed triangular cement gland opening at the midventral femur while most others have no triangular opening or a narrower triangular or pointed orifice. Ovigers of this genus are on both sexes and are extremely tiny and difficult to discern but this species is one of the majority having six segments. It forms the basis of the *glaciale*-section in identification keys to the genus.

Family COLOSSENDEIDAE Hoek

Many species in this family are the largest of all pycnogonids and one has a leg span of a half metre or even more. They are predominantly denizens of the deep sea and walk on extremely long slender legs. The trunk of the largest specimens may only be 3–4 cm long. Their proboscis is usually longer to much longer than the trunk. The genus *Colossendeis* lacks cheliphores entirely in adults, while the genera *Decolopoda* and *Dodecolopoda* have them. The palps are mostly very long and slender, and the extremely long ovigers have a distal curved part called a strigilis which is used to clean the long appendages. The oviger also has a terminal claw. The leg segments are slender and protracted and the distal segments merely form a slender extension of the leg. The main claw is usually quite long and auxiliaries are always lacking.

Genus ***Colossendeis*** Jarzynski, 1870

Species in this usually deep-sea genus are giants of the Class Pycnogonida and specimens with leg spans of 300–400 mm are common. Adults are quite slender, usually are without trunk segmentation, lack any form of cheliphores, and usually have a very long proboscis which is carried horizontally (sometimes with a distal upward or downward curve). There is a great degree of intraspecific variation among species in this genus and, unfortunately, the more specimens collected, the greater the range of variation found in most species.

Colossendeis adelpha, new species
Fig. 1

Material examined

Sta. 41, 1 holotype specimen (SAM E2941).

Distribution

Known only from station 41 in Prydz Bay, in 333–341 m.

Description

Extremely large trunk size for this genus, leg span 352 mm. Trunk glabrous. Lateral processes slightly longer than their distal diameters, separated by their diameters, glabrous. Neck very short. Ocular tubercle a small rounded truncate cone with low round anterodistal tubercle, eyes very indistinct, without pigment. Proboscis robust, little longer than trunk, distal half inflated to 1.5 times proximal stem and moderately downcurved, mouth rounded. Abdomen a small narrow cylinder not extending to distal rim of fourth leg first coxae, downcurved.

Palp robust, third segment longest, about 1.25 length of fifth segment. Distal segments short cylinders, sixth little longer than fourth, seventh through tenth each shorter than last. Armed with fields of tiny short setae distally on fifth and on dorsal surface only of distal five segments.

Oviger typical, robust, strigilis spines plain, in multiple rows, very short, distally rounded, without larger distal spine creating subchela as in other species. Terminal claw slender, well curved, about 0.66 length of terminal segment.

Leg with dorsal and distally ventral row of very short spines. First coxae with group of small rounded tubercles on dorsodistal rim, second coxae very short, little longer than first and third. Femora and second tibiae of equal length, first

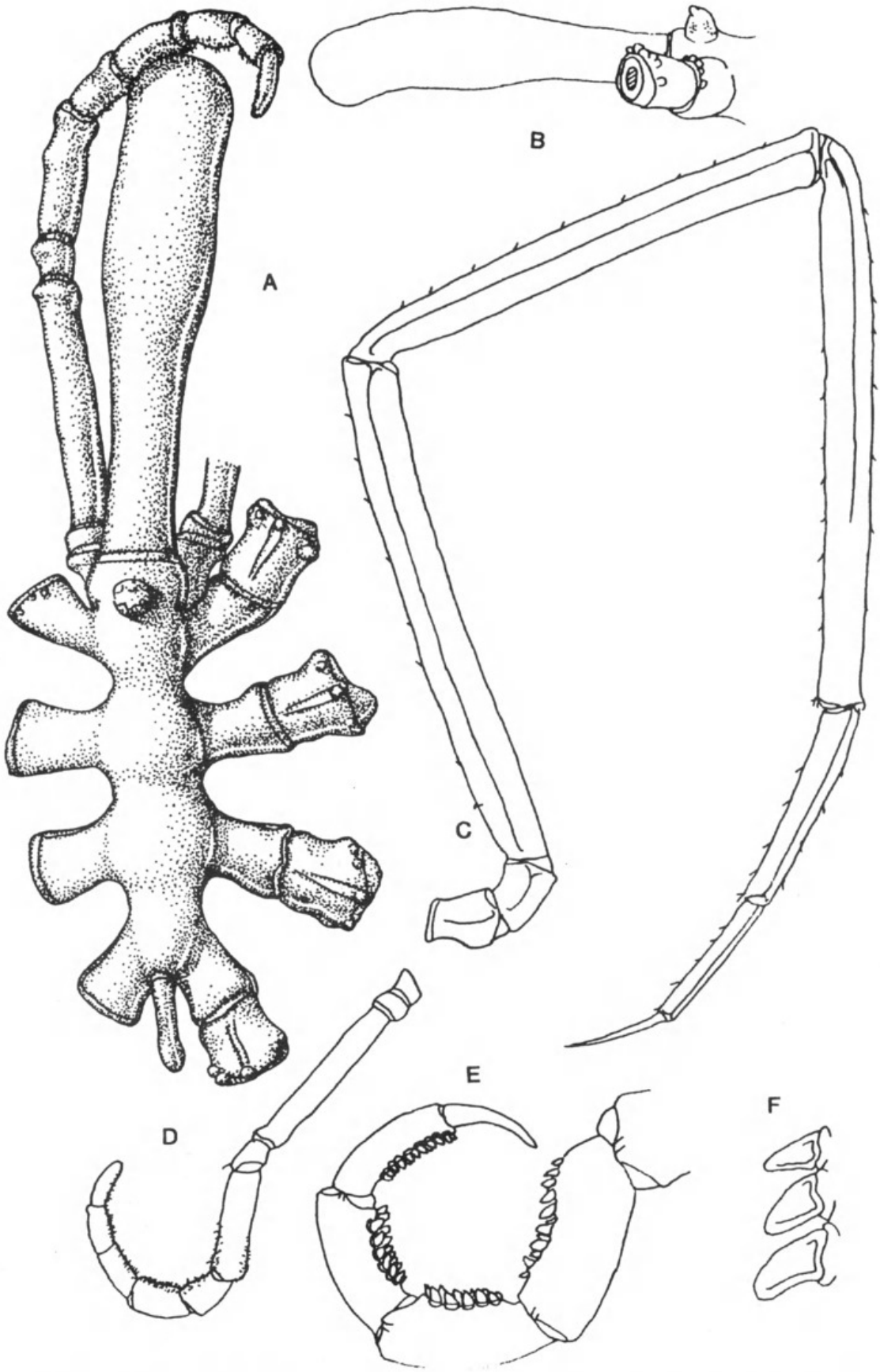

FIGURE. 1. *Colossendeis adelpha*, new species, holotype: **A**, trunk, dorsal view; **B**, trunk anterior, lateral view; **C**, third leg; **D**, palp; **E**, oviger strigilis, enlarged; **F**, three strigilis spines.

tibiae slightly shorter. Tarsus longer than propodus, with greater diameter, both segments with few tiny sole spines. Claw almost 0.66 length of propodus. Sexual pores indistinct.

Measurements of holotype in mm.

Trunk length (proboscis insertion to tip 4th lateral processes), 23; trunk width (across 2nd lateral processes), 13.4; proboscis length, 24.2; abdomen length, 4.8; third leg, 3 coxa combined, 18; femur, 39.5; tibia 1, 36.8; tibia 2, 39.5; tarsus, 16.2; propodus, 11.3; claw, 7.9.

Etymology

The species name (Greek: *adelphus*, meaning brotherly, closely related) refers to its close relationship to *C. australis* Hodgson, 1907.

Remarks

Although this species is in many characters closely related to *Colossendeis australis* Hodgson, there are several prominent differences. The proboscis of the new species is much more slender in its proximal half, is downcurved only in its distal half, and has a very rounded oral surface. That of *C. australis* is inflated to its greatest extent toward the proximal half, thus giving it a larger overall diameter. It is more or less downcurved throughout its length and has a very flat oral surface.

The palps of *C. adelpha* are quite robust and have relatively short segments in relation to each other and bear a set of tiny dorsal setules. There are no setae on the ventral surface where they are usually found. Only one other species as far as can be discerned, *C. scoresbii* Gordon, 1932, has dorsal rather than ventral setae or setules on the palps. The palps of *C. australis* are quite long, very slender in segment lengths versus diameters, and have ventral setae. The propodus and claw are both longer in relation to the tarsus in this new species than in the same segments of *C. australis*.

One of the most revealing differences is in the oviger strigilis spines. The plain spines of the new species are mostly the same size on each segment while those of *C. australis* increase in size proceeding distally on any single segment. The distal spine of the terminal segment is very large and forms a subchelate process with the adjacent claw. There is no similar chelate process on the ovigers of *C. adelpha*.

Colossendeis australis Hodgson, 1907

Colossendeis australis Hodgson, 1907: 59, pl. IX, fig. 1, pl. X, figs. 1–2.– Child, 1995b: 72–73 [key], 73–74 [literature].

Material examined

Sta. 49 (SAM E2942, 1 spec.), sta. 53 (SAM E2943, 1 spec.), sta. 57 (SAM E2944, 1 spec.), sta. 61 (SAM E2945, 11 spec.).

Distribution

This species has a scattered but almost circumpolar distribution in 143–3931 m. It has been collected in the Falkland Islands and Magellanic regions, South Georgia and South Sandwich Islands, and widely separate localities around the Antarctic continent. Its deeper collecting localities have usually been in Subantarctic basins while the shallower localities are high Antarctic.

Remarks

This species' ovigers have larger distal strigilis spines, unlike the previous species (see remarks under that species). They form a subchelate or pincer-like structure on the terminal segment, opposing the claw. Its proboscis is slightly longer than the trunk, widely inflated at midlength and, downcurved beyond this inflation. Its ocular tubercle is a broad low cone and the eyes are tiny. The distal three palp segments are subequal.

Colossendeis drakei Calman, 1915

Colossendeis drakei Calman, 1915: 11, 22–23, fig. 3.– Child, 1995b: 72–73 [key], 78 [literature].

Material examined

Sta. 41 (SAM E2946, 1 spec.), sta. 43 (SAM E2947, 1 spec.), sta. 45 (SAM E2948, 1 spec.), sta. 46 (SAM E2949, 1 spec.), sta. 52 (SAM E2950, 2 spec.), sta. 53 (SAM E2951, 6 spec.), sta. 58 (SAM E2952, 3 spec.).

Distribution

The distribution of *C. drakei* is extremely disjunct and spans an enormous depth range, suggesting that not all records involve the same species and that some have been misidentified. It has been, according to the records, collected south of Tasmania, off the Falkland Islands, South Georgia, South Sandwich, and South Shetland Islands, eastern Antarctica, and the Ross Sea. The shallowest record places it in 3 m while the deepest, 3000 m, is represented by the record from south of Tasmania.

Remarks

The most conspicuous character in this species is its unusually short proboscis which is only as long as the trunk or slightly shorter. The ocular tubercle forms a low pointed cone. Five distal segments of the palps are short, and the oviger terminal claw is also short and lacks the opposable large spine on the terminal segment. The propodus and tarsus are usually subequal and the claw is almost as long as the propodus.

Colossendeis megalonyx ssp. Fry & Hedgpeth, 1969

Colossendeis megalonyx Hoek, 1881: 67, pl. IX, figs. 1–3.

Colossendeis megalonyx ssp. Fry & Hedgpeth, 1969: 30–32, figs. 7, 8, 11–16, 23. Child, 1995b: 72–73 [key], 86–87 [literature].

Material examined

Sta. 40 (SAM E2953, 2 spec.), sta. 41 (SAM E2954, 1 spec.), sta. 44 (SAM E2955, 3 spec.), sta. 46 (SAM E2956, 4 spec.), sta. 48 (SAM E2957, 1 spec.), sta. 52 (SAM E2958, 6 spec.), sta. 53 (SAM E2959, 20+ spec.), sta. 54 (SAM E2960, ½ and 10+ spec.), sta. 58 (SAM E2961, 3 spec.), sta. 59 (SAM E2962, 2 spec.).

Distribution

The many specimens attributed to this assumed complex of subspecies come from almost all Subantarctic and Antarctic localities where collections have been made. Some specimens have been collected as far north as the vicinity of South Africa, south of Madagascar, and off South America and New Zealand. It has an enormous depth range (7–4900 m), suggesting rather definitely that more than one species is involved.

Remarks

Several subspecies were proposed for this species by Fry & Hedgpeth (1969:30–35) without adequate definition of each and with little information as a basis to separate them. The wide variation found in this genus would probably allow each subspecies to revert to its previously designated specific rank under further examination. The parent species, *C. megalonyx* Hoek, has a proboscis with little swelling and a length of little more to much longer than the trunk. One consistent character is in the palp where the eighth segment is shorter than the subequal ninth and tenth. The oviger does not have the subchelate structure of terminal spine and claw. There is very little else which conforms to a diagnosis of this species. A critical analysis of many specimens will be necessary to come to some conclusion regarding the presence or absence of valid species now found in this complex.

Colossendeis robusta Hoek, 1881

Colossendeis robusta Hoek, 1881: 66, pl. IX, figs. 4–5.– Child, 1995b: 72–73 [key], 89–90 [synonymy and literature].

Material examined

Sta. 46 (SAM E2963, 1 spec.), sta. 53 (SAM E2964, 1 spec.).

Distribution

The distribution for what is possibly another multiplicity of species under the name *C. robusta* is circumpolar in the enormous depth range of 0–3610 m.

Remarks

The most prominent characters in this species are the relatively short legs and short proboscis. The proboscis is slightly swollen medially, as long or little longer than the trunk, and the leg segments are shorter than most species in this genus. The femur and first tibia are subequal in length as are the tarsus and propodus. The distal palp segments are each unusually short, almost the same length, and armed with many tiny setae on all surfaces. The oviger strigilis lacks a chelate process of enlarged spine and claw.

Colossendeis scotti Calman, 1915

Colossendeis scotti Calman, 1915: 10 [key], 11–13, fig. 1.– Child, 1995b: 72–73 [key], 90, 92 [literature].

Material examined

Sta. 56 (SAM E2965, 1 spec.).

Distribution

This uncommon species has been collected in the vicinity of South Georgia, the South Sandwich and South Shetland Islands, Weddell Sea, and has the majority of captures located in the Ross Sea at moderate depths of 35–265 m.

Remarks

This is another species with a relatively short

proboscis, but it is widest in lateral view at the oral end and tapers toward the base. It is also quite inflated, being widest at its median length in dorsal view and constricted just before the flaring oral surface. Its eyes are darkly pigmented. The palp distal segments are quite short with the eighth shorter than the subequal ninth and tenth. The oviger strigilis has an enlarged terminal spine forming a subchelate structure with the claw. The legs are slender with the tarsus little longer than the propodus which has a long claw only slightly shorter than the propodus.

Colossendeis tortipalpis Gordon, 1932

Colossendeis tortipalpis Gordon, 1932: 12–15, figs. 2b–2e, 4a.– Child, 1995b:72–73 [key], 93 [literature].

Material examined
Sta. 53 (SAM E2966, 1 spec.).

Distribution
This species has one of the widest ranges in geographical distribution and depth of any Antarctic *Colossendeis* species. It has been collected off Tierra del Fuego, South America, off Heard Island in the southern Indian Ocean, the Scotia Sea and South Shetland Islands, and in many places in the Ross Sea. It has a vast depth range, like many *Colossendeis* species, of 44–4026 m.

Remarks
The distinctive characters of this species make it difficult to confuse with any other known Antarctic member of this genus except for *C. longirostris* Gordon, 1938. It has a very long proboscis (about 1.5 times trunk length) as in *C. longirostris*, but in this species it is downcurved with a much wider median inflation which tapers to a small oral surface. The palp has a long seventh segment, a triangular eighth segment, and the two longer distal segments are carried acutely recurved dorsally over the seventh and eighth. The oviger strigilis has a short terminal claw opposed by an enlarged distal spine on the terminal segment. There are several variations in its ocular tubercle and distal palp segments.

Colossendeis species indeterminate

Material examined
Sta. 60 (SAM E2967, 1 spec.).

Remarks
This specimen is very damaged and cannot be determined with any assurance.

Genus ***Decolopoda*** Eights

This genus contains the single species discussed below. It is the only 10-legged species among the Colossendeidae, at least in the Antarctic.

Decolopoda australis Eights, 1835
Fig. 2

Decolopoda australis Eights, 1835: 203–206, pl. VII.– Fry & Hedgpeth, 1969: 54–56 [early literature], Figs. 7, 8, 10, 75, 76, 78–82.– Child, 1995b: 94–95 [recent literature].

Material examined
Sta. 41 (SAM E2968, 1 spec.), sta. 42 (SAM E2969, 1 hirsute specimen), sta. 53 (SAM E2970, 1 spec.).

Distribution
This rather common species, the first Antarctic pycnogonid known, has been collected in many Subantarctic and Antarctic localities and has a circumpolar distribution. It is known from Heard Island in the southern Indian Ocean to the Ross Sea, and in a wide variety of depths from littoral to 1890 m.

Description of hirsute specimen
Entire specimen clothed in conspicuous but moderately short setae except anterior half of trunk and base of proboscis. The appendages are setose with the setae as long as but none longer than their segment diameters. Trunk setae cover the length of each lateral process in a field extending along entire dorsal surface of leg. Legs also with rows of lateral and ventral setae of various sizes. Ocular tubercle a small narrow cone with unpigmented eyes. Proboscis typical but with closely spaced setae covering all parts except base or proximal sixth of its length. Abdomen very long, slender, extending beyond second coxae distal rim of last leg pair, with dorsal field of short setae over entire length.

Cheliphores typical, with dorsal movable finger gaping above ventral immovable finger (unlike all other known pycnogonids except for following species). Both scape segments with field of dorsal

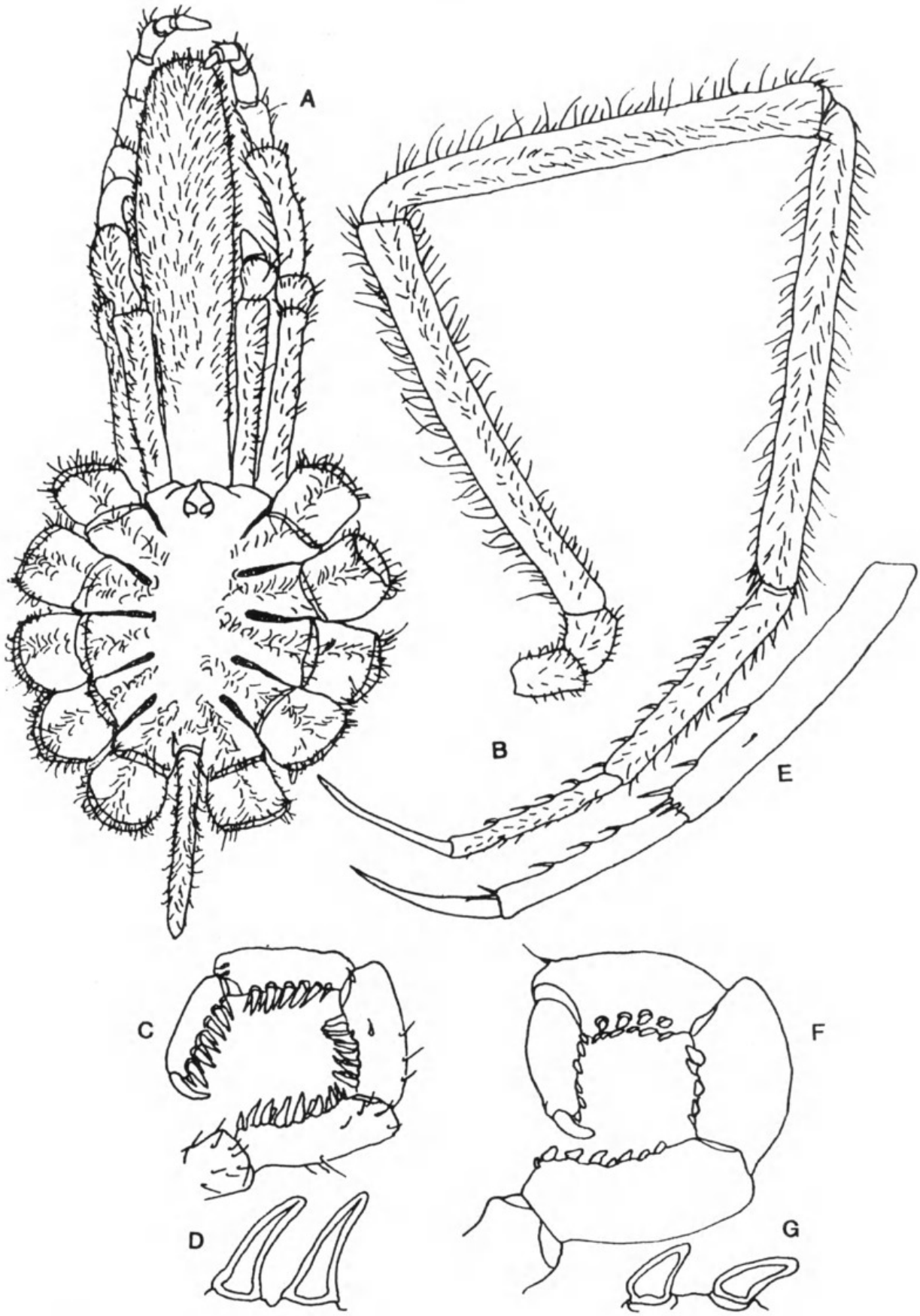

FIGURE. 2. *Decolopoda australis* Eights, the hirsute specimen: **A**, trunk, dorsal view; **B**, third leg; **C**, oviger strigilis, enlarged; **D**, two strigilis spines. Typical specimen: **E**, distal leg segments; **F**, oviger strigilis, enlarged; **G**, two strigilis spines.

setae along their lengths. Palps robust, proximal 5 segments with dorsal fields of setae, distal 5 segments with few ventral and lateral setae. Tenth segment a tapering rounded cone half length of ninth, glabrous. Ovigers decreasingly setose through their lengths. Strigilis segments slender, with rows of slightly curved plain spines each at least 3 times longer than wide. Terminal claw narrow, well curved, almost twice longer than segment diameter.

Legs slender, very setose in rows. Propodus 0.85 length of tarsus, both setose, with row of stout sole spines, but lacking ventrodistal spines. Claw very slender.

Remarks

This is the first specimen of this normally almost glabrous species to be described with extremely setose trunk, lateral processes, appendages, and proboscis. All specimens illustrated in the literature have very few setae. The differences between this specimen and typical examples of *Decolopoda australis*, besides the great number of setae, are found in the oviger strigils and the distal leg segments. The strigilis of a typical specimen is robust or even fat with very short broad plain spines, each well curved, pointing acutely distally, and little longer than their diameters. The terminal claw is shorter, measuring less than the segment diameter in length and there are only 2–3 ectal setae. The tarsus of a typical specimen is longer in relation to the propodus than that of this specimen and has fewer sole spines but does have ventrodistal spines on both segments. There are no setae on either segment of a typical specimen and the claw is usually stouter in comparison to the slender claw of this specimen. The terminal palp segment varies in typical specimens from being absent, a nub, a spike, or a full segment and is difficult to compare with the full segment of this hirsute specimen. This apparently unique specimen is possibly one of a population developing separately and might eventually become a new form, a variety, or even a new species. With the many variations known to occur in this species (causing it to have several synonyms over many years), it has maintained its status as a single species. The oviger and propodal differences are illustrated among the accompanying figures.

Genus ***Dodecolopoda*** Calman & Gordon

This is another genus, like the one above, with a single species which is discussed below. It is also the only 12-legged species in this collection.

Dodecolopoda mawsoni Calman & Gordon, 1933

Dodecolopoda mawsoni Calman & Gordon, 1933: 107–115, fig. 1.– Child, 1995b: 95 [literature].

Material examined

Sta. 53 (SAM E2971, 1 spec.), sta. 57 (SAM E2972, 1 spec.).

Distribution

There are probably no more than six specimens of this rare species listed in the literature, but from these scattered records, its known distribution is probably circumpolar. It is known from the South Shetland Islands, Palmer Archipelago, the Ross Sea, and in Enderby Land at 62°E. Known capture depths are 146–549 m.

Remarks

This is the first record known with two specimens of this species in one report. This is the only pycnogonid known with the paired characters of twelve legs and giant size and therefore is easily recognized. The only other known Antarctic species with twelve legs, *Sexanymphon mirabilis* Hedgpeth & Fry, 1964, is quite small.

This species is closely related to *Decolopoda australis*, and is the only other pycnogonid known with tong-like chelae having the movable finger dorsal to the immovable finger rather than a movable finger in the almost universal ventral position. Both have closely crowded lateral processes creating a circular or ovoid trunk in dorsal aspect. The long proboscis of both is distally inflated and downcurved, the legs are moderately long, the tarsus is much longer than the propodus with its shorter claw. The legs of this species are fairly setose in rows while those of *Decolopoda australis* are almost glabrous with only a few scattered spines. The size of the two specimens in hand is perhaps twice as large as specimens of *D. australis*, although size alone is not a diagnostic character.

Family CALLIPALLENIDAE Hilton

This is a diverse family with many genera, most having few species. They all share the characters of full cheliphores and chelae with fingers, often

with teeth, a lack of palps or palps of a single blunt segment, and ovigers in both sexes, with 10 segments and no terminal claw (except in genera not found in Antarctica). Only two genera were collected in Prydz Bay.

Genus ***Austropallene*** Hodgson, 1915

Both palps and auxiliary claws are entirely lacking in this genus. The proboscis is styliform or narrow and very tapered distally. The cheliphores are usually large to giant with the scapes tuberculate or smooth and the chelae fingers without teeth but sometimes with 1-2 notches. The trunk lacks dorsal architecture.

Austropallene brachyura (Bouvier, 1911)

Pseudopallene brachyura Bouvier, 1911: 1138.

Austropallene brachyura.– Calman, 1915: 39.– Child, 1995c: 132 [literature].

Material examined

Sta. 40 (SAM E2973, 1♂); sta. 54 (SAM E2974, 1♂).

Distribution

This is a circumpolar species known from moderate depths to 640 m.

Remarks

This is one of the more common species of this Subantarctic-Antarctic genus which contains only seven species. It is separable from others by its proboscis, a proximal cylinder with a distal cone, and small cheliphores without distal tubercles on the scapes, chelae fingers of subequal length, and smooth legs with few setae only. Gordon (1944: 36–37) provided a useful key to six of the seven species.

Austropallene calmani Gordon, 1944

Austropallene calmani Gordon, 1944: 42–45, figs. 12a, 13a–c, 14a.– Child, 1995c: 132–133.

Material examined

Sta. 45 (SAM E2975, 1♂); sta. 46 (SAM E2976, 1♂).

Distribution

Its scattered capture localities around the Antarctic perimeter make this another circumpolar species. It has been found in 163–2966 m.

Remarks

This species has a very narrow proboscis which is predominantly a cylinder. It has a small distal cone at the oral surface. The cheliphore scapes have 2–3 large dorsal tubercles and the chaela have fingers of different lengths. The immovable finger has two distal lobes into which the movable finger tip inserts. The legs have tiny tubercles bearing setae. There appears to be little variation in both this species and all others of the genus.

Austropallene cornigera (Möbius, 1902)

Pseudopallene cornigera Möbius, 1902: 186–187.

Austropallene cornigera.– Gordon, 1932: 85–86 [early literature], figs. 42–43.– Child, 1995c: 133–134 [recent literature].

Material examined

Sta. 47 (SAM E2977, 1♂).

Distribution

This extremely common circumpolar species has a moderate depth range of 90–550 m.

Remarks

This is the only species in this limited genus with giant cheliphores larger than its trunk. The immovable finger has an endal notch. The proboscis is widest at its base and tapers to a tiny distal tube. The trunk has small to large dorsomedian tubercles but they are lacking on the cheliphore scapes.

Genus ***Pallenopsis*** Wilson

Subgenus *(Pallenopsis)* Stock, 1975

This genus of many species has two subgenera; the first with larger numbers of more common species usually found in shallower waters, and the second with fewer deeper water species. Each has its own set of unique diagnostic characters not shared by the other subgenus. The genus *Pallenopsis* has 1-segmented palp buds, a short neck carrying ocular tubercle and cheliphores and extending dorsally over the top of the usually short proboscis. The cheliphores are sometimes 2-segmented but are progressing toward the loss of

the segmentation line dividing the two segments. The chelae are fully formed and functional. Ovigers are 10-segmented, without a terminal claw, and sometimes are only 9-segmented in females. The legs are moderately long and sometimes very long, and the male femoral cement gland is ventral and usually exits through a slender tube of varying length among the species. The propodus has auxiliary claws which are sometimes long.

The subgenus *Pallenopsis* has chelae with short fingers placed anaxially or at a right angle to the usually rectangular palm. The movable finger usually has a basal setose bump or pad in the male which is reduced in size or lacking in females. The proboscis in this subgenus is usually shorter than those of the other subgenus, *Bathypallenopsis*, and some species in this subgenus are extremely setose with some of these species having tiny lateral setules on each long seta. These setose species are almost all confined to Antarctic and Subantarctic localities. Only one has so far been collected in Prydz Bay for inclusion in this report.

Pallenopsis* (*Pallenopsis*) *patagonica (Hoek, 1881)

Phoxichilidium patagonicum Hoek, 1881: 84–86, pl. 12, figs. 6–9.

Pallenopsis patagonica.– Loman, 1923: 34.– Child, 1995c: 147–149 [literature].

Material examined

Sta. 25B (SAM E2978, 2♂); sta. 41 (SAM E2979, 3♀); sta. 42 (SAM E2980, 3♀); sta. 45 (SAM E2981, 1 juv.); sta. 46 (SAM E2982, 1♀); sta. 49 (SAM E2983, 1♂ with eggs, 1♂, 1♀).

Distribution

This is a circumpolar species found on all coasts and the deeps of Antarctica and the Subantarctic. It has an extremely wide depth range of 254–3566 m.

Remarks

This species comes close to *P.* (*P.*) *villosa* Hodgson, in being the most setose species in the subgenus *Pallenopsis*. The trunk and appendages sometimes cannot be seen for the extensive field of long setae covering its dorsal surface. The crowded setae are always plain and have no lateral setules as do those of *P.* (*P.*) *villosa*, so that the trunk shape and widely spaced lateral processes can usually be seen among the many long setae. The plain setae constitute a good diagnostic character and they are easily examined for this purpose.

Pallenopsis* (*P.*) *pilosa (Hoek, 1881)

Phoxichilidium pilosum Hoek, 1881: 90, pl. 13, figs. 10–13.

Pallenopsis pilosa Hoek, 1883: 9 [list].– Child, 1995c: 149–150 [literature].

Material examined

Sta. 41 (1♂, SAM E2984); sta. 42 (1 juv. SAM E2985); sta. 44 (1♂, with eggs, 1♂, 2♀, 1 juv., SAM E2986); sta. 45 (1♀, SAM E2987); sta. 46 (1 juv., SAM E2988); sta. 47 (3♂, 3♀, SAM E2989); sta. 49 (1♂, 2♀, SAM E2990); sta. 52 (1♂, 8♀, 1 juv., SAM E2991); sta. 53 (1♂, 4♀, SAM E2992); sta. 54 (5♂, 4♀, SAM E2993).

Distribution

This is also a circumpolar species, but it has an extremely wide depth range of 254–3566 m.

Remarks

This is one of the most setose species in the subgenus *Pallenopsis*. With the species *P.* (*P.*) *villosa* Hodgson, 1907, the trunk and appendages sometimes cannot be seen for the extensive field of long setae covering its dorsal surfaces. The multitude of setae each have many lateral setules which greatly contribute to its camouflage. This species comes close to *villosa*, but the shape of the trunk and widely spaced lateral processes can always be discerned behind the many long setae. These setae are plain and have no lateral setules, a consistent diagnostic character easily seen.

Family NYMPHONIDAE Wilson

The largest family among the nine families of Pycnogonida, this one boasts a bewildering array of some 250 species, mostly concentrated in the vast genus *Nymphon*. Many of these species fall into somewhat natural groups which are currently being recognized and used to segregate at least some of the array into manageable subsets for identification purposes. There are several other small genera in this family, only one of which was collected in Prydz Bay.

Genus *Nymphon* Fabricius, 1794

Nymphon species are often collected in large numbers from any trawl, particularly in Antarctic waters. They are characterized by having fully chelate cheliphores, palps of five segments beginning with a short first segment, fully segmented trunks with an ocular tubercle and eyes, 10-segmented ovigers in both sexes, each oviger having a fully formed strigilis with leaf-shaped denticulate inner spines and a terminal claw bearing teeth. Most shallow-water species have auxiliary claws of various lengths and more of the deep water species than not have a simple main claw without auxiliaries (for unknown reasons). Three *Nymphon* species are represented in these collections.

Nymphon australe Hodgson, 1902

Nymphon australe Hodgson, 1902: 257, pl. XI.– Gordon, 1932: 59–60 [early synonymy and literature], figs. 25d, 26b.– Child, 1995a: 9–10 [recent literature].

Material examined

Sta. 41 (SAM E2994, 1♂, 1♀); sta. 42 (SAM E2995, 1 juv.); sta. 44 (SAM E2996, 27 spec.); sta. 45 (SAM E2997, 19 spec.); sta. 46 (SAM E2998, 10 spec.); sta. 47 (SAM E2999, 5 spec.); sta. 52 (SAM E3000, 10 spec.); sta. 53 (SAM E3001, 6 spec.); sta. 54 (SAM E3002, 5 spec.); sta. 55 (SAM E3003, 3 spec.); sta. 57 (SAM E3004. 1♀); sta. 59 (SAM E3005, 1 juv.); sta. 60 (SAM E3006, 1♂, 1♀); sta. 61 (SAM E3007, 1♀).

Distribution

This species is the most commonly captured pycnogonid in Antarctic and Subantarctic waters and appears in almost every report on specimens from those waters. It has been collected as far north as Cook Strait, New Zealand, the Falkland Islands, Chilean and Argentine coasts, and some Subantarctic localities in the Indian Ocean in depths of usually less than 2000 m.

Remarks

This most common species serves as the pattern for the *Australe* group (Child, 1995a:5, 6–7 [key]) of related species in this, the largest pycnogonid genus. The group is diagnosed by a robust trunk with crowded lateral processes and a short neck which is crowded laterally with oviger bases. The trunk and lateral processes of this group of 20 described species usually have conspicuous dorsal setae or spines or both and a swollen abdomen carried horizontally. The cheliphores usually have conspicuous spines or setae only on the inner lateral surfaces. Another steady character is found in the male ovigers which almost always have fifth and sixth segments which are distally inflatable with the inflated area usually collapsed. On the legs, the tibiae and tarsus have a few long ventrodistal spines, the tarsus is as long or longer than the propodus, both are often straight and have short evenly spaced sole spines. Auxiliary claws can be absent, vestigial, or shorter than the main claw diameter, and are never longer. No other group of *Nymphon* species from the Antarctic (or any other body of water) share most of these characters. To compare morphologies, a closely related variety, *N. australe* var. *caecum* Gordon, 1944, shares all these characters but one. It is the deep-water congener of the parent species and only lacks eyes and an ocular tubercle, both of which are conspicuous and tall in *N. australe*.

Nymphon charcoti Bouvier, 1911

Nymphon charcoti Bouvier, 1911: 1138.– Child, 1995a: 35–37 [literature].

Material examined

Sta. 41 (SAM E3008, 1♂); sta. 45 (SAM E3009, 1 juv.); sta. 46 (SAM E3010, 1 juv.); sta. 52 (SAM E3011, 2♂, 1♀); sta. 53 (SAM E3012, 7 spec.); sta. 54 (SAM E3013, 3 juv.).

Distribution

This species is collected much less often than the last species listed but probably has a circumpolar range in 150–1080 m, where it appears to be common where found.

Remarks

This is the largest known species of *Nymphon* in Antarctic waters (*N. inferum* Child, 1995a, almost reaches this size). The trunk of *N. charcoti* often measures 18+ mm in length, while that of *N. inferum* has a maximum known length of about 15 mm. Both species are quite a bit larger than the average *Nymphon*.

There is a small ventrodistal knob on the anterior of the cephalic segment opposite the ocular tubercle and the short ocular tubercle has large pigmented eyes in this species. The ocular

area of *N. inferum* has a low bump and lacks eyes entirely. The tarsus is longer than the propodus in this species while it is shorter in *N. inferum*. There are a good number of similar characters in the two species besides adult size but those listed above will serve to differentiate the species.

Nymphon gracilipes Miers, 1875

Nymphon gracilipes Miers, 1875: 76.– Child, 1995a: 38–39 [literature].

Material examined
Sta. 48 (SAM E3014, 1♀); sta. 59 (SAM E3015, 1♀); sta. 60 (SAM E3016, 1♀).

Distribution
This species has been collected most often in the Indian Ocean quadrant of the Antarctic and in the Subantarctic islands to the north. It has a broad depth range of 20–1000 m, with one capture reported in 3055 m which may be either an identification or recording error.

Remarks
This clean-appearing species has a long glabrous trunk and well separated lateral processes with the same tenuosity found in the cheliphores, ovigers, and legs. The tarsus is 0.3 times longer than the propodus and the main claw is short with auxiliary claws only 0.4 as long as the main claw.

Genus ***Pentanymphon*** Hodgson

A very small sized species of *Nymphon* which has over time developed an extra trunk segment and an extra pair of legs making 10 in all. There is a single common species in this genus although it has sufficient variation to have caused an expanded synonymy since it was described.

Pentanymphon antarcticum Hodgson, 1904

Pentanymphon antarcticum Hodgson, 1904: 458–462, pl. XIV.– Child, 1995a: 54–55 [literature].

Material examined
Sta. 57 (SAM E3017, 1♀).

Distribution
This common species has been collected in many localities in the vicinity of 200 m, but has a scattering of other captures in depths as deep as 3227 m. It has a circumpolar distribution.

Remarks
This small species is usually very white coloured and is one of the rare pycnogonids with five pairs of legs. Its lateral processes are well separated and glabrous, the ocular tubercle and oviger bases are placed to the anterior of the first lateral processes on a long neck, and the slender long legs have few short setae.

Family PYCNOGONIDAE Wilson

This is probably the most morphologically advanced family in the pycnogonids, if advanced means loss of or reduction of segments and appendages. The species of this family and genus lack any form of cheliphores or palps, and some species have even disposed of ovigers. The males of these anovigerous species merely cement the egg clusters to their ventral trunk surfaces. Many species have also abandoned auxiliary claws or these claws are so vestigial as to be nonfunctional. The species are almost all robust with short lateral processes and very short legs with the second tibiae sometimes shorter than their diameters.

Genus ***Pycnogonum*** Brünnich, 1764

Pycnogonum species indeterminate

Material examined
Sta. 41 (SAM E3018, 1 larva).

Remark
This specimen is too young to be determined except to its genus.

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Appendix

Stations and Species from Prydz Bay, Antarctica,
Collected on R/V 'Aurora Australis', 1991

Sta. 25B, 68°31.1'S, 77°29.4'E, 251–416 m (bottom 450–556 m) 3 II	
Achelia spicata (Hodgson)	1♀
Pallenopsis (*P.*) *patagonica* (Hoek)	2♂
Sta. 40, 67°01.1'S, 78°11.5'E, 251–260 m, trawl, 17 II	
Colossendeis megalonyx ssp. Fry & Hedgpeth	2 spec.
Austropallene brachyura Hodgson	1♂
Sta. 41, 67°30.6'S, 77°14.3'E, 333–341 m, trawl, 18 I	
Colossendeis adelpha, new species	1 spec.
Colossendeis drakei Calman	1 spec.
Colossendeis megalonyx ssp. Fry & Hedgpeth	1 spec.
Decolopoda australis Eights	1 spec.
Pallenopsis (*P.*) *patagonica* (Hoek)	3♀
Pallenopsis (*P.*) *pilosa* (Hoek)	1♂
Nymphon australe (Hodgson)	1♂, 1♀
Nymphon charcoti Bouvier	1♂
Pycnogonum sp. indet.	1 larva
Sta. 42, 67°34.–'S, 77°33.–'E, 300 m, trawl, 18 II	
Decolopoda australis Eights	1 hirsute spec.
Pallenopsis (*P.*) *patagonica* (Hoek)	3♀
Pallenopsis (*P.*) *pilosa* (Hoek)	1 juv.
Nymphon australe (Hodgson)	1♀
Sta. 43, 67°57.5'S, 76°20.6'E, 436–441 m, trawl, 19 II	
Colossendeis drakei Calman	1 spec.
Sta. 44, 68°27.9'S, 75°26.6'E, 616–622 m, trawl, 19 II	
Ammothea spinosa (Hodgson)	3♂, 3♀, 3 juv.
Colossendeis megalonyx ssp. Fry & Hedgpeth	3 juv.
Pallenopsis (*P.*) *pilosa* (Hoek)	1♂ w/ eggs, 1♂, 2♀, 1 juv.
Nymphon australe (Hodgson)	27 spec.
Sta. 45, 68°58.3'S, 74°23.8'E, 787 m, trawl, 19 II	
Ammothea spinosa (Hodgson)	1♂ (damaged)
Colossendeis drakei Calman	1 juv.
Austropallene calmani Gordon	1♂
Pallenopsis (*P.*) *patagonica* (Hoek)	1 juv.
Pallenopsis (*P.*) *pilosa* (Hoek)	1♀
Nymphon australe (Hodgson)	19 spec.
Nymphon charcoti Bouvier	1♂ juv.
Sta. 46, 68°31.7'S, 73°13.0'E, 743 m, trawl, 20 II	
Colossendeis drakei Calman	1 spec.
Colossendeis megalonyx ssp. Fry & Hedgpeth	4 spec.
Colossendeis robusta Hoek	1 spec.
Austropallene calmani Gordon	1♂
Pallenopsis (*P.*) *patagonica* (Hoek)	1♀
Pallenopsis (*P.*) *pilosa* (Hoek)	1 juv.
Nymphon australe (Hodgson)	5 spec.
Nymphon charcoti Bouvier	1♂
Sta. 47, 68°23.1'S, 73°48.4'E, 660–662 m, trawl, 21 II	
Austroraptus polaris Hodgson	1♀
Austropallene cornigera Möbius	1♂

Pallenopsis (P.) pilosa (Hoek)	3♂, 3♀
Nymphon australe (Hodgson)	5 spec.
Sta. 48, 68°03.7'S, 73°09.3'E, 680–683 m, trawl, 21 II	
Colossendeis megalonyx ssp. Fry & Hedgpeth	1 spec.
Nymphon gracilipes Miers	1♀
Sta. 49, 66°59.5'S, 76°26.7'E, 327–332 m, trawl, 22 II	
Colossendeis australis Hodgson	1 spec.
Pallenopsis (P.) patagonica (Hoek)	1♂ w/eggs, 1♂, 1♀
Pallenopsis (P.) pilosa (Hoek)	3 spec.
Sta. 52, 66°46.4'S, 72°36.5'E, 530 m, trawl, 24 II	
Ammothea adunca Child	1♂
Ammothea allopodes Fry & Hedgpeth	1♂, 2♀
Ammothea glacialis (Hodgson)	1♂
Colossendeis megalonyx ssp. Fry & Hedgpeth	6 spec.
Pallenopsis (P.) pilosa (Hoek)	1♂, 8♀, 1 juv.
Sta. 53, 66°03.7'S, 72°36.2'E, 526–532m, trawl, 24 II 91	
Ammothea glacialis (Hodgson)	1♂ w/eggs, 1♀
Ammothea spinosa (Hodgson)	1♂ w/eggs, 1♀
Colossendeis australis (Hodgson)	1 spec.
Colossendeis drakei Calman	6 spec.
Colossendeis megalonyx ssp. Fry & Hedgpeth	20+ spec.
Colossendeis robusta Hoek	1 spec.
Colossendeis tortipalpis Gordon	1 spec.
Decolopoda australis Eights	1 spec.
Dodecolopoda mawsoni Calman & Gordon	1 spec.
Pallenopsis (P.) pilosa (Hoek)	1♂, 4♀
Nymphon australe (Hodgson)	6 spec.
Nymphon charcoti Bouvier	1♂ w/eggs, 4♀, 2 juv.
Sta. 54, 67°00.3'S, 72°40.2'E, 532–536m, trawl, 24 II 91	
Ammothea glacialis (Hodgson)	1♀
Colossendeis megalonyx ssp. Fry & Hedgpeth	12½ spec.
Austropallene brachyura Hodgson	1♂
Pallenopsis (P.) pilosa (Hoek)	5♂, 4♀
Nymphon australe (Hodgson)	5 spec.
Nymphon charcoti Bouvier	3 juv.
Sta. 55, 66°43.6'S, 71°54.5'E, 667–676 m, trawl, 25 II	
Nymphon australe (Hodgson)	3 spec.
Sta. 56, 67°27.5'S, 70°20.2'E, 161–165 m, trawl, 26 II	
Colossendeis scotti Calman	1 spec.
Sta. 57, 67°16.7'S, 70°08.1'E, 172–182 m, trawl, 26 II	
Colossendeis australis Hodgson	1 spec.
Dodecolopoda mawsoni Calman & Gordon	1 spec.
Nymphon australe (Hodgson)	1 spec.
Pentanymphon antarcticum Hodgson	1 spec.
Sta. 58, 67°02.4'S, 70°18.8'E, 242–244 m, trawl, 26 II	
Colossendeis drakei Calman	3 spec.
Colossendeis megalonyx ssp. Fry & Hedgpeth	3 spec.
Sta. 59, 66°53.4'S, 70°40.5'E, 444–453 m, trawl, 27 II	
Colossendeis megalonyx ssp. Fry & Hedgpeth	2 spec.
Nymphon australe (Hodgson)	1 juv.
Nymphon gracilipes Miers	1♀

Sta. 60, 67°16.3'S, 68°57.7'E, 139 m, trawl, 28 II

Colossendeis sp. indet.	1 damaged spec.
Nymphon australe (Hodgson)	1♂, 1♀
Nymphon gracilipes Miers	1♀

Sta. 61, 67°27.4'S, 68°50.3'E, 145–150 m, trawl, 1 III

Austrodecus glaciale Hodgson	1 spec.
Colossendeis australis Hodgson	11 spec.
Nymphon australe (Hodgson)	1 spec.

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