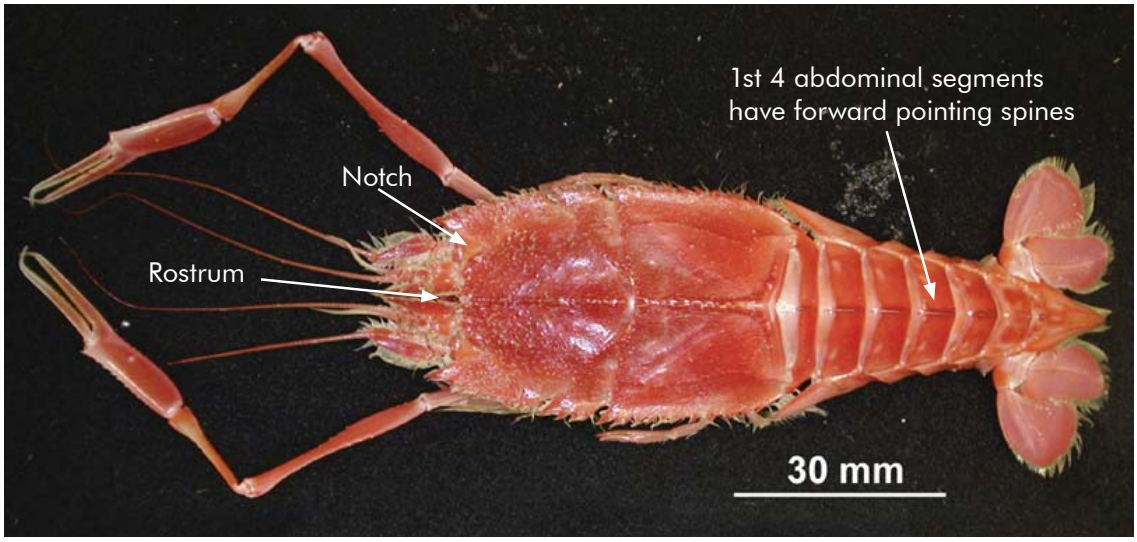
Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Polychelidae

Polycheles spp. (Deepsea blind lobster) (PLY)



Distinguishing features: Lobster-like, but first 4 pairs of legs (all in females) with pincers – long and slender on the first pair and small and short on the rest. Elongate, flat-topped cephalothorax, bordered with sharp spines. Small rostrum of 1 or 2 spines. Dorsal orbital notches triangular. First four abdominal segments with forward pointing spines.

Colour: Generally pink with the carapace spines and abdominal terga a darker rose pink.

Size: Carapace length up to 75 mm.

Distribution: Australia and New Zealand. Widespread in New Zealand waters, at least from Bay of Plenty to Auckland Islands.

Depth: 290 to 2200 m.

Similar species: Several species in New Zealand waters. Image above is *P. enthrix* the more common species in New Zealand. Other polychelids known from New Zealand region that are also very similar are – *Polycheles nanus*, *P. surdus*, *P. scultpus*, *Pentachels laevis*, *Pentacheles validus*, and *Willemoesia pacifica*.

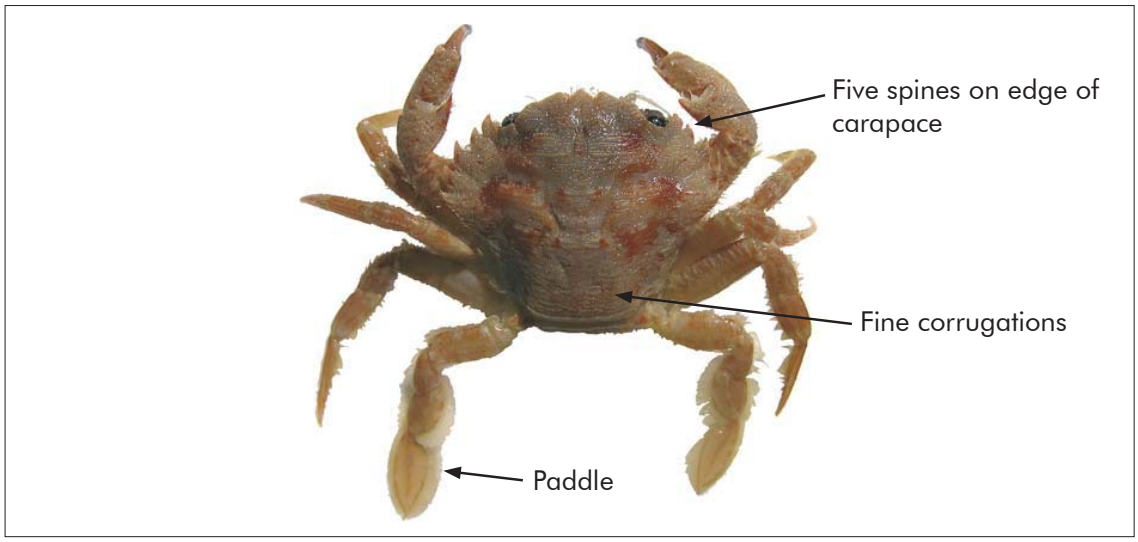
References: Ahyong, S.T.; Brown D.E. (2002). New species and new records of Polychelidae from Australia (Crustacea: Decapoda). *Raffles Bulletin of Zoology 50*: 53-79.

Bate, C.S. (1888). Report on the scientific results of the voyage of HMS Challenger during the years 1873-76. *Zoology 24*: 1-942.

Galil, B.S. (2000). Crustacea Decapoda: review of the genera and species of family Polychelidae. *Memoires du Museum National d'Histoire Naturelle 184*: 285-387.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Portunidae

Liocarcinus corrugatus (Dwarf swimming crab) (LCO)



Distinguishing features: Five spines of about the same size on edge of carapace. Fine corrugations over much of the carapace. Last pair of legs flattened into paddles.

Colour: Variable, white, grey to reddish brown.

Size: Carapace width up to 20 mm in males, 25 mm in females.

Distribution: Widely distributed around the world, in northern and central New Zealand.

Depth: Intertidal to 140 m.

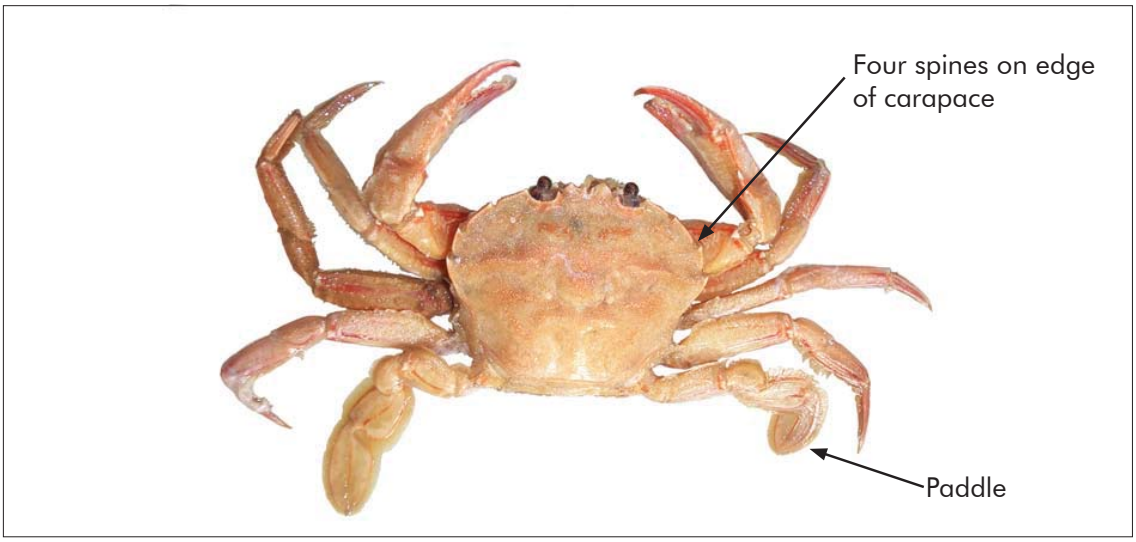
Similar species: The paddle crab (*Ovalipes catharus*) and the swimming crab (*O. molleri*) are similar with five spines on lateral edges of carapace, but have no corrugations on carapace and are much larger.
The smooth red swimming crab (*Nectocarcinus bennetti*) and the hairy red swimming crab (*N. antarcticus*) are similar, but have 4 spines on each lateral edge of carapace, no corrugations on carapace and are much larger.

References: McClay, C.L. (1988). Brachyura and crab-like Anomura of New Zealand. *Leigh Laboratory Bulletin No. 22*. 463 p.

Morton, J.E.; Millar, M.C. (1968) The New Zealand Sea Shore. Collins, London, 653 pp.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Portunidae

Nectocarcinus antarcticus (Hairy red swimming crab) (NCA)



Distinguishing features: Four spines on each lateral edge of carapace. Last pair of legs flattened into paddles. Surface of carapace and legs with matted woolly hairs.

Colour: Carapace and upper surface of legs speckled with dark red, and red over pinkish red. Small white marks on ridges and spines. No iridescence.

Size: Carapace width to 90 mm in males, smaller in females.

Distribution: New Zealand mainland, Chatham, Stewart, Bounty, and Auckland Islands, and possibly Campbell Island.

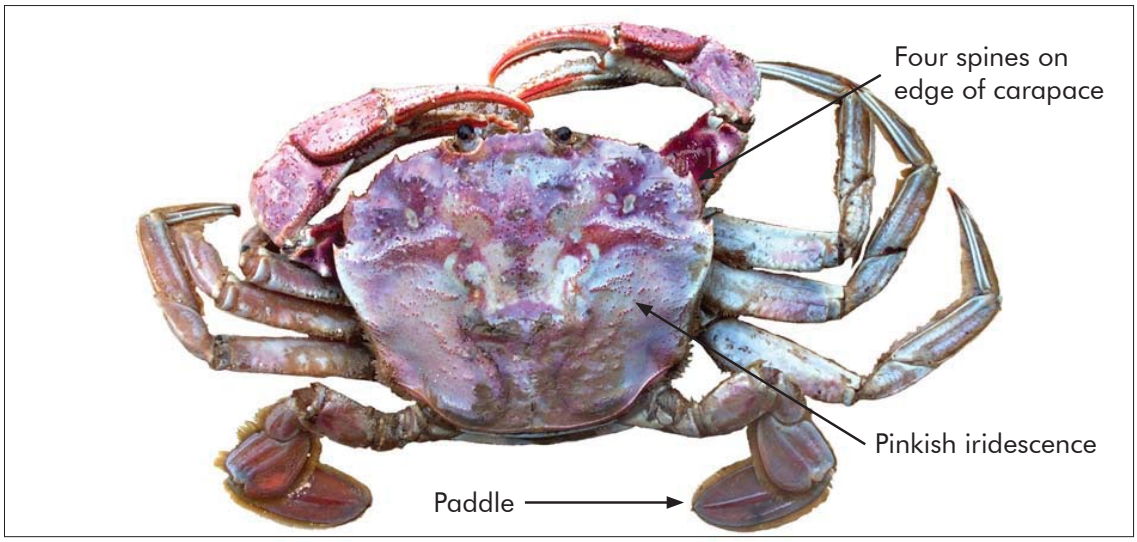
Depth: Intertidal to 550 m.

Similar species: The smooth red swimming crab (*Nectocarcinus bennetti*) is similar, but may have iridescence on carapace, has no matted woolly hairs on carapace or legs and has more prominent lateral spines at front of carapace.
The paddle crab (*Ovalipes catharus*) is similar, but has 5 spines on each lateral edge of carapace and dark-brown speckling on carapace.
The swimming crab (*Ovalipes molleri*) is similar, but has 5 spines on each lateral edge of carapace and iridescence on the carapace. Palms and legs are flattened, spiny-edged area on palm.

References: Bennett, E.W. (1964). The marine fauna of New Zealand: Crustacea Brachyura. New Zealand Department of Scientific and Industrial Research Bulletin 153. (*New Zealand Oceanographic Institute Memoir* 22). 120 pp.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Portunidae

Nectocarcinus bennetti (Smooth red swimming crab) (NCB)



Distinguishing features: Four spines on each lateral edge of carapace. Carapace and legs smooth, except for small granular areas. Areas of pinkish iridescence on carapace. Last pair of legs flattened into paddles.

Colour: Colour of carapace and top of chelipeds variable, from tan to purplish red, areas of iridescence, especially in adults; some paler, regularly patterned areas near back of carapace.

Size: Carapace width to 85 mm in males, 70 mm in females.

Distribution: Chatham Rise and Pukaki Rise, southern South Island, Stewart, Snares, Auckland, and Campbell Islands.

Depth: 20 to 480 m, most common between 60 and 180 m.

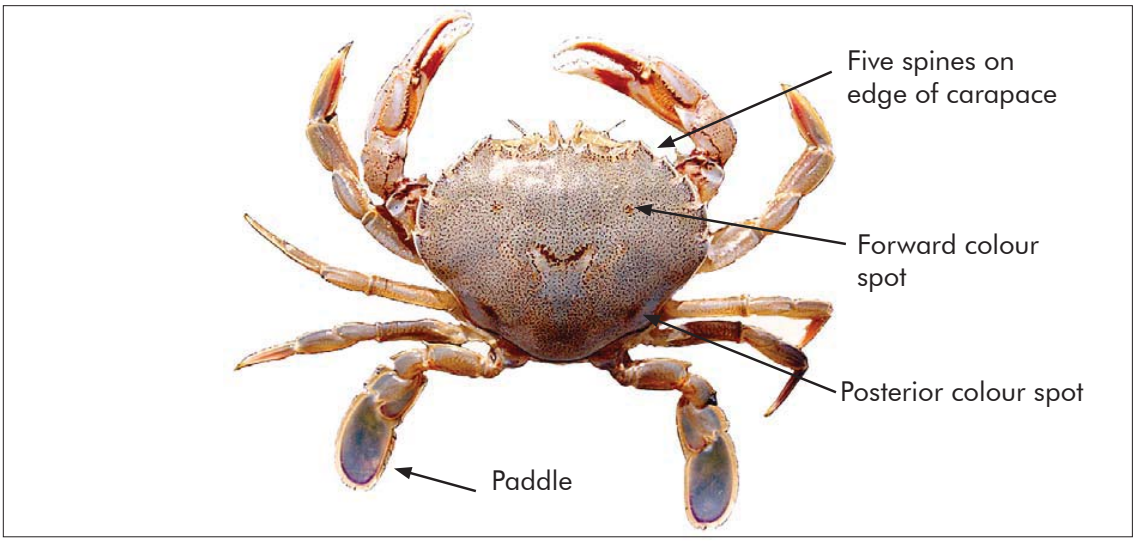
Similar species: The hairy red swimming crab (*Nectocarcinus antarcticus*) is similar, but has no pink iridescence on carapace, matted woolly hairs on carapace and legs and spines on lateral edges of carapace are less prominent.
The paddle crab (*Ovalipes catharus*) is similar, but has 5 spines on each lateral edge of carapace and dark-brown speckling on carapace.
The swimming crab (*Ovalipes molleri*) is similar, but has 5 spines on each lateral edge of carapace, reddish iridescence on the carapace and a more flattened, spiny edged area on palm.

References: Dell, R.K.; Griffin, D.J.G.; Yaldwyn, J.C. (1970). A new swimming crab from the New Zealand subantarctic and a review of the genus *Nectocarcinus* A. Milne Edwards. *Transactions of the Royal Society of New Zealand 12* (7): 49–68.

McLay, C.L. (1988). Brachyura and crab-like Anomura of New Zealand. *Leigh Laboratory Bulletin No. 22*. 463 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Portunidae

Ovalipes catharus (Paddle crab) (PAD)



Distinguishing features: Last pair of legs flattened into paddles. Carapace smooth, speckled with red-brown spots. Five spines on each lateral edge of carapace.

Colour: Pale orange bluish, densely speckled with dark red-brown spots. Colour spots concentrated into 2 forward and 2 larger posterior spots.

Size: Carapace width up to 150 mm in males, 115 mm in females.

Distribution: Southern Australia and New Zealand. Widely distributed around New Zealand and at the Chatham Islands. On open sandy beaches, in harbours and estuaries.

Depth: Intertidal to 100 m. Most common in upper 10 m.

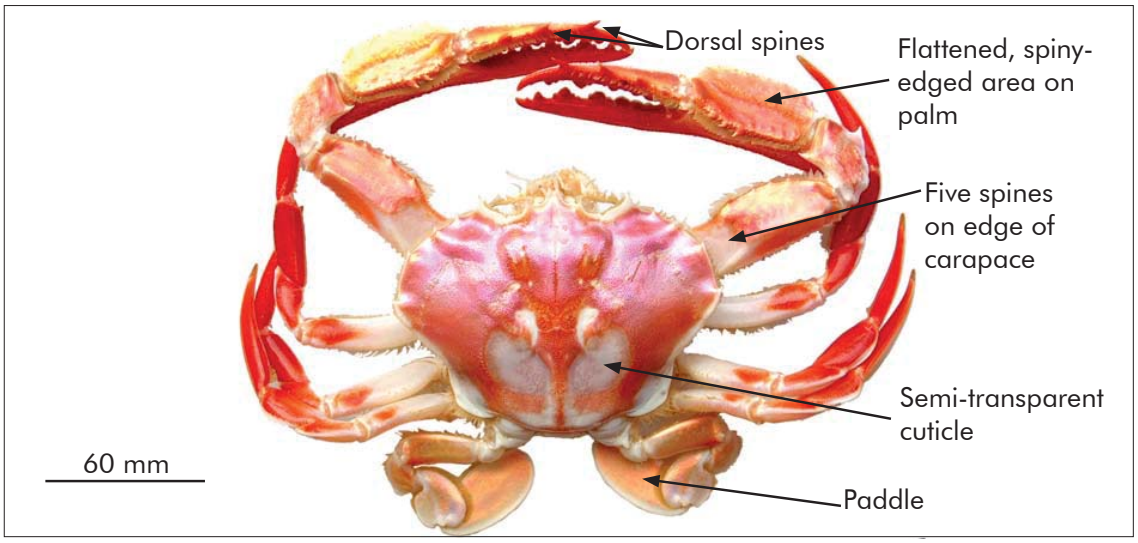
Similar species: The swimming crab (*Ovalipes molleri*) is similar, but has reddish iridescence on carapace and no dark brown speckling. Also flattened, spiny edged area on palms and legs.
The dwarf swimming crab (*Liocarcinus corrugatus*) is broadly similar, but has a series of corrugations over much of carapace and is much smaller.
The smooth red swimming crab (*Nectocarcinus bennetti*) is similar, but has only 4 spines on each lateral edge of carapace, no dark-brown speckling on carapace and may have pink iridescence on carapace.
The hairy red swimming crab (*Nectocarcinus antarcticus*) is similar, but has only 4 spines on each lateral edge of carapace, and the carapace is covered with fine hair, no dark-brown speckling.

References: McLay, C.L. (1988). Brachyura and crab-like Anomura of New Zealand. *Leigh Laboratory Bulletin No. 22*. 463 p.

Stevens, D.W. (1999). A summary of biology and commercial landings and a stock assessment of paddle crabs Ovalipes catharus (White, 1843) (Crustacea, Portunidae), in New Zealand. *New Zealand Fisheries Assessment Research Document 99/18*. 26p. (Unpublished report held in NIWA library, Wellington).

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Portunidae

Ovalipes molleri (Swimming crab) (OVM)



Distinguishing features: All upper surfaces highly iridescent. Sharp spines on carapace between eyes. Five spines on each edge of carapace. Two semi-transparent areas of shell near back of carapace in mature specimens. Flattened, spiny-edged area on palm behind movable finger. Movable finger with dorsal spines. Last pair of legs flattened into paddles

Colour: Carapace iridescent red (fades quickly after death).

Size: Carapace width up to 120 mm. Less in females.

Distribution: Eastern Australia and New Zealand, Northern North Island, south to the Chatham Rise.

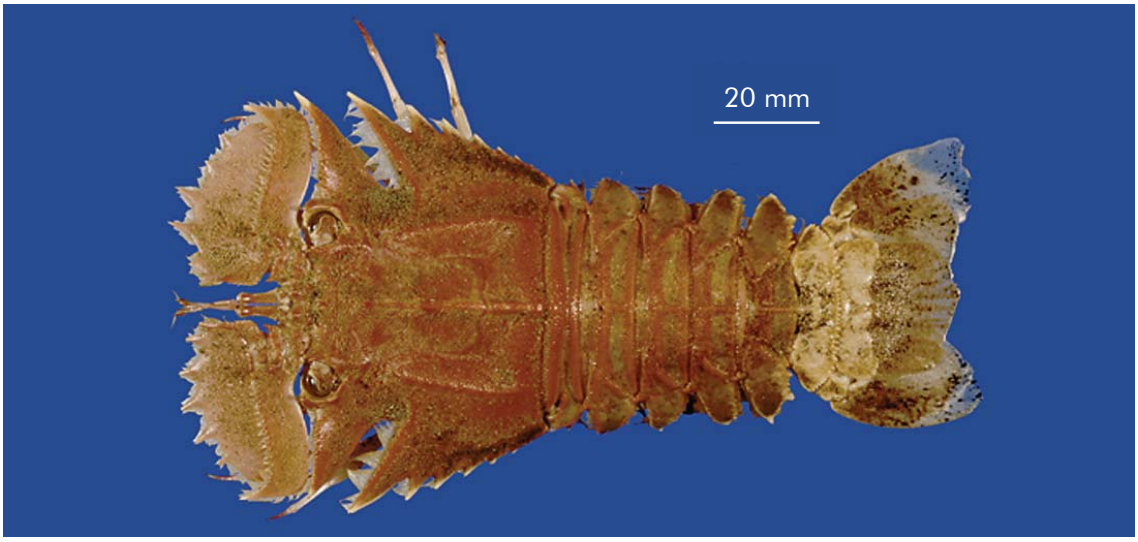
Depth: 70 to 600 m.

Similar species: The paddle crab (*Ovalipes catharus*) is similar, but dark-brown speckling on carapace, no iridescence on carapace or legs; flattened, spiny-edged area on palm less pronounced and spines on movable finger.
The smooth red swimming crab (*Nectocarcinus bennetti*) is similar, but has 4 spines on each lateral edge of carapace, with spines on carapace between eyes short and blunt.
The hairy red swimming crab (*Nectocarcinus antarcticus*) is similar, but has 4 short, blunt spines on each lateral edge of carapace and no iridescence on carapace.
The dwarf swimming crab (*Liocarcinus corrugatus*) is broadly similar, but is much smaller and has a series of corrugations over much of carapace.

References: McLay, C.L. (1988). Brachyura and crab-like Anomura of New Zealand. *Leigh Laboratory Bulletin No. 22*. 463 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Scyllaridae

Ibacus alticrenatus (Prawn killer) (PRK)



Distinguishing features: Dorso-ventrally flattened. Second antenna modified to a closely hinged series of 5 flat plates. Carapace covered by velvety pubescence. Wide, deep notch in margin of carapace.

Colour: Dorsal surface of carapace and antennae red-orange to brown, with darker red spots in the middle of the carapace. Lateral carapace spines and pleural spines tipped with yellow brown. 6th abdominal segment and uropods and telson yellow-brown.

Size: Carapace length up to 63 mm. More commonly less than 50 mm.

Distribution: Australia and New Zealand. North Island, northern South Island as far south as Oamaru, and Chatham Islands. Possibly at Kermadec Islands and on Campbell Plateau and Chatham Rise.

Depth: 20 to 700 m. Possibly deeper too, but mostly on shelf and upper slope.

Similar species: *Ibacus brucei* more flattened, and appears to lack 'hair' on the carapace. Outer margin of distal antennal lamellae of *Arctides antipodarum* has numerous insignificant teeth.

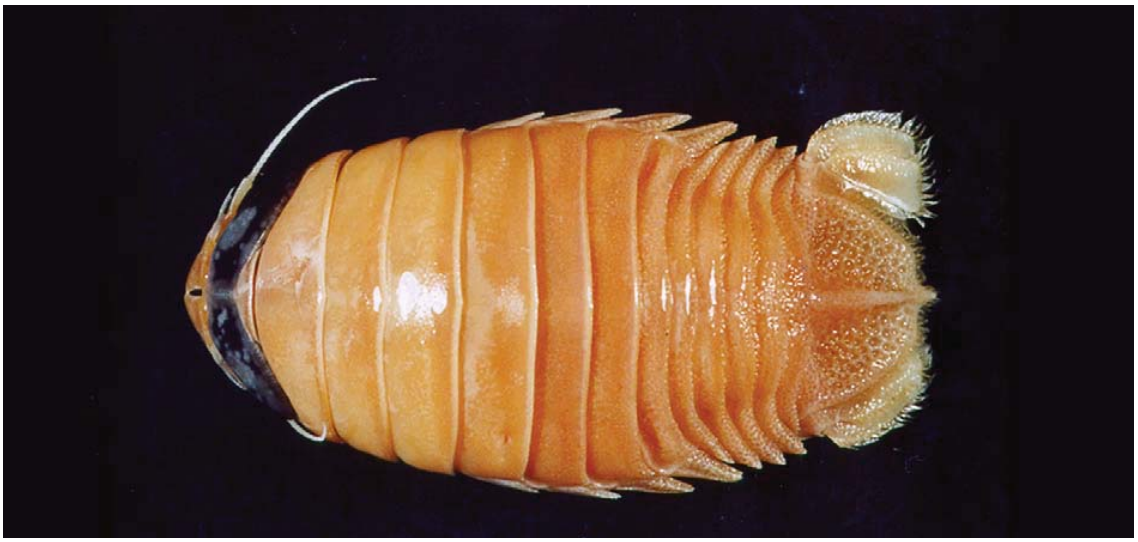
References: Dell, R.K. (1955). A record of *Latreillopsis petterdi* Grant from New Zealand, with notes on some other species of Crustacea. *Records of the Dominion Museum 2*: 147–149.

Holthuis, L.B. (1985). A revision of the Family Scyllaridae 1. Subfamily Ibacinae. *Zoologische Verhandelingen 218 p.*

O'Driscoll, R.L. et al. (2003). Areas of importance for spawning, pupping or egg-laying, and juveniles of New Zealand deepwater fish, pelagic fish, and invertebrates. *NIWA Technical Report 119*. 377 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Isopoda
Family Aegidae

Aega monophthalma (Fish biter) (AMO)



Distinguishing features: Huge eyes that meet in the middle. Antennule flattened. Body heavily pitted on the posterior segments. Mouthparts form a conical bundle under the head.

Colour: Pale yellow to brown, orange laterally, white below; eyes dark brown to black.

Size: Total length from 40 to 63 mm. Size range is for adults; females are larger than males.

Distribution: Widespread in the Atlantic, southwestern Pacific and Southern Ocean; also eastern Australia.

Depth: 440 to 930 m.

Similar species: Several other similar species including *Aega semicarinata*. Other species have separate eyes or a smooth body surface.

References: Bruce, N. L. (2002). Parasites or predators? New Zealand's aegid isopod crustaceans. *Biodiversity Update* 5: 8.

Bruce, N.L.; Lew Ton, H.M. ; Poore, G.C.B. (2002). Aegidae White, 1850. p. 159–163. *In*: Poore, G.C.B. (ed.) Crustacea: Malacostraca: Syncarida and Peracarida: Isopoda, Tanaidacea, Mictacea, Thermosbaenacea, Spelaeogriphacea. Melbourne. CSIRO Publishing. 433 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Isopoda
Family Cymothoidae

Elthusa neocytta (Gill biter or Tongue biter) (ENE)

Distinguishing features: A large cream or white isopod with obvious eyes. Commonly found in mouths of oreos, left image. The body shape is more-or-less straight, and the fifth abdominal segment is overlapped by the fourth segment. The tips of all legs are clawed, and generally the body and appendages are without setae.

Colour: White to cream in life.

Size: Total length from 26 to 60 mm. (Size refers to adults.)

Distribution: Southwestern Pacific, Tasman Sea and New Zealand EEZ.

Depth: 50 to 1000 m.

Similar species: The genus *Elthusa* is large (more than 25 species) but with low diversity in cool and cold waters. *Elthusa raynaudii* (Milne Edwards, 1840) is also known from New Zealand, and can be immediately identified by its assymetric body shape and convex body outline.

References: Bruce, N.L. (1990). The genera Catoessa, Elthusa, Ichthyoxenus, Idusa, Livoneca and Norileca n. gen. (Isopoda, Cymothoidae), crustacean parasites of marine fishes, with descriptions of eastern Australian species. *Records of the Australian Museum* 42: 247–300.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Isopoda
Family Cymothoidae

Elthusa propinqua (Gill biter) (ELP)

Distinguishing features: A medium-size isopod with a distinctly acute front margin to the head and with prominent eyes. The body is wide, and usually twisted to one side. All legs bear strongly recurved 'claws'.

Colour: Cream coloured except for the eyes; entirely lacking chromatophores.

Size: Total length from 14 to 26 mm. Size refers to adults

Distribution: Western Pacific from Japan and Philippines to eastern Australia and New Zealand; also northern Indian Ocean.

Depth: 340 to 835 m.

Similar species: The genus *Elthusa* is large (more than 25 species) but with low diversity in cool and cold waters. *Elthusa raynaudii* (Milne Edwards, 1840) is also known from New Zealand, but is far larger, has a bluntly rounded head and the uropods (tail appendages) are rounded rather than acute as in the present species.

References: Bruce, N.L. (1990). The genera *Catoessa*, *Elthusa*, *Ichthyoxenus*, *Idusa*, *Livoneca* and *Norileca* n. gen. (Isopoda, Cymothoidae), crustacean parasites of marine fishes, with descriptions of eastern Australian species. *Records of the Australian Museum* 42: 247–300.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Isopoda
Family Serolidae

Acutiserolis spp. (Spiny serolid isopod) (ACU)

Distinguishing features: Body strongly flattened, lateral margins with conspicuous spines; eyes dorsal.

Colour: Varying from translucent, slate grey, or brown; eyes may be copper, brown, black, or bright pink.

Size: Total length from 10 to 40 mm.

Distribution: *Acutiserolis* species are found throughout the New Zealand EEZ, from the continental shelf to depths of about 3000 m.

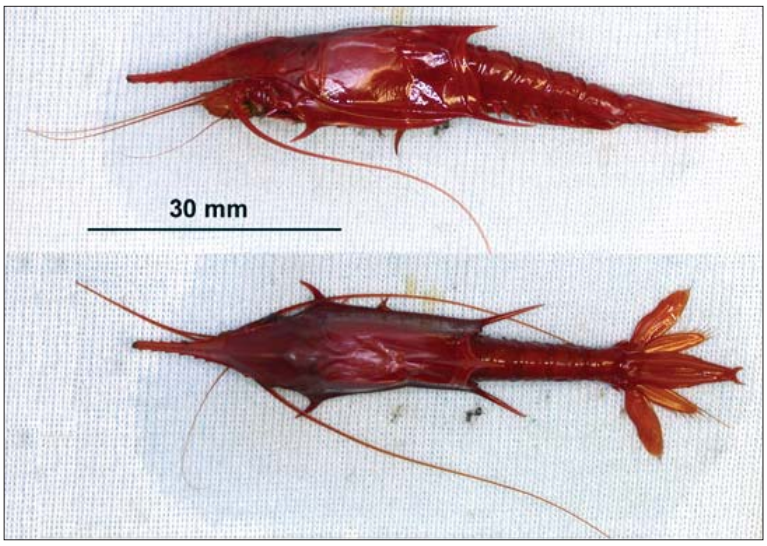
Depth: 100 to 3000 m.

Similar species: The genus has 8 to 12 species in New Zealand waters, none of which appear to have been named. Other serolid genera are similarly flattened, but lack the lateral spines and some are without eyes.

References: Poore, G.C.B.; Brandt, A. (1997). Crustacea Isopoda Serolidae: *Acutiserolis cidaris* and *Caecoserolis novaecaledoniae*, two new species from the Coral Sea. Résultats de Campagnes MUSORSTOM, Vol. 18. *Mémoires du Muséum National d'Histoire Naturelle, Paris 176*: 151–168.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Lophogastrida
Family Gnathophausiidae

Neognathophausia ingens (Giant red mysid) (NEI)



Distinguishing features: These mysids are prawn-like, fragile and soft, deep to bright scarlet. Rostrum elongate (triangular in cross section). Antenna 2 scale, outer margin serrated and without setae. Uropod exopod with distal articulation.

Colour: Bright scarlet.

Size: Total length up to 300 mm. More commonly much smaller – 30 mm.

Distribution: Widespread in tropical and temperate seas.

Depth: 50 to 900 m. Migrate vertically in water column diurnally, so depths given are depth in water, not bottom depths.

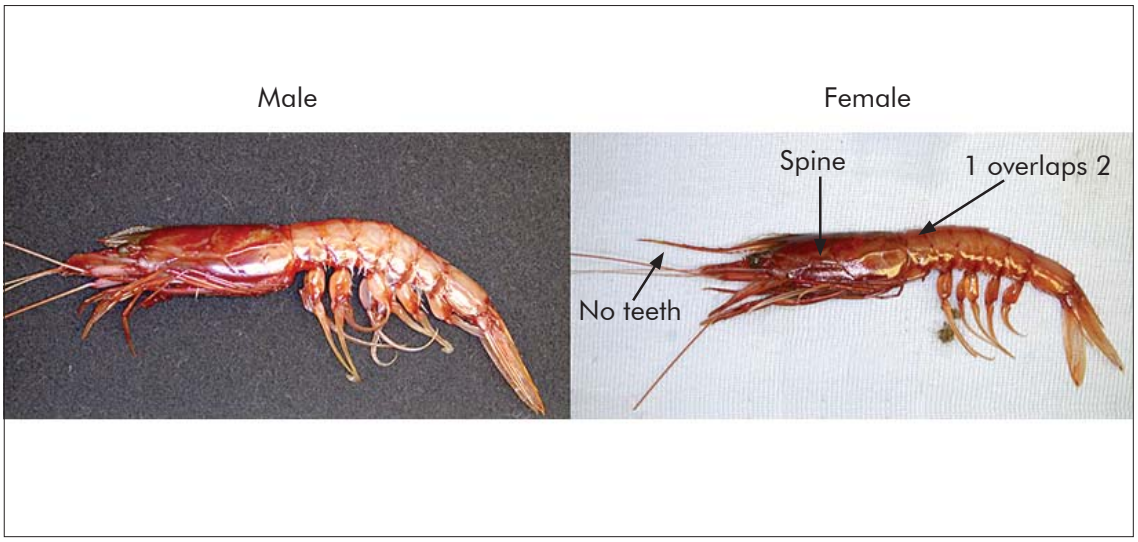
Similar species: Mysids are distinguished from shrimps, prawns, and krill in that the carapace is not attached to the last few segments at the posterior end and so can be lifted.

References: Lowry, J.K.; Stoddart, H.E. (2003). Crustacea: Malacostraca: Peracarida: Amphipoda, Cumacea, Mysidacea. *Zoological Catalogue of Australia 19.2B*.

Webber, R. (2002). Prawns coming in from the cold. *Seafood New Zealand 10(9)*: 75–78.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Aristaeidae

Aristaeomorpha foliacea (Royal red prawn) (AFO)



Distinguishing features: Rostrum is long and slender in females, with more than 3 teeth on top and none on the bottom; males have a short rostrum. There is one small hepatic spine on the side of the carapace; abdominal segment 1 overlaps segment 2; legs 1 to 3 have small chelae (pincers).

Colour: A fairly uniform red over the whole body.

Size: Total length up to 230 mm (includes rostrum).

Distribution: A worldwide species. In New Zealand waters it has occasionally been caught on the Chatham Rise and Challenger Plateau, but typically occurs north of Cook Strait, with frequent records in the Bay of Plenty.

Depth: 250 to 1400 m. Most common between 400 and 1100 m.

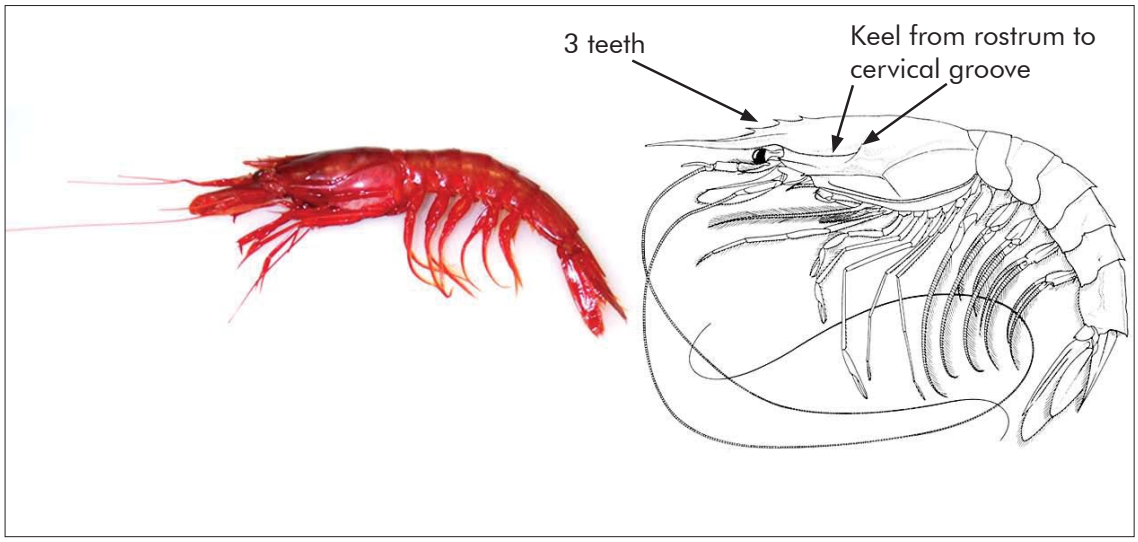
Similar species: *Aristaeopsis edwardsiana* (and *Aristeus* spp.) have only 3 teeth on top of the rostrum, and do not have an hepatic spine. *Nematocarcinus* spp. appear similar, but abdominal segment 2 overlaps segment 1, there usually a few small teeth spread along the bottom of the rostrum, only legs 1 and 2 have chelae, legs 3 to 5 very long.

References: Webber, W.R. (2002). Prawns coming in from the cold (Pt 1). *Seafood New Zealand 10*(9): 75–78.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Aristaeidae

Aristaeopsis edwardsiana (Scarlet prawn) (PED)



Distinguishing features: The base of the rostrum has 3 teeth on top, above the eye. The sides of the carapace have several ridges, including one which runs from the rostrum to the cervical groove.

Colour: Uniformly scarlet to bright red, to deep crimson.

Size: Total length up to 350 mm.

Distribution: Worldwide distribution. Occurs in deep water around much of New Zealand. Distribution is continuous around the North Island and extends out to the Chatham Rise and Challenger Plateau. Puysegur Bank is the most southern record.

Depth: 200 to 1800 m. Most common between 900 and 1100 m.

Similar species: *Aristeus* spp. are very similar in shape and features. They are generally smaller bodied, and do not have the ridge on the carapace from the rostrum to the cervical groove (ridge either absent or very short and not reaching cervical groove).

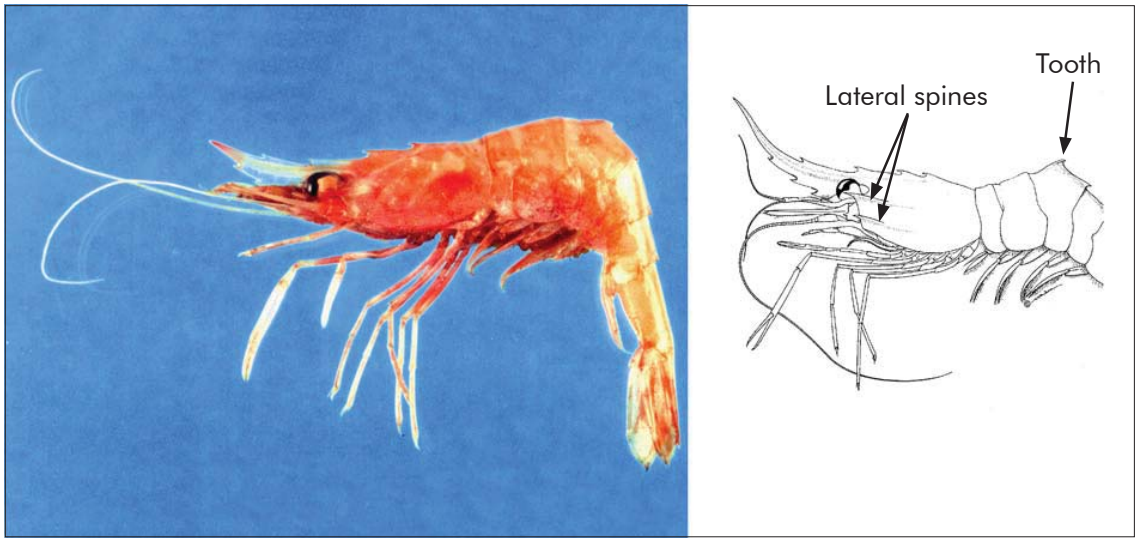
References: Perez Farfantes, I.; Kensley, B. (1997). Penaeoid and sergestoid shrimps and prawns of the world: keys and diagnostics for the families and genera. *Memoires du Museum National d'Histoire Naturelle 175*. 233 p.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Webber, W.R. (2002). Prawns coming in from the cold (Pt 2). *Seafood New Zealand 10*(10): 70–71.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Campylonotidae

Campylonotus rathbunae (Sabre prawn) (CAM)



Distinguishing features: A distinctive heavy-bodied and well armed species. It has a rigid carapace and blade-like rostrum. Two strong lateral spines on the carapace. The 3rd abdominal segment has a pronounced tooth.

Colour: Body pink to yellow-orange. Tip of rostrum is orange to red.

Size: Total length up to 140 mm (includes rostrum).

Distribution: Endemic to Australasia, occurring off New Zealand and eastern and southern Australia. Around New Zealand it has been recorded from Northland south (especially in the Bay of Plenty), Chatham Rise to Campbell Plateau. Not known from Challenger Plateau or Kermadec region.

Depth: 270 to 800 m. Most common at depths of 400 to 600 m.

Similar species: None. It is the only member of its family in New Zealand waters.

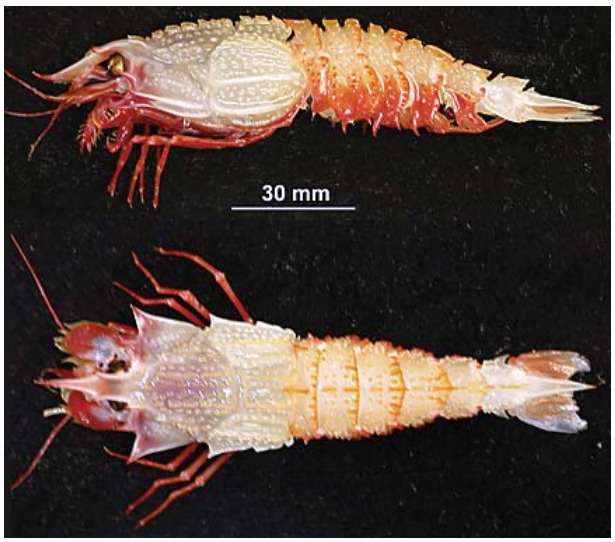
References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Webber, W.R. (2002). Prawns coming in from the cold (Pt 1). *Seafood New Zealand 10*(9): 75–78.

Yaldwyn, J.C. (1960). Crustacea Decapoda Natantia from the Chatham Rise: a deep water bottom fauna from New Zealand. *New Zealand DSIR Bulletin 139*: 13–53.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Glyphocrangonidae

Glyphocrangon spp. (Goblin prawn) (GLO)



Distinguishing features: Prominent rostral spine, about half carapace length, with 2 pairs of lateral spines. Large lateral carapace flange just posterior to eye, with smaller one half-way to posterior of carapace. Median carina on abdomen segments, spine-like on first segment.

Colour: Carapace yellowish, otherwise the prominent colour is the scarlet of the spine tips against a yellowish background.

Size: Carapace length up to 35 mm.

Distribution: Northern New Zealand continental slope and seamounts, and off eastern Australia.

Depth: 720 to 980 m.

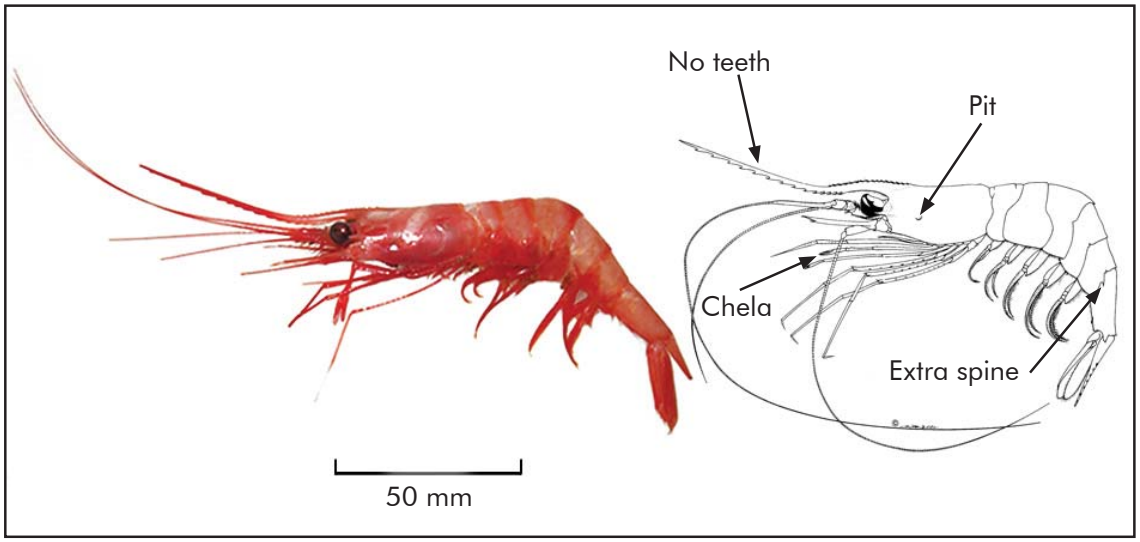
Similar species: Several species in New Zealand waters, many undescribed/ unidentified.

References: Kensley, B.; Tranter, H.A.; Griffin, D.J.G. (1987). Deepwater decapod Crustacea from eastern Australia (Penaeidae and Caridae). *Records of the Australian Museum 39*: 263–331.

Takeda, M. (1990). Fishes collected by the R/V *Shinkai Maru* around New Zealand. Japan Marine Fishery Resource Research Centre (JAMARC). 410 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Nematocarcinidae

Lipkius holthuisi (Omega prawn) (LHO)



Distinguishing features: Second abdominal side plate overlaps the first, long rostrum with teeth (>10) along the bottom spread out towards tip. Top of rostrum has no teeth for most of its length. Carapace has small pit on side, 5th abdominal segment has an extra spine, first and second legs have chelae (but these features hard to see without magnifying glass).

Colour: Anterior half of body is red, with abdomen partly red, partly colourless.

Size: Total length up to 200 mm (includes rostrum).

Distribution: Australia and New Zealand. Around New Zealand it is distributed south of 37° S. Found almost continuously along margin of continental slope from East Cape southwards, along the Chatham Rise, around the Campbell Plateau, out to Challenger Plateau.

Depth: 350 to 1700 m. Most common 800 to 1000 m.

Similar species: *Nematocarcinus* spp. in the same family, but have teeth on top of rostrum out to tip. *Plesionika martia* has many small teeth on the bottom of rostrum.

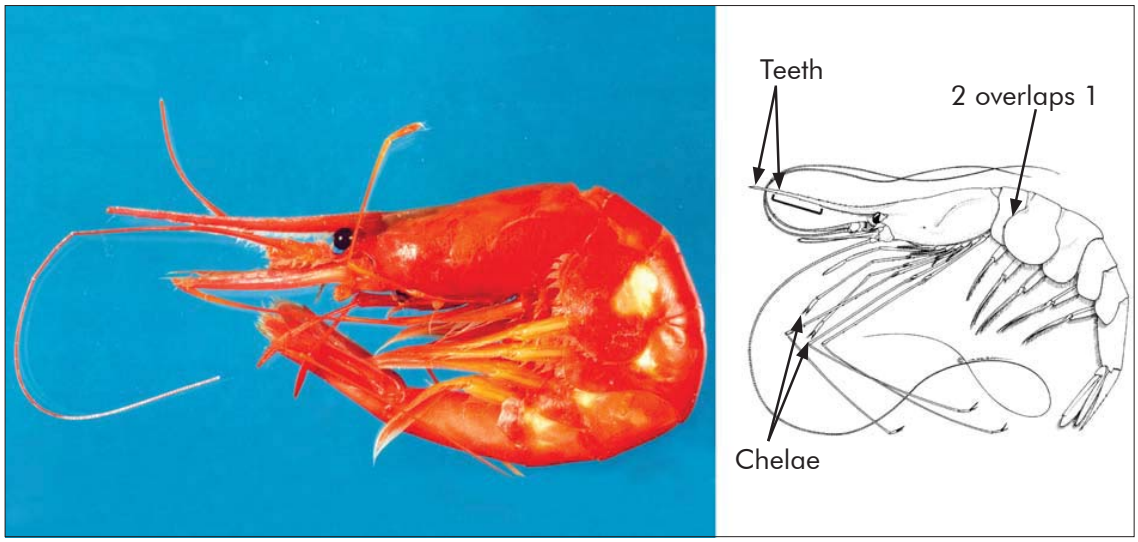
References: Webber, W.R. (2002). Prawns coming in from the cold (Pt 1). *Seafood New Zealand 10*(9): 75–78.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Yaldwyn, J.C. (1960). Crustacea Decapoda Natantia from the Chatham Rise: a deep water bottom fauna from New Zealand. *New Zealand DSIR Bulletin 139*: 13–53.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Nematocarcinidae

Nematocarcinus spp. (Spider prawn) (NEC)



Distinguishing features: Teeth on top of rostrum extend right out to the tip; bottom of rostrum with none or a few teeth; legs 3, 4,5 are very long (often broken); legs 1 and 2 have chelae (pincers); abdominal segment 2 overlaps segment 1.

Colour: Body red, orange to yellow area under carapace, abdomen partly red, partly colourless.

Size: Total length up to 170 mm (includes rostrum).

Distribution: Worldwide. Around New Zealand they occur in small numbers around the margins of the continental shelf off the Chatham Rise, Challenger Plateau, and west coast of the South Island.

Depth: 800 to 1200 m. Mostly occurs 900 to 1100 m.

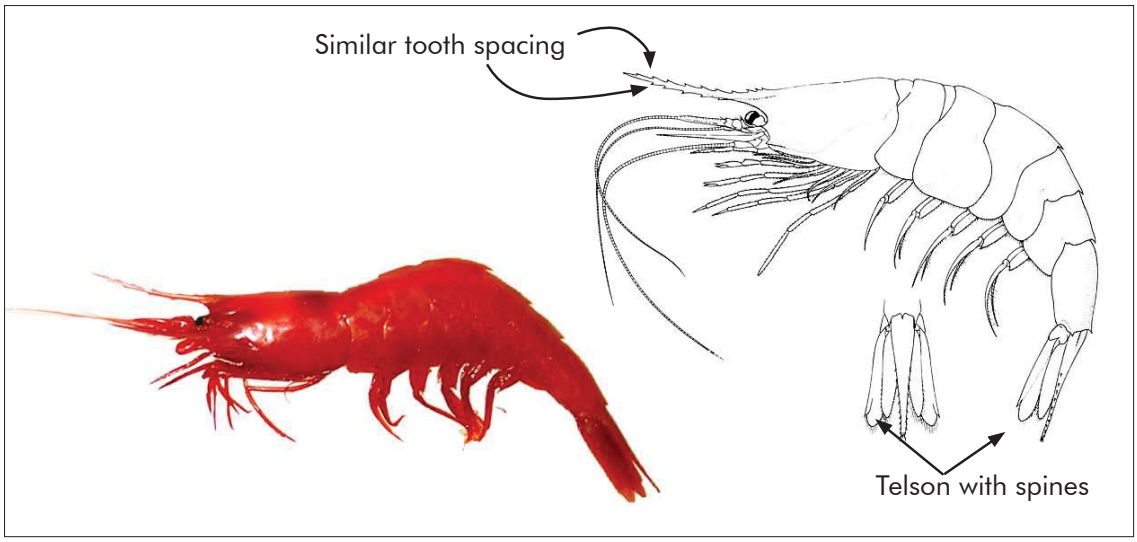
Similar species: There are five species in this genus known from the New Zealand region. *Lipkius holthuisi*, *Notopandalus magnoculus*, and *Plesionika martia* have a similar shape, but the teeth on top of the rostrum do not extend out to the tip, and they have more than 10 teeth on the bottom of the rostrum.

References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Richardson, L.R.; Yaldwyn, J.C. (1958). A guide to the natant decapod crustacea (shrimps and prawns) of New Zealand. *Tuatara 7*: 17–41.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Oplophoridae

Acanthephyra spp. (Subantarctic ruby prawn) (ACA)



Distinguishing features: Few species are as uniformly bright red as *Acanthephyra*. Telson with 4 pairs of spines (*A. quadrispinosa* (AQU)) or 7 to 11 pairs (*A. pelagica* (APE)). Spacing of teeth on the rostrum is similar on both top and bottom.

Colour: Uniformly bright red to scarlet.

Size: Total length up to 140 mm.

Distribution: Both species have been reported in all but the southern most parts of the New Zealand EEZ, with *Acanthephyra quadrispinosa* more commonly found in the north (north of Cook Strait) and *A. pelagica* in the south (Challenger Plateau and Chatham Rise down to 50° S on the Campbell Plateau).

Depth: 400 to 2000 m. Most commonly recorded around 1000 m.

Similar species: Three other species of *Acanthephyra* are found in New Zealand waters, but they are infrequently caught. *Systellaspis debilis* is similar in shape, but body colour is partly red, partly translucent, or colourless; and lower parts of the carapace have a line of photophores.

References: Webber, W.R. (2002). Prawns coming in from the cold (Pt 1). *Seafood New Zealand 10*(9): 75–78.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Oplophoridae

Notostomus auriculatus (Scarlet prawn) (NAU)

Distinguishing features: Large uniformly scarlet/crimson species. Long rostrum with teeth on top and bottom. Five lateral keels on each side of carapace. Strong, blade-like, finely serrated ridge along top of carapace. Two lateral keels at base of rostrum, upper keel longer, extending posteriorly beyond eye.

Colour: Uniformly scarlet.

Size: Up to 180 mm (including rostrum).

Distribution: South Atlantic, NSW, Tasmania, southern Indo-West Pacific, and around New Zealand.

Depth: From the surface to at least 1200 m.

Similar species: Other (uncommon) *Notostomus* species are similar, but have only the upper 3 of the 5 lateral keels on the carapace, and the upper keel on the rostrum does not extend back beyond the eye.

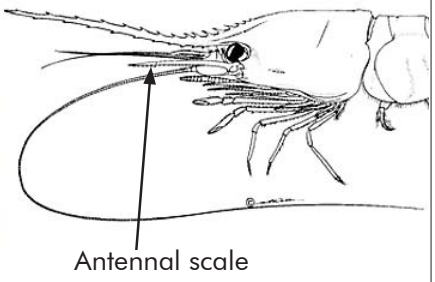
References: Poore, C.B. (2004). Marine decapod Crustacea of Southern Australia: a guide to identification. CSIRO Publishing. 574 p.

Richardson, L.R.; Yaldwyn, J.C. (1958). A guide to the Natant Decapod Crustacea (shrimps and prawns) of New Zealand. *Tuatara* 7: 17-41.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication* 6. 42 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Oplophoridae

Oplophorus spp. (Deepwater prawn) (OPP)



Distinguishing features: Solid body, prominent and long spines on abdominal segments 3 to 5. *Oplophorus novaezeelandiae* (ONO) has a smooth outer edge to the antennal scale, but there are small spines on that of *O. spinosus* (OPS). Use code OPP when unsure of species.

Colour: Anterior half of body red, abdomen red-striped, rostrum and large spines transparent.

Size: Total length up to 100 mm (total length measurement includes rostrum).

Distribution: Widespread through the South Atlantic and southern Pacific Oceans, western Australia, and New Zealand. Around New Zealand, *O. novaezeelandiae* is recorded from the Kermadec Ridge to the southern margin of the Campbell Plateau. *O. spinosus* has a more northern distribution than *O. novaezeelandiae*, with the latter dominating south of East Cape.

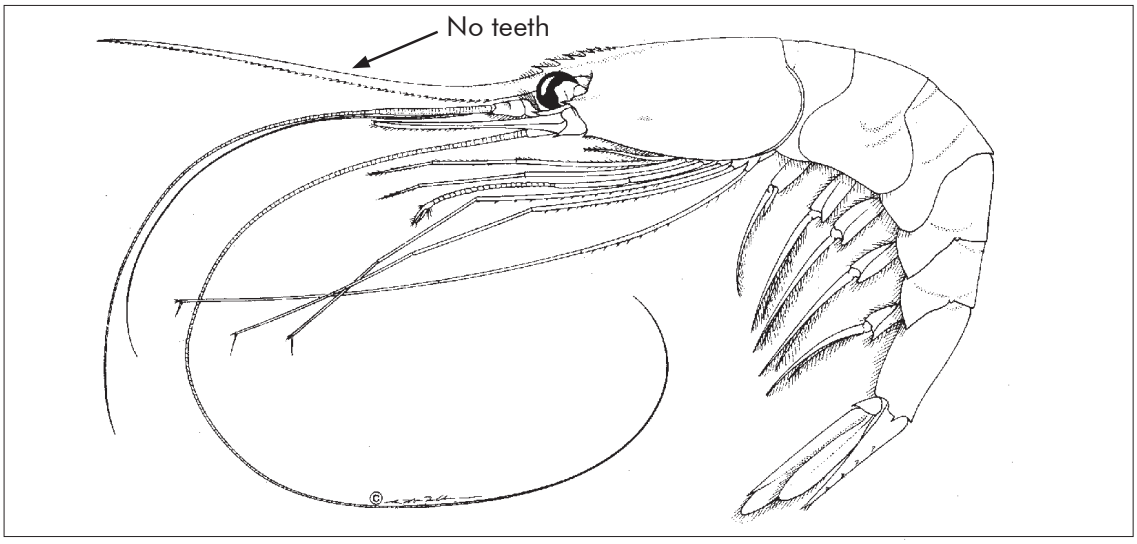
Depth: 200 to 1100 m. Mainly taken from 800 to 950 m. Has also been recorded at or near surface.

Similar species: None. The abdominal spines are very distinctive.

References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication* 6. 42 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Pandalidae

Plesionika martia (Golden prawn) (PLM)



Distinguishing features: The bottom of the rostrum has many small and close-set teeth right out to the tip; teeth are absent from the top of the rostrum except above the eye; females with ming-blue eggs.

Colour: Most of body translucent to light pink, tip of rostrum red, small red areas on abdomen and telson.

Size: Total length up to 170 mm (including long rostrum).

Distribution: Widely distributed; around New Zealand found from the Kermadec Islands to Cook Strait, with records predominantly from the Bay of Plenty and Challenger Plateau.

Depth: 180 to 2100 m. Most commonly caught from 400 to 600 m.

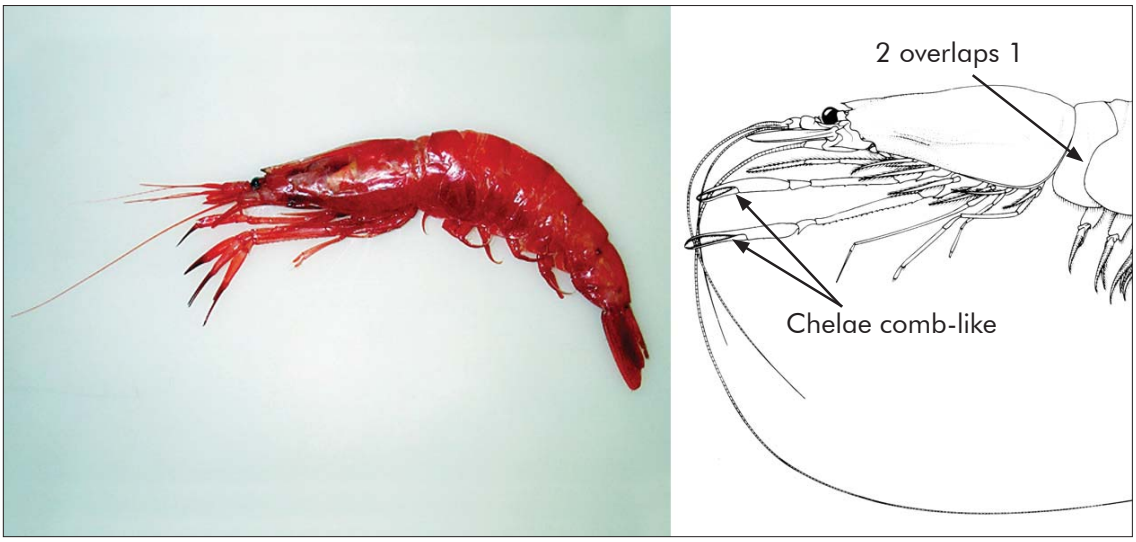
Similar species: *Notopandalus magnoculus*, teeth on bottom of rostrum are spaced out more towards the tip; teeth above the eye are slender and moveable. *Lipkius holthuisi*, teeth on bottom of rostrum also spaced out more towards the tip. *Nematocarcinus* spp. teeth occur on the top of the rostrum, out to the tip.

References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*: 42 p.

Webber, W.R. (2002). Prawns coming in from the cold (Pt 2). *Seafood New Zealand 10(10)*: 70–71.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Pasiphaeidae

Pasiphaea aff. tarda (Deepwater prawn) (PTA)



Distinguishing features: A large, noticeably flat-sided prawn with a very small rostrum (largest of the genus *Pasiphaea* in New Zealand). Long fine chelae (pincers) on legs 1 & 2, cutting edges of pincers with comb-like rows of fine teeth. Abdominal segment 2 overlaps segment 1.

Colour: Red.

Size: Total length up to 160 mm including rostrum.

Distribution: *Pasiphaea aff. tarda* is commonly caught in trawls on the Chatham Rise, Challenger Plateau, and around the South Island. Also recorded off East Cape and in Bay of Plenty, but generally has a more southern distribution.

Depth: 750 to 1500 m. Most commonly reported from 800 to 1200 m.

Similar species: Small specimens of *Pasiphaea aff. tarda* very hard to distinguish by eye from other species of the genus. Any large animal (longer than 100 mm) is almost certainly P. *aff tarda*. *Sergia potens* has abdominal segment 1 overlapping segment 2, and chelae on legs 2 and 3 which are are very small.

References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Webber, W.R. (2002). Prawns coming in from the cold (Pt 2). *Seafood New Zealand 10(10)*: 70–71.

Phylum Arthropoda (subphylum Crustacea)
Class Maxillipoda
Order Decapoda
Family Penaeidae

Funchalia spp. (Funchalia prawn) (FUN)

Distinguishing features: Short rostrum (but longer than eye) with teeth on top only. No teeth on side of carapace behind front edge. Small flat hairs on surface of body. First three legs with chelae. First abdominal segment overlaps second.

Colour: Transparent with areas of pink-orange-yellow.

Size: Up to 160 mm long.

Distribution: Atlantic, Indian Ocean, West Pacific, Antarctic, Australia, and New Zealand.

Depth: From near surface (at night) to more than 500 m.

Similar species: *Haliporoides sibogae* and *Solenocera comata* are similar, but have no body hair, and have 2 and 3 spines respectively on side of carapace, behind front edge. *Chlorotocus novaezealandiae* is similar, but the second abdominal segment overlaps the first, and a chela is present on the second leg only.

References: Poore, C.B. (2004). *Marine decapod Crustacea of Southern Australia: a guide to identification*. CSIRO Publishing. 574 p.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication* 6. 42 p.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Sergestidae

Sergestes spp. (Sergestid prawn) (SER)

Distinguishing features: Small to medium size, soft, fragile, and transparent, usually with red spots. Short rostrum (much shorter than eyestalks). Chelae (legs 2 and 3) microscopically small. Last two pairs of legs reduced or absent. First abdominal segment overlaps second. Eyestalks often pointing outwards.

Colour: Transparent with red spots (chromatophores). Stomach and light producing organs visible through carapace.

Size: Up to 70 mm.

Distribution: Worldwide including New Zealand.

Depth: 0 to 2000 m.

Similar species: *Sergia* species are similar but are usually scarlet to deep crimson. *Pasiphaea* species are also similar, but have larger, visible, long slender chelae with comb-like cutting edges, and the second abdominal segment overlaps the first.

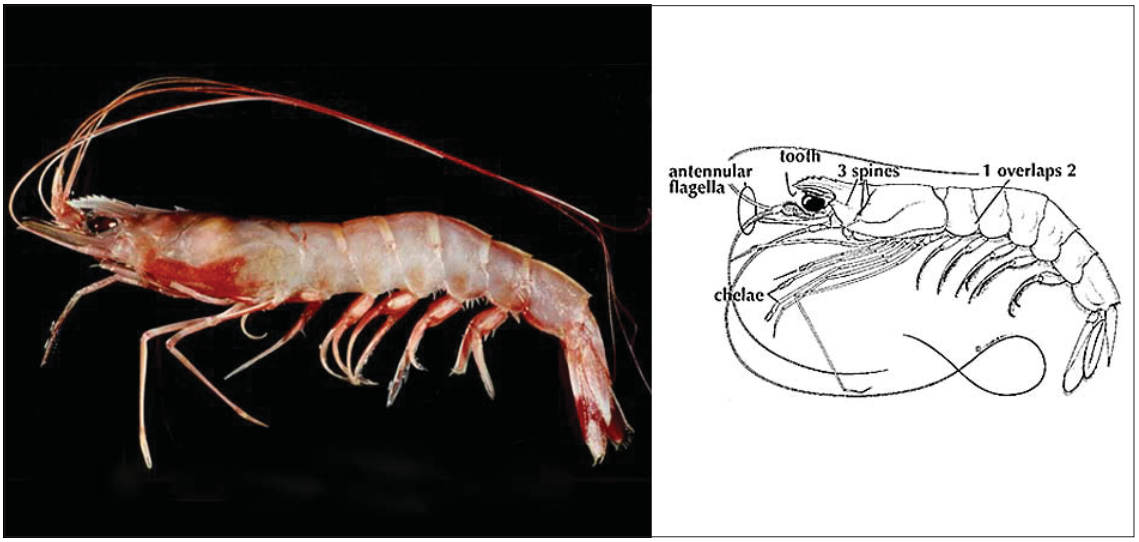
References: Poore, C.B. (2004). Marine decapod Crustacea of Southern Australia: a guide to identification. CSIRO Publishing. 574 p.

Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Webber, W.R. (2002). Prawns coming in from the cold (PT 2). *Seafood New Zealand 10 (10)*: 70-71.

Phylum Arthropoda (subphylum Crustacea)
Class Malacostraca
Order Decapoda
Family Solenoceridae

Haliporoides sibogae (Jack-knife prawn) (HSI)



Distinguishing features: A single small tooth below the rostrum tip; rostrum arched dorsally; rostrum longer than eye; 3 small spines on side of carapace; antennular flagella round (not flat); first abdominal segment overlaps second; legs 1 to 3 have small chelae (pincers).

Colour: Red-pink, with colourless to yellow-orange areas on abdomen.

Size: Total length up to 150 mm.

Distribution: Widely distributed. Around New Zealand, distributed primarily between North Cape and the Chatham Rise, with a few occurences on the Campbell Plateau.

Depth: 100 to 1500 m. A wide range of depths, most frequently recorded from 350 to 600 m.

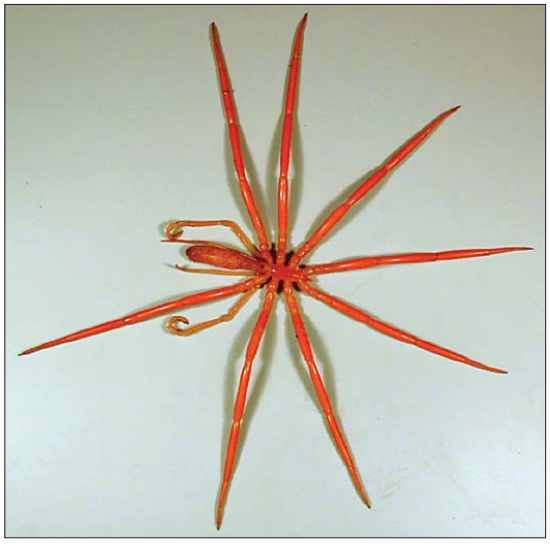
Similar species: *Solenocera comata* has no tooth below the rostral tip, rostrum is shorter than eye, 2 (not 3) spines on side of carapace, flattened antennular flagella. *Funchalia* spp. are 'hairy' on the body, no tooth below rostrum tip. *Chlorotocus novaezelandiae*: abdominal segment 2 overlaps segment 1, and only leg 2 has chelae.

References: Webber, W.R.; Fenaughty, C.M.; Clark, M.R. (1990). A guide to some common offshore shrimp and prawn species of New Zealand. *New Zealand Fisheries Occasional Publication 6*. 42 p.

Grey, D.L.; Dall, W.; Baker, A. (1983). A guide to the Australian penaeid prawns. Department of Primary Production of the Northern Territory, Australia. 140 p.

Phylum Arthropoda (subphylum Chelicerata)
Class Pycnogonida
Order Pantopoda
Family Colossendeidae

Colossendeis spp. (Giant sea spiders) (PYC)



Distinguishing features: Eight legs or more, spider-like, large bodied, eyes usually completely lacking.

Colour: Most dull white or brown, but some bright reddish orange.

Size: From 10 to 60 mm body length.

Distribution: Cosmopolitan deepsea genus often found in quite shallow Antarctic waters.

Depth: 5 to 1000 m.

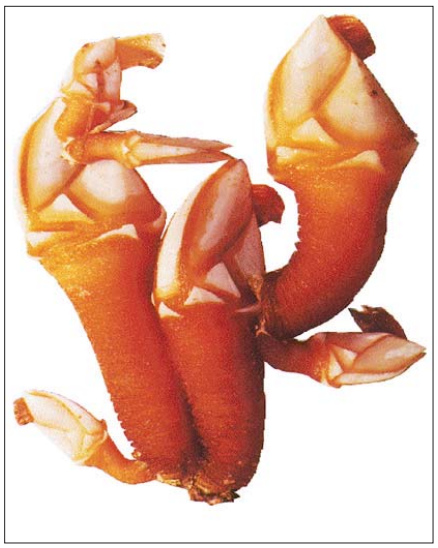
Similar species: Other members of Family Colossendeidae.

References: Allan-Child, C. (1998). The marine fauna of New Zealand: Pycnogonida (sea spiders). *NIWA Biodiversity Memoir 109*. 71 p.

Fry, W.G.; Hedgpeth, J.L. (1969). The fauna of the Ross Sea. Part 7. Pycnogonida, 1. *New Zealand Oceanographic Institute Memoir 49*. 139 p.

Phylum Arthropoda (subphylum Maxillipoda)
Class Maxillipoda
Order Thoracica
Family Scalpellidae

(Stalked barnacles) (SBN)



Distinguishing features: Large barnacle with 13 white calcereous plates which make up the capitulum and are separated by brown chitinous material. Stalked barnacles also known as goose barnacles.

Colour: Chocolate to dark straw-coloured stalk with fine white spines.

Size: Total length to 130 mm.

Distribution: Worldwide. Occurs on the flat slope, and on seamounts.

Depth: 120 to 1100 m.

Similar species: Other scalpellid barnacles.

References: Buckeridge, J. (1999). Barnacles, not just a fouling nuisance. *Seafood New Zealand* 7(2): 38–39.

Foster, B.A. (1978). The marine fauna of New Zealand: barnacles (Cirripedia: Thoracica). *New Zealand Oceanographic Institute Memoir 69*. 160 p.