

# PHYLUM: ARTHROPODA

Authors

Charles Griffiths<sup>1</sup>, Jannes Landschoff<sup>1</sup> and Lara Atkinson<sup>2</sup>

Citation

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<sup>1</sup> Marine Research Institute and Department of Biological Science, University of Cape Town

<sup>&</sup>lt;sup>2</sup> South African Environmental Observation Network, Egagasini Node, Cape Town

## Phylum: **ARTHROPOD**A

#### Sub-phyla Crustacea and Chelicerata

Crabs, prawns, lobsters, barnacles, mantis shrimps, isopods, pycnogonids, etc.

The Phylum Arthropoda includes all animals which have an external skeleton (exoskeleton), a segmented body, and jointed appendages. It is by far the most diverse of all phyla, incorporating over 80% of all described species. The Phylum is divided into five Sub-phyla, as follows:

- Sub-phylum Trilibitomorpha: Trilobites (extinct).
- **Sub-phylum Chelicerata:** Spiders and horseshoe crabs, of which only the Class Pycnogonida is briefly considered in this guide.
- Sub-phylum Myriopoda: Centipedes and millipedes, entirely terrestrial, so not covered in this guide.
- **Sub-phylum Hexapoda:** Insects and their allies, primarily terrestrial or freshwater, almost completely absent from marine habitats and not covered in this guide.
- **Sub-phylum Crustacea:** Crabs, prawns, etc., the main group considered within this guide.

## Sub-phylum Crustacea

Crustaceans are characterised by having a segmented body, a chitinous exoskeleton, paired jointed limbs and two pairs of antennae. They include such well-known groups as crabs, prawns, hermit crabs, lobsters and barnacles. Most are free-living and aquatic, but some are terrestrial (e.g. woodlice), parasitic (e.g. some barnacles and isopods), or sedentary (barnacles). There are about 67 000 known species globally and over 2 300 marine species have been described from South African waters, with many more remaining undescribed.

The major subgroups consided here are the following:

- Class Ostracoda: Small, body enclosed in an oval or round bivalved carapace. Planktonic or benthic in both marine and freshwater. About 45 marine species are known from South Africa.
- Class Hexanauplia: This recently recognised group includes both the more familiar Subclass Copepoda (copepods: small but very abundant and diverse planktonic or benthic animals, about 430 South African marine species, not covered in this guide) and the Infraclass Cirripedia (barnacles; 86 South African species),

which have become sessile, have reduced body parts and are usually encased by calcareous plates.

- **Class Malacostraca:** The largest class and divided among many orders, of which the following are addressed in this guide:
  - Order Stomatopoda: Mantis shrimps (35 species known in the region).
  - **Order Tanaidacea:** Tanaids (19 species known in the region).
  - **Order Isopoda:** Isopods (over 300 species known in the region).
  - **Order Amphipoda:** Amphipods (over 450 species known in the region).
  - Order Decapoda: Prawns, lobsters, hermit crabs, crabs, etc., which include most of the larger-bodied Crustacea and form the majority of species addressed in this guide. Over 750 species are recorded from South Africa.

The order of species pages presented in this guide may not necessarily follow strict phylogenetic relationships, but are presented based on superficial similarity to enable better comparisons during field identification.

#### **Collection and preservation**

In the field, or on board a vessel, crustaceans are best preserved by freezing specimens in individual plastic bags with labels. Specimens should be packaged with protection padding and in hard plastic containers to protect them from breakage. This is best done by packing small groups of samples into larger jars, rigid cardboard boxes, buckets with lids, or crates. Alternatively, specimens can be frozen in a jar or container filled with seawater.

Samples can also be preserved in 70% ethanol, but as colour can be important for identification and quickly fades in alcohol, specimens that might be of taxonomic significance should first be photographed to record their natural colours. Include the specimen label and, if possible, a scale bar in photogaphs, which are best taken against a plain black or white background.

## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837.

Bianchi G, Carpenter KE, Roux J-P, Molloy FJ, Boyer D and Boyer HJ. 1999. *FAO species identification field guide for fishery purposes. Field guide to the living marine resources of Namibia* ISSN 1020-6868 Norwegian Agency for International Development, Food and Agriculture Organization of the United Nations, Rome.

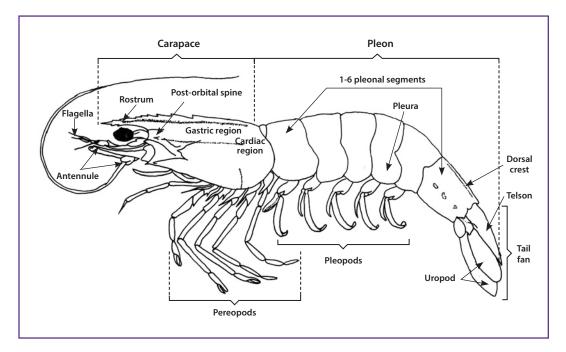
Biccard A and Griffiths CL. 2016. Additions to the barnacle (Crustacea: Cirripedia) fauna of South Africa. *African Zoology* 51(2): 99-116.

Debelius D. 1999. Crustacea: Guide of the World. IKAN, Frankfurt. 321pp.

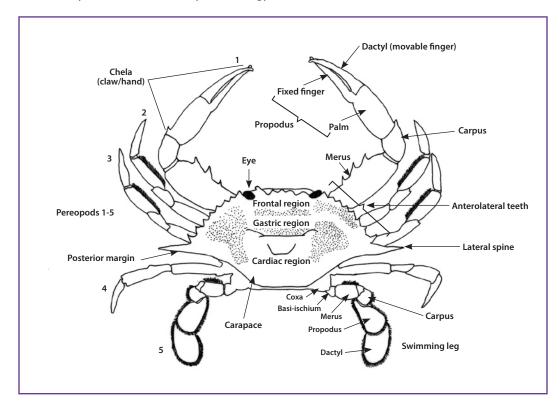
Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. (3 volumes).

Griffiths CL. 1976. *Guide to the Benthic Marine Amphipods of Southern Africa*. Trustees of the South African Museum, Cape Town, 106pp.

Kensley B. 1978. *Guide to the Marine Isopods of Southern Africa*. Trustees of the South African Museum, Cape Town, 173pp.

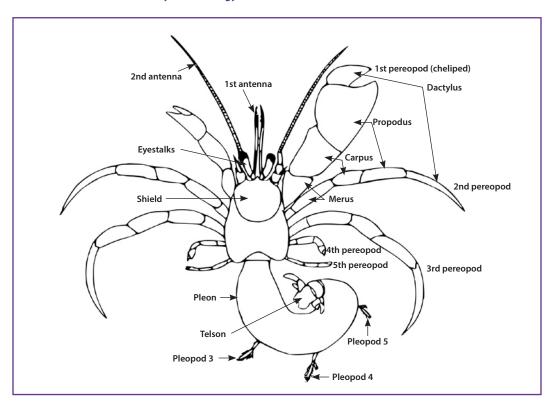


#### Prawn external anatomy terminology

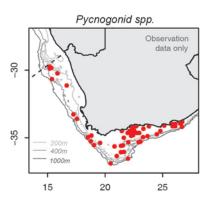


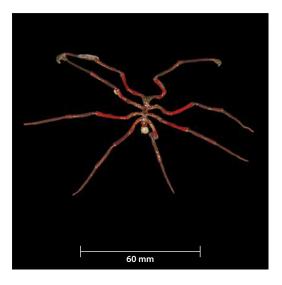
## Crab (Brachyura) external anatomy terminology

## Hermit crab external anatomy terminology



Pycnogonid spp. (Pycnog)	
Phylum:	Arthropoda
Subphylum:	Chelicerata
Class:	Pycnogonida
Order:	Pantopoda
Suborder:	-
Family:	Various
Genus:	'Pycnogonid'
Species:	-
Common name:	Sea spiders



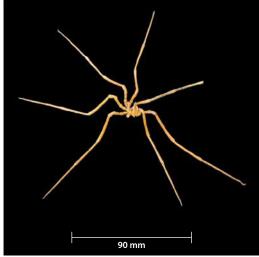


Pycnogonids (sea spiders) have small bodies with long, spider-like legs. Most have four pairs of jointed walking legs, although some species are known to have five or six pairs of legs. Body form consists of a cephalon and a trunk which has four body segments, each segment bearing a pair of legs. The cephalon bears a proboscis, a pair of chelifores, a pair of palps and a pair of ovigerous legs (ovigers). Ovigers are a feature unique to Pycnogonida.

Offshore South African pycnogonids from Iziko Museum, identified by David Staples, are classified into three families: <u>Pallenopsidae</u>, <u>Callipallenidae</u>, and <u>Nymphonidae</u>. However, for purposes of research trawl surveys, all pycnogonids are grouped together under the FishBoard code 'Pycnog'.

## Colour

Variable, but usually orange, yellow or red.



#### Size

Variable. From a few millimetres up to 140 mm in diameter (in South Africa).

#### Distribution

Ubiquitous in benthic habitats.

#### Similar species

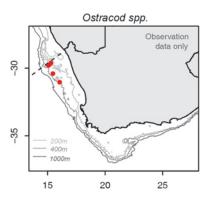
Unlikely to be confused with any other group, except perhaps Inachidae spider crab species, which have five pairs of slender, long legs.

#### References

Bamber RN, El Nagar A and Arango CP. (eds). 2018. *Pycnobase: World Pycnogonida Database*. Accessed at http://www.marinespecies.org/pycnobase on 2018-03-01.

Barnard KH. 1954. South African Pycnogonida. *Annals of the South African Museum* 41: 81-159.

Ostracods (Ostra)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Ostracoda
Order:	Various
Suborder:	-
Family:	Various
Genus:	'Ostracod'
Species:	-
Common name:	Ostracods





Small crustaceans, body completely enclosed in bivalved carapace, hence common name 'mussel shrimps' or 'seed shrimps'. Usually round or oval in outline, most are smooth, but some extravagantly ridged or spiked. Some have conspicuous antennal notch (Order Myodocopa, shown here). Swim using elongate antennae. Can be planktonic or benthic and have various feeding habits, including carnivores, grazers, scavengers and filter-feeders.

## Colour

Usually white to yellow, sometimes pink/orange organs visible through carapace.

#### Size

Up to 15 mm diameter, mostly much smaller (<5 mm).



#### Distribution

Ubiquitous in benthic and pelagic habitats.

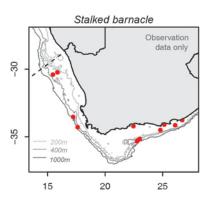
#### **Similar species**

South African benthic marine ostracods are poorly known and in urgent need of revision.

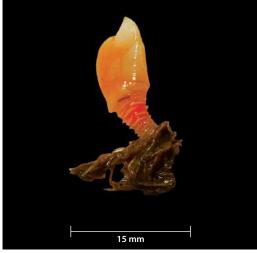
#### Reference

Stebbing TRR. 1910. General Catalogue of South African Crustacea. *Annals of the South African Museum* 6: 281-593.

Stalked barnacles (BarSta)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Hexanauplia
Order:	Lepadiformes
Suborder:	-
Family:	Various
Genus:	'Stalked barnacles'
Species:	-
Common name:	Stalked barnacles







Diverse group of barnacles, most commonly encountered attached to floating objects ('Goose barnacles'), but in benthic habitats also often found attached to rocks, crustaceans, corals, hydroids, polychaete tubes, etc. Filter-feeding appendages project from laterally-flattened body, which is enclosed in shiny shell plates (plates rarely reduced or even absent in ectoparasitic species). Body characteristically borne on flexible stalk attached to substratum. Stalk may be short or long, and either bare, or armoured with small plates.

#### Colour

Usually white.

**Size** Typically 2-50 mm tall.

#### Distribution

Entire region, surface to abyssal depths.

## **Similar species**

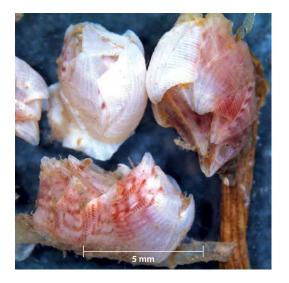
The two species shown (*Verum porcellanum*, left, and *Poecilasma kaempferi*, right) both attach to crabs and are fairly well known, but many other species occur in the region, most of them known only from one or a few specimens.

#### References

Biccard A. 2012. *Taxonomy, systematics and biogeography of South African Cirrepedia (Thoracica)*. MSc Thesis, University of Cape Town.

Biccard A and Griffiths CL. 2016. Additions to the barnacle (Crustacea: Cirripedia) fauna of South Africa. *African Zoology* 51(2): 99-116.

Sessile barnacles (BarSes)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Hexanauplia
Order:	Sessilia
Suborder:	-
Family:	Various
Genus:	'Sessile barnacles'
Species:	-
Common name:	Sessile barnacles



Diverse and familiar group of 'typical' barnacles, with body completely enclosed in a conical ring of four to eight shell plates. Live permanently attached to rocks, corals, sponges and other benthic substrata (no stalk). Filter-feed using setose appendages projecting from an opening at distal end of shell.

## Colour

Usually white to pink.

## Size

Typically 2-50 mm tall.

#### Distribution

Entire region, surface to abyssal depths.

## **Similar species**

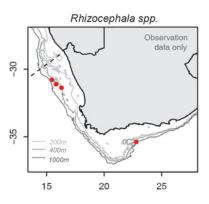
Stalked barnacles (previous page), but sessile barnacles are not elevated off the substratum on a fleshy stalk. Several species of sessile barnacles occur in deeper benthic samples, either attached to rocks, shells, crabs, etc., or embedded in sponges or in the tissue of gorgonians or corals. Little is known about these species and specimens are rare and valuable.

## References

Biccard A. 2012. *Taxonomy, systematics and biogeography of South African Cirrepedia (Thoracica)*. MSc Thesis, University of Cape Town.

Biccard A and Griffiths CL. 2016. Additions to the barnacle (Crustacea: Cirripedia) fauna of South Africa. *African Zoology* 51(2): 99-116.

Parasitic barnacles (BarPar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Hexanauplia
Order:	Rhizocephala (Superorder)
Suborder:	-
Family:	Various
Genus:	'Parasitic barnacles'
Species:	-
Common name:	Parasitic barnacles





Bizarre group of barnacles that parasitise and castrate various species of decapod crustaceans. Body has lost all resemblance to 'normal' barnacle and consists of a root-like 'interna' penetrating host's body and an 'externa', a bulb-like reproductive body projecting from abdomen or thorax of host. In different species the externa can be a single grape-like structure, or comprise multiple lobes (as shown here on the hermit crab *Parapagurus bouvieri*) or 'clubs'. Most species are host-specific.

#### Colour

Usually white or transparent.

#### Size

Externa typically 5-20 mm across.

#### Distribution

Whole region, on various crustacean hosts.

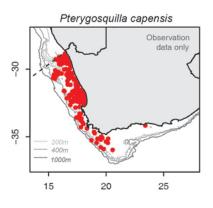
#### **Similar species**

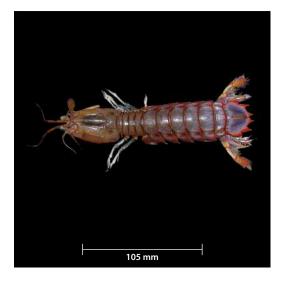
Only six species recorded from South Africa, three of them still to be described and most known only from a single specimen, so without doubt many other species await discovery.

## References

Walker G. 2001. Introduction to the Rhizocephala (Crustacea: Cirripedia). *Journal of Morphology* 249: 1-8.

Pterygosquilla capensis (Mantis)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Stomatopoda
Suborder:	Unipeltata
Family:	Squillidae
Genus:	Pterygosquilla
Species:	capensis
Common name:	Cape mantis shrimp







Easily recognised by enlarged spearing raptorial claw, which has six to eight teeth and a sharp dactyl. Carapace with central saddle, telson with central keel and six large marginal teeth. The only abundant offshore benthic stomatopod on the West Coast, although several other species are found on the South and East Coasts. Can occur in high densities.

## Colour

Mostly pale yellow to brown, but can have blue colouration with red and yellow trim in tail portion.

## Size

Up to 180 mm in length, but usually smaller.

## Distribution

Widespread species. Namibia to southern KwaZulu-Natal.



## **Similar species**

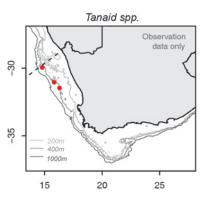
None on West Coast, several on South and East Coasts.

## References

Abelló P and Macpherson E. 1990. Influence of environmental conditions on the distribution of *Pterygosquilla armata capensis* (Crustacea: Stomatopoda) off Namibia. *South African Journal of Marine Science* 9(1): 169-175.

Griffiths CL and Blaine MJ. 1988. Distribution, population structure and biology of stomatopod Crustacea off the west coast of South Africa. *South African Journal of Marine Science* 7(1): 45-50.

Tanaids (Tanaid)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Tanaidacea
Suborder:	-
Family:	Various
Genus:	'Tanaids'
Species:	-
Common name:	Tanaids







Small, cylindrical crustaceans with unstalked eyes. First two thoracic segments fused to head and covered with short carapace, the other six segments remaining separated. First pair of legs bear <u>distinctive strong claws</u>. Filamentous uropods project beyond back end of body. About 20 species occur in region.

## Colour

Usually white.

## Size

Can reach 20 mm (as *Carpapseudes austroafricanus,* depicted), but normally much smaller.

## Distribution

Widespread, in most habitats, especially among sponges, ascidians, etc.



## **Similar species**

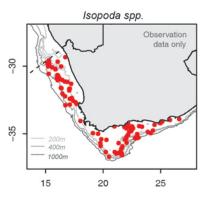
Can be confused with isopods and amphipods, but differ in form of claws, uropods and in that the carapace covers first thoracic segments (these being separated in other groups).

## References

No guide to offshore benthic species, but for coastal forms see:

Day JH. 1969. A Guide to Marine Life on South African Shores. AA Balkema, Cape Town, pp. 92-93 (300pp.).

<i>Isopods</i> (Isopod)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Isopoda
Suborder:	-
Family:	Various
Genus:	'Isopods'
Species:	-
Common name:	lsopods





Smallish crustaceans, usually with dorso-ventrally flattened bodies, rarely tubular in shape. Two pairs of antennae of very variable length, one pair of unstalked eyes (often large), seven thoracic segments, each with a pair of pereopods (rarely clawed). Over 300 species in the region, with diverse shapes and habits. Some occur as external or as gill and mouth parasites of fish.

#### Colour

Variable, most commonly whitish or brown.

#### Size

Up to 50 mm, but usually smaller (typically 5-20 mm).



## Distribution

Widespread in all habitats.

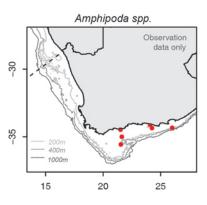
## **Similar species**

Potentially confused with amphipods, which are characteristically laterally flattened.

#### Reference

Kensley B. 1978. *Guide to the Marine Isopods of Southern Africa*. Trustees of the South African Museum, Cape Town, 173pp.

Amphipods (Amph)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Amphipoda
Suborder:	-
Family:	Various
Genus:	'Amphipods'
Species:	-
Common name:	Amphipods





Diverse group of small crustaceans, most easily recognised by their laterally compressed bodies. Also characterised by having two pairs of antennae, unstalked eyes, prominent side plates and seven pairs of pereopods, the first two often modified to form conspicuous 'claws'. Over 300 species occur in the region, occupying almost all habitats and with diverse feeding habits. Abundant in sediments (e.g. *Ampelisca* spp. left), and on reefs, where commonly associated with sponges, seaweeds, ascidians, etc. (e.g. *Amaryllis macropthalma*, right).

#### Colour

Variable, most often white, but some brightly coloured. Specimens from trawls usually less colourful.



#### Size

Small, most species 5-20 mm.

## Distribution

Ubiquitous, from shore to deep ocean in all habitats.

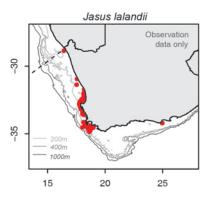
#### **Similar species**

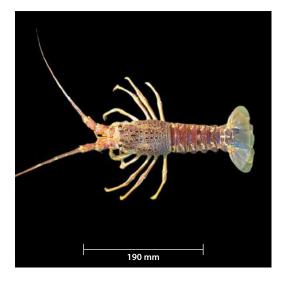
Potentially confused with isopods, which are characterisally dorso-ventrally flattened.

#### Reference

Griffiths CL. 1976. *Guide to the Benthic Marine Amphipods of Southern Africa*. Trustees of the South African Museum, Cape Town, 106pp.

Jasus lalandii (JasLal)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Palinuridae
Genus:	Jasus
Species:	lalandii
Common name:	West Coast rock lobster





Carapace with flattened squamous (scale-like) tubercles of various sizes, each pointed with a fringe of setae around the base. Two large spines and a small central rostrum between the eyes. Abdominal segments fringed with setae, the penultimate transverse row better developed than the others, so that a more or less conspicuous groove is formed between it and the hindmost row. Phyllosoma larva transparent and free floating, with flat, leaflike body and long spindly legs.

#### Colour

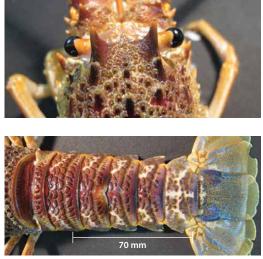
Reddish brown, often with purplish or violet tints, especially on tail fan, under surface dull yellow, flagellum of antennae often with pale bands.

## Size

Maximum total body length 460 mm, carapace length up to 180 mm.

#### Distribution

Southern African endemic. Restricted to southern Africa from Northern Namibia to Algoa Bay.



#### **Similar species**

*Palinurus gilchristi* has banded orange-and-white legs and overall is more orange in colour than *J. lalandii.* 

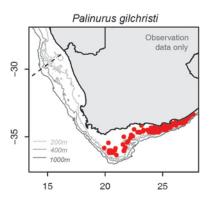
#### References

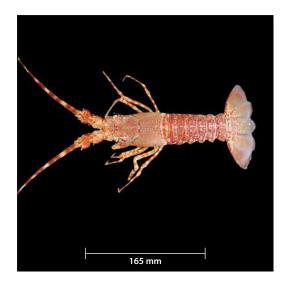
Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 407-415.

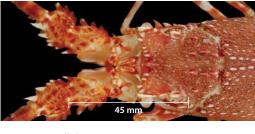
Heydorn AEF. 1969. The rock lobster of the South African west coast *Jasus lalandii* (H. Milne-Edwards). 2. Population studies, behaviour, reproduction, moulting, growth and migration. *Investigational Report Division of Sea Fisheries South Africa* 71: 1-52.

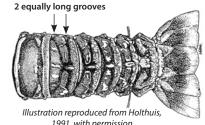
Holthuis LB. 1991. FAO Species Catalogue Vol. 13 Marine Lobsters of the World. An Annotated and Illustrated Catalogue of Species of Interest to Fisheries Known to Date. Food and Agriculture Organization of the United Nations, Rome, 1991.

Palinurus gilchristi (PalGil)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Palinuridae
Genus:	Palinurus
Species:	gilchristi
Common name:	South Coast rock lobster









## 1991, with permission

## **Distinguishing features**

Colour orange with white bands on legs and antennnae. Frontal margin of carapace with 4-6 teeth, outer dorsal processes far apart, splayed outward. Abdominal segments 2-5 with <u>two</u> <u>equally long, deep, hairy grooves</u> on either side of the median keel. The median keel connects the anterior and posterior transverse grooves forming an H-shaped sculpturing.

## Colour

Orange or reddish, banded with yellow white on abdomen, antennae and legs, pale marks on abdomen mostly at sides and oblique.

#### Size

Between 150-310 mm in length.

#### Distribution

South African endemic. South Coast of South Africa.

#### **Similar species**

*P. delagoae*, which has larger frontal horns, but fewer spines on anterior carapace. Longitudinal groove absent on abdominal segment in *P. delagoae* (next page).

#### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 445-450.

Groeneveld JC. 1997. Growth of spiny lobster *Palinurus gilchristi* (Decapoda: Palinuridae) off South Africa. *South African Journal of Marine Science* 18 (1): 19-29.

Holthuis LB. 1991. FAO Species Catalogue Vol. 13 Marine Lobsters of the World. An Annotated and Illustrated Catalogue of Species of Interest to Fisheries Known to Date. Food and Agriculture Organization of the United Nations, Rome, 1991.

Pollock DE and Augustyn CJ. 1982. Biology of the rock lobster *Palinurus gilchristi* with notes on the South African fishery. *Fisheries Bulletin South Africa* 16: 57-73.

Palinurus delagoae (PalDel)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Palinuridae
Genus:	Palinurus
Species:	delagoae
Common name:	Natal spiny/Deep-sea lobster

Not yet recorded during demersal surveys, but known to occur in the region.



## **Distinguishing features**

Reddish-mauve colour distinctive, large frontal 'horns' on carapace widely splayed, carapace less spinose anteriorly, the groups of setae around bases of spines less well-developed, anteriorly almost obsolete. No longitudinal groove on either side of the median keel on abdominal segment 2-5. <u>Anterior</u> groove on abdominal segment 2-5 shorter and less <u>distinct</u> than posterior groove and grooves not linked. Little to no hair on abdomen.

## Colour

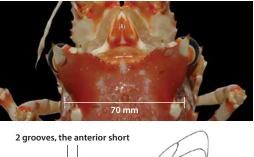
Reddish mauve with irregular ivory white patches, legs and antennae red and white banded.

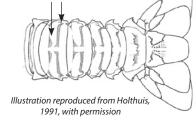
#### Size

Up to 400 mm in length.

#### Distribution

Southern African endemic. South and East coasts of South Africa, mainly caught between 100-300 m.





## **Similar species**

*P. gilchristi* which has more distinct H-shaped abdominal segment grooves.

#### References

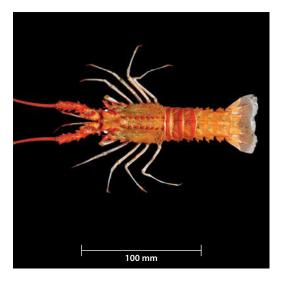
Berry PF. 1973. The biology of the spiny lobster *Palinurus delagoae* Barnard, off the coast of Natal, South Africa. *Oceanographic Research Institute, Investigational Report* 31: 1-27.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 438-445.

Holthuis LB. 1991. FAO Species Catalogue Vol. 13 Marine Lobsters of the World. An Annotated and Illustrated Catalogue of Species of Interest to Fisheries Known to Date. Food and Agriculture Organization of the United Nations, Rome, 1991.

Projasus parkeri (ProPar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Palinuridae
Genus:	Projasus
Species:	parkeri
Common name:	Cape jagged lobster





Highly distinctive, carapace smooth, except for marked submedian and lateral longitudinal series of large spines on either side. Abdomen smooth, a median keel on segments 1-5 and a few spines on segment 6.

#### Colour

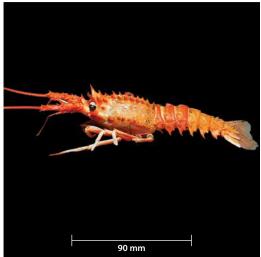
Orange or orange-red; flagella of 1<sup>st</sup> antenna, 5<sup>th</sup> and 6<sup>th</sup> joints of legs and membranous part of tail-fan pale in colour.

#### Size

Up to 150 mm in length.

#### Distribution

South Coast near East London.



#### **Similar species**

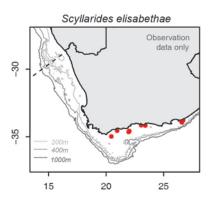
Unmistakable. Previously called Jasus parkeri.

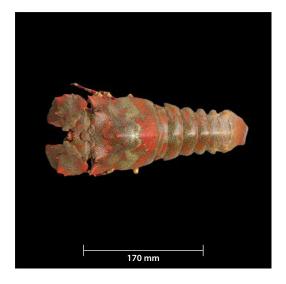
#### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 540-541.

Melville-Smith R. 1990. A first record of *Projasus parkeri* (Stebbing, 1902) (Decapoda, Palinuridae) in the Atlantic Ocean. *Crustaceana* 59(3): 314-316.

Scyllarides elisabethae (ScyLar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Scyllaridae
Genus:	Scyllarides
Species:	elisabethae
Common name:	Shovel-nosed/Slipper lobster





Unmistakable, due to flattened body and short, broad and flattened antennae (used to shovel through sediment). Pereopods distinctively banded vermillion. Antero-lateral corner of carapace sharply produced forwards.

#### Colour

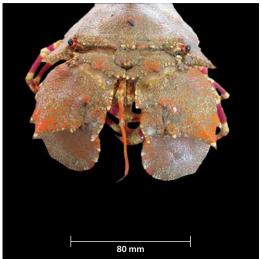
Dull brown, with a rough texture and orange pattern.

### Size

Up to 250 mm in length.

#### Distribution

South Coast, Agulhas Bank to Mozambique.



## Similar species

None in the survey region.

## References

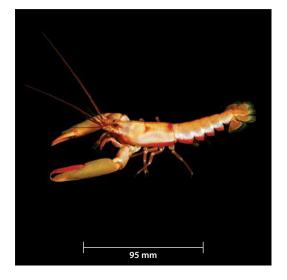
Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 562-563.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 495- 498.

Groeneveld JC, Cockcroft AC and Cruywagen GC. 1995. Relative abundances of spiny lobster *Palinurus delagoae* and slipper lobster *Scyllarides elisabethae* off the east coast of South Africa. *South African Journal of Marine Science* 16(1): 19-24.

Homarinus capensis (HomCap)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Pleocyemata
Family:	Nephropidae
Genus:	Homarinus
Species:	capensis
Common name:	Cape lobster/Pygmy lobster

Not yet recorded during demersal surveys, but known to occur in the region.





Resembles a small North Atlantic clawed lobster. Carapace smooth with slight granulation; rostrum short, dorso-ventrally flattened with five to ten small lateral serrations. First three pairs of legs with chelae, those of first pair the largest and subequal. Pereopods 2 and 3 with much smaller chelae. Abdomen elongate and straight, surface slightly pitted, uropods broadly rounded, telson as broad as long, both thickly fringed by setae.

## Colour

Reddish or reddish-yellow, laterally with longitudinal orange and white stripes.

## Size

Length up to 100 mm.

#### Distribution

Dassen Island to Eastern Cape, endemic.



## **Similar species**

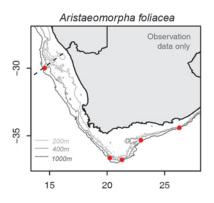
Could be confused with *Metanephrops mozambicus* and *Nephropsis* spp. (not included in this guide), but these have a strongly toothed dorsal ridge along carapace and more slender chelae, and occur in more tropical waters off KwaZulu-Natal.

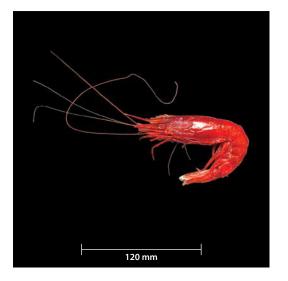
## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 526-527 (Fig 98, as *Astacus capensis*).

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 356-360.

Aristaeomorpha foliacea (ArsFol)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Aristeidae
Genus:	Aristaeomorpha
Species:	foliacea
Common name:	Giant/Royal red prawn





Carapace slightly keeled anteriorly. Females with several small teeth on long rostrum, but males with much shorter rostrum. Marked network of lateral ridges on carapace. Chelae on first and third pereopods well developed, eyestalk with tubercle, no postorbital spine.

## Colour

Deep red-orange. Carapace darker red than abdominal segments. Can be paler red in smaller individuals.

## Size

Up to 220 mm total length.

## Distribution

Southern Namibia to South Coast of South Africa – demersal species on sandy and muddy bottoms on continental slope at 300-500 m. Widespread in Atlantic and Indo-Pacific and extensively exploited.

## **Similar species**

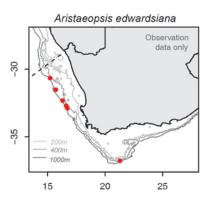
Aristeus varidens, which have three distinct dorsal teeth on rostrum (females) and no teeth on ventral margin.

#### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 6-8.

Papaconstantinou C and Kapiris K. 2003. The biology of the giant red shrimp (*Aristaeomorpha foliacea*) at an unexploited fishing ground in the Greek Ionian Sea. *Fisheries Research* 62: 37-51.

Aristaeopsis edwardsiana (Plesed)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Aristeidae
Genus:	Aristaeopsis
Species:	edwardsiana
Common name:	Scarlet shrimp





Carapace with dorsal keel extending 70% of carapace length. Rostrum elongate in females and juveniles, shorter in males, with three dorsal and no ventral teeth. Distinct keels on sides of carapace. Abdominal segments dorsally keeled. Pleopods remarkably elongate; first three pairs exceeding length of walking legs.

## Colour

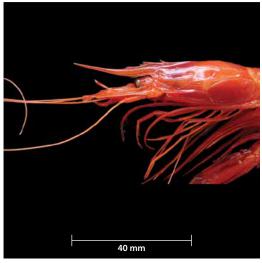
Variable, ranging from deep crimson to orange.

#### Size

Up to 230 mm total length.

#### Distribution

Throughout southern Africa and widespread in Atlantic and Indo-Pacific.



#### **Similar species**

None.

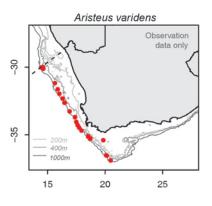
#### References

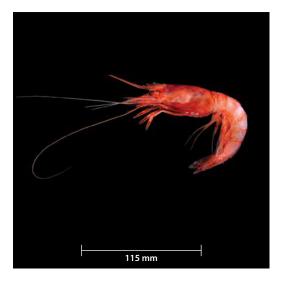
Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 624-625 (as *Plesiopenaeus edwardsianus*).

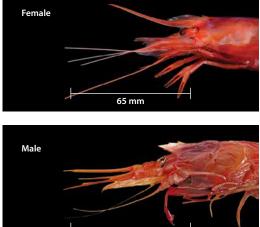
Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 9-12.

Ganga U, Rajool Shanis CP, Manjebrayakath H and Akhilesh KV. 2012. Account on the deepsea shrimp *Aristaeopsis edwardsiana* (Johnson, 1867) from the Indian EEZ. *Indian Journal of Fisheries* 59(1): 29-31.

Aristeus varidens (ArsVar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Aristeidae
Genus:	Aristeus
Species:	varidens
Common name:	Striped red prawn







Males and females have different rostrums. Males have a smaller and shorter rostrum and can have a small 4<sup>th</sup> tooth. Females have three distinct teeth on dorsal edge near base of rostrum, with a smooth long rostral spine (can curve upwards) and no teeth on ventral margin of spine. Carapace slightly keeled.

#### Colour

Deep red-orange ranging to paler pink in colour in smaller individuals (100 mm).

#### Size

Total length up to 200 mm in females and 120 mm in males.

#### Distribution

West Coast of South Africa and Namibia. Adults at 400–600 m depth, young at 300 m depth on muddy bottoms. Caught mostly at night, suggesting they burrow into substratum by day.

#### **Similar species**

Aristaeomorpha foliacea, which have teeth on ventral edge of rostrum spine and base of rostrum is more 'leaf-shaped'.

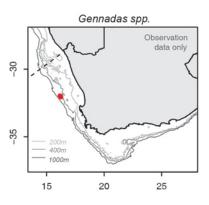
40 mm

#### References

Bianchi G, Carpenter KE, Roux J-P, Molloy FJ, Boyer D and Boyer HJ. 1999. *FAO species identification field guide for fishery purposes. Field guide to the living marine resources of Namibia* ISSN 1020-6868. Norwegian Agency for International Development, Food and Agriculture Organization of the United Nations, Rome.

Burukovskii RN. 1978. Biology of the shrimp Aristeus varidens. Soviet Journal of Marine Biology 4: 690-697.

Gennadas spp. (Gennad)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Benthesicymidae
Genus:	Gennadas
Species:	spp.
Common name:	Small single-spine shrimp





Deep red in colour, legs especially dark red; black markings on the ventral edge of the abdomen where the pleopods attach. Pale uropods. Carapace with crest anteriorly, extending forward into a short spine-like rostrum.

#### Colour

Deep red to black in parts.

## Size

Total length ± 50 mm, carapace 15 mm.

#### Distribution

West Coast of South Africa.



#### **Similar species**

Thirteen closely related species occur in southern African waters.

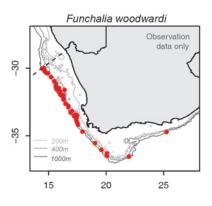
## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 628-634.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 20-23.

Kensley B. 1978. *Shrimps and Prawns of Southern Africa*. South African Museum, Cape Town. p. 12. (65pp.).

Funchalia woodwardi (FunWoo)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Penaeidae
Genus:	Funchalia
Species:	woodwardi
Common name:	Woodward's large pink prawn





Carapace with branching lateral keels. Rostrum short, flattened and compact, reaching just past the eye, with 11 dorsal teeth, no ventral teeth, but many fine hairs on ventral surface. Mandibles with elongate scythe-like incisor processes. Pereopods short. Ovaries with unspawned eggs visible through carapace when present.

## Colour

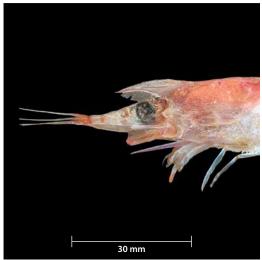
Pale pink to white, with distinct red to pink bands across tail. Thorax often has darker pink/purple colouration where internal organs are visible.

## Size

Up to 170 mm in length.

#### Distribution

West and South Coasts of South Africa and Namibia. Pelagic species, occurring at depths below 550 m.



## **Similar species**

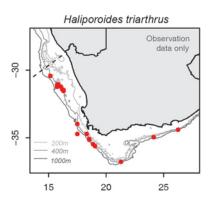
Hymenopenaeus triarthrus, which has a much more pronounced, enlarged leaf-shaped rostrum.

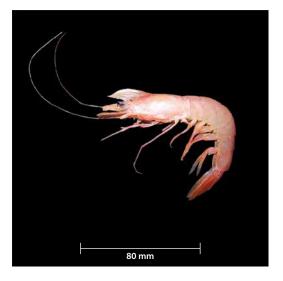
#### References

Bianchi G, Carpenter KE, Roux J-P, Molloy FJ, Boyer D and Boyer HJ. 1999. *FAO species identification field guide for fishery purposes. Field guide to the living marine resources of Namibia* ISSN 1020-6868. Norwegian Agency for International Development, Food and Agriculture Organization of the United Nations, Rome.

Miller DGM, Augustyn CJ and Hampton I. 1983. An unusual record of the prawn *Funchalia woodwardi* Johnson (Crustacea: Decapoda), *South African Journal of Marine Science* 1(1), pp.175-180.

Haliporoides triarthrus (HalTri)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Solenoceridae
Genus:	Haliporoides
Species:	triarthrus
Common name:	Serrated leaf rostrum prawn





Easily recognised by large, flattened, curved and serrated leaf-like rostrum with 10 spines on dorsal edge and two spines on ventral edge, no post-rostral keel. Both flagella of antenna 1 much longer than length of animal. Flagellum of antenna 2 also very long. Fourth to sixth abdominal segments keeled, each keel ending in a short spine.

## Colour

Pale pink.

## Size

Up to 150 mm in length.

#### Distribution

West and South Coasts of South Africa.



## **Similar species**

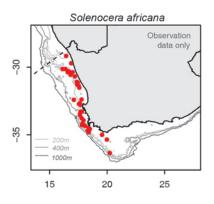
None.

## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 619-621.

Robey J, Fennessy ST, Everatt Bl and Santos J. 2013. Patterns in abundance, population structure and biology of knife prawn *Haliporoides triarthrus* on deep-water trawl grounds off eastern South Africa. *African Journal of Marine Science* 35(4): 565-577.

Solenocera africana (SolAfr)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Solenoceridae
Genus:	Solenocera
Species:	africana
Common name:	African mud shrimp Orange-back prawn







Carapace with marked orbital and postorbital spine (just behind eye) and long cervical groove on side. Rostrum short, with seven dorsal spines, none below. <u>Antennal flagella united to form a respiratory tube</u>. Distinguished by <u>bright orange colour along dorsal</u> <u>thorax and tail</u>. Immature individuals between 50-100 m and adults occur in depths of 300 m or more. On sandy and muddy seabeds. Mainly active at night; feed on polycheates, small crustaceans and molluscs.

## Colour

Golden orange with brighter band along dorsal edge; can also be paler in colour.

## Size

Up to 140 mm total length.

#### Distribution

West Coast of South Africa through to KwaZulu-Natal, 50-450 m, in sand and mud seabeds.

## **Similar species**

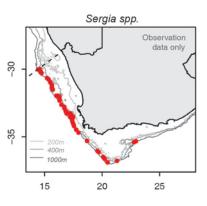
One of six species from this genus in the region.

#### References

Bianchi G, Carpenter KE, Roux J-P, Molloy FJ, Boyer D and Boyer HJ. 1999. *FAO species identification field guide for fishery purposes. Field guide to the living marine resources of Namibia* ISSN 1020-6868. Norwegian Agency for International Development, Food and Agriculture Organization of the United Nations, Rome.

Kensley B. 2006. Pelagic shrimp (Crustacea: Decapoda) from shelf and oceanic waters in the southeastern Atlantic Ocean off South Africa. *Proceedings of the Biological Society of Washington* 119(3): 384-394.

Sergia spp. (Srgia)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Suborder:	Dendrobranchiata
Family:	Sergestidae
Genus:	Sergia
Species:	spp.
Common name:	Scarlet prawn





Rostrum much reduced, upturned and short, not even reaching eyestalks, with tiny posterior spine. First abdominal segment overlaps second. Ventrally flattened. Anterior part of carapace not elongated beyond insertion of mouth appendages. First pair of pereopods not chelate, second and third pereopods with minute chelae.

## Colour

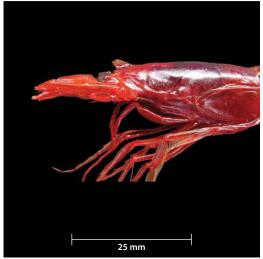
Dark red, with carapace deepening in red to black.

#### Size

Up to 125 mm length.

#### Distribution

Predominantly West Coast, but can occur along South Coast of South Africa.



## **Similar species**

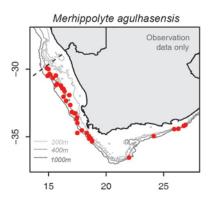
One of some 18 similar species occurring in the region.

#### References

Bianchi G, Carpenter KE, Roux J-P, Molloy FJ, Boyer D and Boyer HJ. 1999. *FAO species identification field guide for fishery purposes. Field guide to the living marine resources of Namibia* ISSN 1020-6868. Norwegian Agency for International Development, Food and Agriculture Organization of the United Nations, Rome.

Vereshchaka AL, Olesen J and Lunina AA. 2014. Global diversity and phylogeny of pelagic shrimps of the former genera *Sergestes* and *Sergia* (Crustacea, Dendrobranchiata, Sergestidae), with definition of eight new genera. *PloS ONE* 9(11): e112057.

Merhippolyte agulhasensis (MerAgu)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Hippolytidae
Genus:	Merhippolyte
Species:	agulhasensis
Common name:	Banded-leg red shrimp





Rostrum distinctly serrated on the ventral edge and curves sharply upwards. Five rostral teeth dorsally and five evenly-spaced teeth below. <u>Characteristic red-and-white banded pereopods</u>.

## Colour

Red bands across tail, red-and-white legs, green eggs in females. Male rostrum's colour changes from white to red.

#### Size

Male up to 85 mm, female up to 70 mm body length.

## Distribution

West and South Coasts of South Africa.



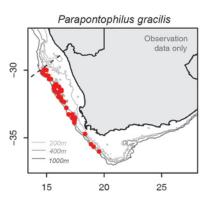
## **Similar species**

*M. calmani* has only three dorsal teeth on rostrum and ventral teeth grouped at base of rostrum.

## Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 690-692.

Parapontophilus gracilis (ParaGG)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Crangonidae
Genus:	Parapontophilus
Species:	gracilis
Common name:	Orange striped tail/Golden-eye shrimp





Very small species. Rostrum with short spine not reaching beyond eye, two spines along dorsal margin. Eye glows golden in light. Two spines laterally along carapace. Tail appears banded with mottled pattern. Second pereopod has modified cheliped with expanded hand, palm with strong spine at base. Third pereopod small and slender, remaining pereopods much longer.

#### Colour

Orange-and-white banded, ventral side appears whitish, dorsally orange, with golden eyes.

## Size

Average 46-50 mm body length.

#### Distribution

Global distribution, including West Coast of South Africa.



## **Similar species**

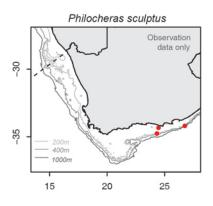
None.

## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 806-808 (as *Pontophilus gracilis*).

Komai T. 2008. A world-wide review of species of the deep-water crangonid genus *Parapontophilus* Christoffersen, 1988 (Crustacea, Decapoda, Caridea), with descriptions of ten new species. *Zoosystema* 30(2): 261-332.

Philocheras sculptus (PonAff)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Crangonidae
Genus:	Philocheras
Species:	sculptus
Common name:	Sculpted prawn





Carapace with median keel bearing four forwarddirected teeth and several smaller keels on lateral margins. Rostrum curved downwards and apically divided into two points when viewed from above. Abdominal segments with dorsal ridges.

## Colour

Mottled brown and blue when alive, becoming red when preserved.

#### Size

Small, body length up to 20 mm.

#### Distribution

South Coast, Algoa Bay to East Coast, Durban.



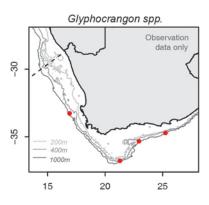
## **Similar species**

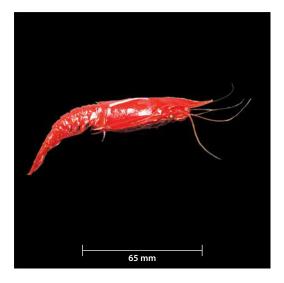
None.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 810-811 (as *Pontophilus sculptus*).

Glyphocrangon spp. (Glypho)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Glyphocrangonidae
Genus:	Glyphocrangon
Species:	spp.
Common name:	Armoured shrimps





Robust, rigidly calcified and armoured shrimps of which 10 regional species are described. Rostrum well-developed, dorsally flattened, with upturned tip, laterally spinose, proportionately longer in young than in adult. Carapace strongly sculptured with longitudinal ridges and keel. Abdomen usually sculptured, the segments firmly interlocked. Telson strong, spine-like and pointed, quadrangular in cross section. Eyestalks short, eyes large.

## Colour

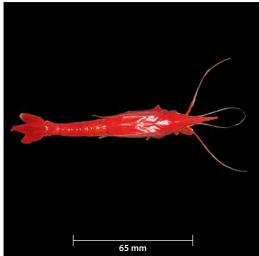
Red.

## Size

Large; body length up to 110 mm.

#### Distribution

Widespread distribution, including the West and South Coasts of South Africa. Tropical *Glyphocrangon* spp. occur in northern KwaZulu-Natal.



## **Similar species**

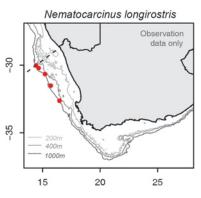
None.

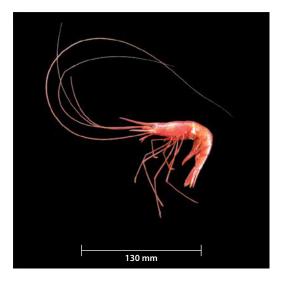
## References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 334-340.

Komai T. 2010. A new species of the deep-sea shrimp genus *Glyphocrangon* A. Milne-Edwards (Crustacea: Decapoda: Caridea: Glyphocrangonidae) from the southeastern Atlantic off southern Africa. *African Natural History* 6: 83-90.

Nematocarcinus longirostris (NemLon)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Nematocarcinidae
Genus:	Nematocarcinus
Species:	longirostris
Common name:	Long-rostrum prawn





Rostrum thin, lance-like, longer than rest of carapace, dorsally with many small spines, ventrally with four to six distal spines, setose proximally. Lateral keel extending along  $\pm$  half of carapace. Antennae very long. Third to sixth pereopods extremely long, chelate and with fine hairs at tips. Telson with two distinct spines on end and several small dorso-lateral spinules.

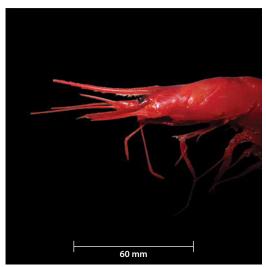
#### Colour

Deep red.

Size Body length up to 130 mm.

#### Distribution

West Coast (> 400 m) of South Africa.



## **Similar species**

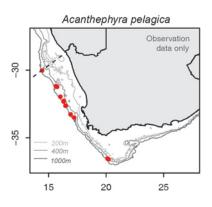
Similar to *Nematocarcinus sigmoideus* and there is controversy as to which is the correct name for the South African population. Emmerson (2016) lists *N. longirostris* as a synonym under *N. symoideus* (p. 185), but indicates in his text (p. 182) that both species may occur in South African waters.

#### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 671-674.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 185-187; listed as a synonym of *N. sigmoideus.* 

Acanthephyra pelagica (AcaPel)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Acanthephyridae
Genus:	Acanthephyra
Species:	pelagica
Common name:	Red pelagic prawn





Rostrum more than half the length of carapace; seven to nine distinct spines on dorsal margins and five spines on ventral margins. <u>Between 7-11 pairs of lateral spines on telson</u>. Abdominal segments with dorsal keel and posterior spine on segments 3 to 6. No keels present on carapace.

#### Colour

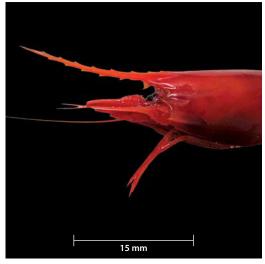
Deep red.

#### Size

Up to 25 mm carapace length (excluding rostrum). Pleon (abdomen)  $\pm$  60 mm length.

#### Distribution

West and South Coasts (> 400 m) of South Africa.



## **Similar species**

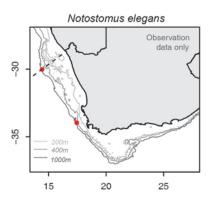
*Oplophorus novaezeelandiae*, but *A. pelagica* has distinct spines on lateral edge of telson. South African specimens may be *A. sica* (see Emmerson 2016, Vol 1, p. 146).

#### References

Burukovsky RN and Andreeva VM. 2010. On the biology of *Acanthephyra pelagica* (Decapoda: Natantia: Oplophoridae) of the North Atlantic subtropical convergence zone. *Journal of Siberian Federal University* 3:303-321.

Kensley B. 1978. *Shrimps and Prawns of Southern Africa*. South African Museum, Cape Town, 38pp.

Notostomus elegans (NotWes)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Acanthephyridae
Genus:	Notostomus
Species:	elegans
Common name:	Dark red double-keeled prawn





Cephalothorax expanded, rostrum curved, strongly serrated on both dorsal and ventral margins, serrations extending along front part of carapace. Distinct lateral carapace keels running along length of carapace. Abdominal segments 3 to 6 with distinct dorsal keels terminating in sharp posterior teeth.

#### Colour

Dark red to black.

#### Size

60–80 mm total length.

#### Distribution

West Coast (> 400 m) of South Africa.



## **Similar species**

Acanthephyra pelagica and Oplophorus novaezeelandiae, but distinguished by expanded cephalothorax, many teeth on rostum and lateral ridges on carapace.

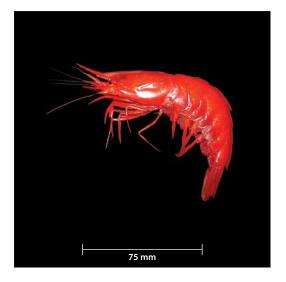
#### References

Kensley B. 1978. *Shrimps and Prawns of Southern Africa*. South African Museum, Cape Town. 38pp. (as *N. westergreni*).

Retamal M and Ulloa P. 2015. A new record of *Notostomus elegans* Milne Edwards, 3883 in Chilean waters (Decapoda, Pleocyemata, Oplophioridae). *Wulfenia* 22(5): 233-235.

Oplophorus novaezeelandiae (OplNov)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Oplophoridae
Genus:	Oplophorus
Species:	novaezeelandiae
Common name:	Keeled flattened red prawn





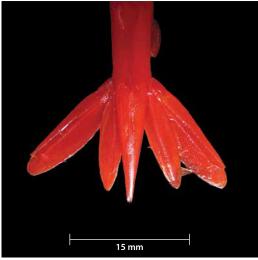
Laterally-flattened prawn with distinct spine on third abdominal segment. Rostrum approximately same length as carapace, with six dorsal spines close to the base and three to four ventral spines. No visible telson spines, but three tiny projections at tip of telson. <u>No spinose appendage</u>. Outer margin of scaphocerite (flattened appendage near mouth) smooth, no barb on inner margin. Two short lateral keels along sides of carapace below eyes.

## Colour

Deep red.

#### Size

60–100 mm total length.



#### Distribution

West Coast (> 400 m) of South Africa.

## **Similar species**

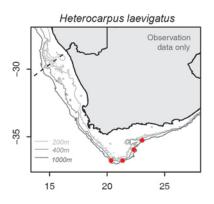
Acanthephyra pelagica, but O. novaezeelandiae does not have lateral spines on telson.

#### References

Burokovsky RN. 2011. Pelagic shrimps of Namibia. *Zoologichesky Zhurnal* 90(4): 412-419.

Kensley B. 1978. *Shrimps and Prawns of Southern Africa*. South African Museum, Cape Town: 38pp.

Heterocarpus laevigatus (HetLae)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Pandalidae
Genus:	Heterocarpus
Species:	laevigatus
Common name:	Smooth nylon shrimp





Distinctive appearance with swollen cephalothorax, marked dorsal keel cut into about five teeth, plus two marked lateral keels, the lower produced into a sharp spine anteriorly. Carapace pitted. Rostrum elongate and curved strongly upwards, one tooth at the base above eye, rest of dorsal margin smooth, ventral margin with 10 teeth. Abdominal segments not keeled.

## Colour

Orange-red.

Size 110-130 mm total length.

#### Distribution

South and West Coasts of South Africa, widespread in Indo-Pacific and off West Africa and Brazil.

## **Similar species**

None.

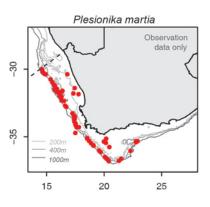
## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 684.

Dailey MD and Ralston S. 1986. Aspects of the reproductive biology, spatial distribution, growth, and mortality of the deepwater caridean shrimp, *Heterocarpus laevigatus* in Hawaii. *Fishery Bulletin* 84 (4): 915-925.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 315- 319.

Plesionika martia (PleMar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Pandalidae
Genus:	Plesionika
Species:	martia
Common name:	Common golden shrimp





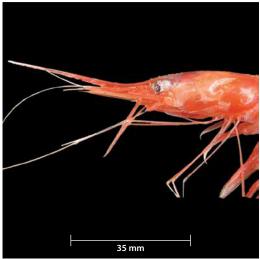
Very long, straight rostrum with dorsal rostral teeth only near base of rostrum, no teeth on ventral margin. Most commonly caught prawn species on West Coast.

### Colour

Orange to pink in colour.

## Size

Average 80–100 mm total length.



### Distribution

West and South Coasts of South Africa.

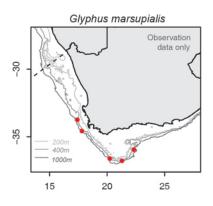
## **Similar species**

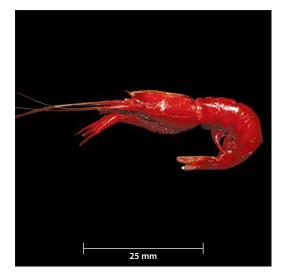
One of 14 species from this genus in the region, these being distinguished mostly by numbers and arrangement of teeth on rostrum.

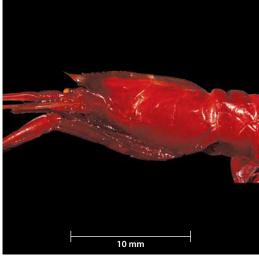
## Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837, pp. 679-681.

Glyphus marsupialis (GlyMar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Pasiphaeidae
Genus:	Glyphus
Species:	marsupialis
Common name:	Kangaroo shrimp







Large red shrimp. Carapace with dorsal ridge terminating in a short triangular rostrum. Two pairs of scissor-like chelae with fingers bearing numerous sharp, toothlike scales. Abdomen of female swollen (hence common name). Known to bioluminesce. Carnivorous.

## Colour

Dark red.

## Size

Up to 160 mm total length.

## Distribution

West and South Coasts of South Africa. Widely distributed in Pacific, Indian and (less so) Atlantic Oceans, benthic on sandy seabeds at 500-1100 m.

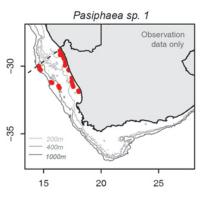
## **Similar species**

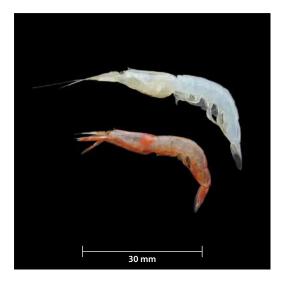
None.

## References

Not detailed in any previous regional guide, but listed (from Namibia) by: Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 3, p. 425.

Pasiphaea sp. 1 (Pasiph)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Pasiphaeidae
Genus:	Pasiphaea
Species:	sp. 1
Common name:	Glass shrimp





Small, translucent shrimp with orange trim along dorsal and ventral carapace varying in coverage, telson, antennae and tips of chelipeds. First and second pair of pereopods chelate.

### Colour

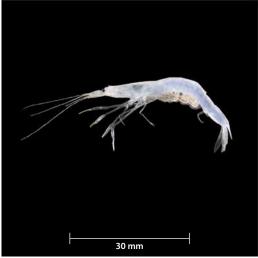
Translucent to white, with orange colouration on edges of claws, tail and carapace, which can cover much of the body.

## Size

Up to 90 mm body length, but usually smaller (30 mm).

### Distribution

West and South Coasts of South Africa.



### **Similar species**

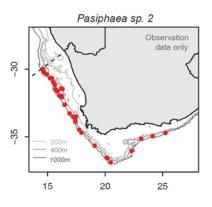
There are nine species of this genus reported from southern African waters. All are delicate shrimps with rostrum reduced or absent and first two pairs of pereopods chelate, with characteristic comb-like hairs on finger.

### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 648-650.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 132-140.

Pasiphaea sp. 2 (Pasip2)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Caridea
Family:	Pasiphaeidae
Genus:	Pasiphaea
Species:	sp. 2
Common name:	Ventrally flattened shrimp





Ventrally flattened, very short triangle rostrum with tiny dorsal spine. Large, well-developed fine chelae on first and second pereopods. Abdominal segment two overlaps with segment one. Considerably larger and more ventrally flattened than *Pasiphaea* sp. 1.

## Colour

Often red thorax with white tail. Can have orangered colouration around edges, or be completely white, or completely red to orange.

#### Size

Average 160 mm total length including rostrum.

#### Distribution

West and South Coasts of South Africa.



## **Similar species**

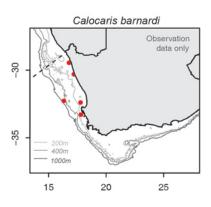
There are nine species of this genus reported from Southern African waters. All are delicate shrimps with rostrum reduced or absent and first two pairs of pereopods chelate, with characteristic comb-like hairs on finger. Larger and more ventrally flattened than *Pasiphaea* sp. 1.

#### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 648-650.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, pp. 132-140.

Calocaris barnardi (SnapSh)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Axiidea
Family:	Axiidae
Genus:	Calocaris
Species:	barnardi
Common name:	Snapper shrimp





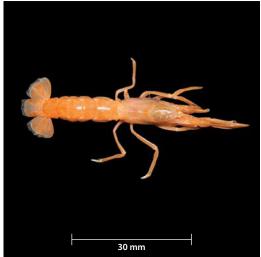
Resembles a sand-prawn in overall appearance. Carapace with short, horizontal, pointed rostrum lacking marginal teeth distally, but with lateral edges upturned, and with untoothed medial keel. Rostrum at base with four teeth on either side. First two pairs of pereopods chelate, the first pair much larger and more robust. Abdomen elongate and lacking ornamentation; exopod of uropod with keel. Telson longer than broad, strongly setose (with bristles) along margin, apex broadly rounded.

## Colour

Bright to pale orange.

#### Size

Average 80 mm total length, including claw.



#### Distribution

Namibia to West Coast of South Africa.

# Similar species

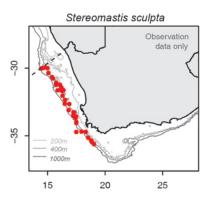
None.

## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 501-503.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, p. 382.

Stereomastis sculpta (SteScu)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Polychelida
Family:	Polychelidae
Genus:	Stereomastis
Species:	sculpta
Common name:	Deep-sea blind lobster/Sea cockroach





Unusual, heavily sculptured, blind, widespread deepsea crustacean. Carapace with median keel, lateral keels and transverse median ridge, all produced into sharp spines. Abdominal segments 1 to 5 with keels forming large forwardly-directed spines, increasing in size from first to fourth segment. Slender, elongate claws held forwards.

## Colour

Mostly pink with darker patches on telson, but can also be nearly all white with red patches on telson and parapodia tips.

## Size

Up to 130 mm body length.

#### Distribution

Predominantly West Coast of South Africa.



## **Similar species**

*Polycheles typhlops* has similar body shape, but is orange red and lacks spines on medial keel of carapace.

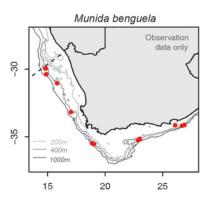
#### References

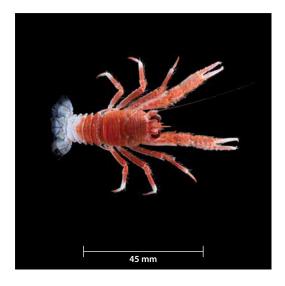
Abelló P and Cartes JE. 1992. Population characteristics of the deep-sea lobsters *Polycheles typhlops* and *Stereomastis sculpta* (Decapoda: Polychelidae) in a bathyal mud community of the Mediterranean Sea. *Marine Biology* 114(1): 109-117.

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 501-503.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, 382pp.

Munida benguela (Muninc)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Munididae
Genus:	Munida
Species:	benguela
Common name:	Striped squat lobster





Small lobster-type crustacean. Tail often folded underneath abdomen. Carapace and abdominal segments with transverse ridges. Distinctly striped pattern on thorax. Chelipeds (claws) as long as thorax and abdomen combined.

## Colour

Orange-and-white striped pattern, tail white.

## Size

50-60 mm in total length.

#### Distribution

Namibia to KwaZulu-Natal, South Africa.



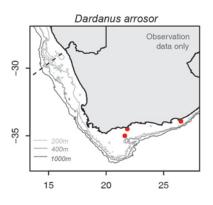
### **Similar species**

There are 12 similar species of this genus in regional waters.

## Reference

de Saint Laurent M and Macpherson E. 1988. *Munida benguela*, espèce nouvelle d'Afrique du Sud. Comparaison avec *Munida sanctipauli* Henderson, 1885 (Crustacea: Decapoda: Galatheidae). *Bulletin du Muséum National d'Histoire Naturelle*, Paris, 4, pp. 105-115.

Dardanus arrosor (PagAro)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Diogenidae
Genus:	Dardanus
Species:	arrosor
Common name:	Striated hermit crab







Unmistakable, with transverse, <u>scaly striations on</u> <u>chelae and pereopods</u>. Left cheliped larger than right one.

### Colour

Orange to brown, eyestalks orange with two red bands.

### Size

Can grow to a large shield length of 75 mm, total length 250 mm. One of the largest South African hermit crabs.

### Distribution

All along South African coasts, common on South Coast shelf region, from 30-290 m.

## **Similar species**

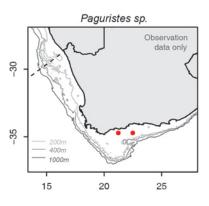
Several other species of the genus *Dardanus* known from South Africa have similarly-coloured eyestalks and same general appearance of chelipeds, but lack the <u>scaly striae</u> on surface of chelae and pereopods.

#### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 1, 382pp.

McLaughlin PA, Rahayu DL, Komai T and Chan TY. 2007. *A Catalogue of the Hermit Crabs (Paguroidea) of Taiwan*, National Taiwan Ocean University, Keelung, Taiwan, 365pp.

Paguristes sp. (PaguSp)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Diogenidae
Genus:	Paguristes
Species:	sp.
Common name:	Agulhas bank hermit







Left chela slightly larger. Chelae and pereopods with corneous tips and irregularly covered with <u>prominent</u> <u>tubercles</u>, which end in a <u>brown, corneous spine</u>. Not heavily covered with hairs.

### Colour

Orange, with green eyes. Tubercles on pereopods and chelae pinkish-white.

## Size

Up to 9 mm shield length, total length 100 mm.

## Distribution

South African endemic. Agulhas Bank, South Coast of South Africa, 87-126 m.

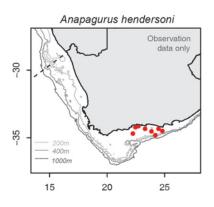
## **Similar species**

Potentially confused with other orange hermit crabs like *Sympagurus dimorphus*, but members of *Paguristes* have relatively short, similarly-sized chelipeds.

## References

Species currently being described.

Anapagurus hendersoni (AnaHen)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Paguridae
Genus:	Anapagurus
Species:	hendersoni
Common name:	Blue-lined hermit crab







Enlarged right cheliped; dorsal surface of chela with small tubercles and high, spinose ridge proximally; carpus long and with row of small spines mesially. Left cheliped very slender, palm of chela (weak) and carpus with longitudinal double row of spines dorsally. Best identifiable by <u>colouration</u>.

### Colour

Two colour morphs exist in South African waters having one of two background colourations – either cream or brownish with the same colour patterns. Shield orange to brown in both forms, corneas of eyes dark greenish to yellow-turquoise. Characteristic features are the <u>translucent blue</u> <u>longitudinal stripes</u> on the ventral margin of the propodi of the pereopods, and a <u>maroon dot</u> on the mesioventral (inner side) of each chela; the right a large dot and left a smaller dot (not visible in frontal view, sometimes less pronounced in the cream colour morph).

## Size

Up to 40 mm total length.

### Distribution

South African endemic. West Coast of South Africa to KwaZulu-Natal, 9-226 m.

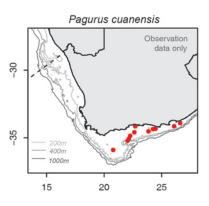
### **Similar species**

*Goreopagurus poorei*, but *A. hendersoni* has distinct colour markings (blue stripes and maroon dot).

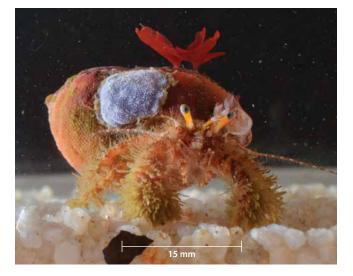
## Reference

García-Gomez J. 1994. The systematics of the genus *Anapagurus* Henderson, 1886, and a new genus for *Anapagurus drachi* Forest, 1966 (Crustacea: Decapoda: Paguridae). *Zoologische Verhandelingen* 295: 1-131.

Pagurus cuanensis (PagCua)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Paguridae
Genus:	Pagurus
Species:	cuanensis
Common name:	Hairy hermit crab







Right chela distinctively larger than left. Chelae and pereopods heavily covered with setae (hairs), usually concealing the armature. Palm of right hand with three to four rows of medium to strong spines, of which the median row is usually the strongest.

### Colour

Pereopods and chelae brown, completely covered with earth-coloured setae. Merus of chelipeds (see line diagram p. 136) reddish, sprinkled with whitish spots. Eyestalks yellow to orange. Second antennae reddish-brown with white rings. Offshore specimens duller in colour than inshore (False Bay) individuals; often in old and overgrown shells.

#### Size

Up to 8 mm shield length, total length 50 mm.

#### Distribution

Reported from Vema Seamount (Namibian West Coast), False Bay, Cape St. Blaize, Mossel Bay, Durban and KwaZulu-Natal to 130 m. Common on Agulhas Bank.

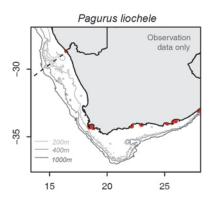
#### **Similar species**

*Pagurus liochele*, but *P. cuanensis* distinguished by strongly spined and very hairy chelae and does not have blue colouration of *P. liochele*. At least six other specimens of the genus occur in the region. *Propagurus deprofundis* occurs in greater depths.

### Reference

McLaughlin PA and Forest J. 1999. Hermit crabs of the genus *Pagurus* Fabricius (Crustacea, Decapoda, Paguridae) from south-eastern South Africa. *Annals* of the South African Museum 105: 297-344.

Pagurus liochele (PagLio)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Paguridae
Genus:	Pagurus
Species:	liochele
Common name:	Blue-faced hermit





Right chela distinctively larger than left. Palm of right hand with row of blunt spines on dorsomesial margin and surface covered with low blue tubercles. Stronger row of white-blue tubercles adjacent to cutting edge of fixed finger. <u>Colour diagnostic</u>. Specimens from South Coast trawls mostly in shells occupying cavities in an undescribed species of *Suberites* sponge (see picture).

## Colour

Eyestalks orange at base with distal half characteristically <u>cobalt-blue</u>. Dark purple chelipeds covered with cobalt-blue tubercles. Propodi of pereopods with <u>cobalt-blue ring distally</u>, dactyls with reddish longitudinal stripes. Second antennae red with white rings.

## Size

Up to 7 mm shield length, total length 40 mm.



## Distribution

Southern African endemic. Orange River to Transkei, South Africa, littoral to 110 m. Sometimes caught in inshore trawls.

## **Similar species**

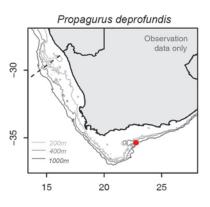
*Pagurus cuanensis*, however *P. liochele* is distinctive with blue colouration on eyestalks and propodi of walking legs. At least six other species of the genus occur in the region.

### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 169-172.

McLaughlin PA and Forest J. 1999. Hermit crabs of the genus *Pagurus* Fabricius (Crustacea, Decapoda, Paguridae) from south-eastern South Africa. *Annals* of the South African Museum 105: 297-344.

Propagurus deprofundis (ProDep)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Paguridae
Genus:	Propagurus
Species:	deprofundis
Common name:	Orange keeled hermit







Chelae uniformly orange and <u>spiny</u>, right larger than left. Palm covered with six irregular rows of spines, accompanied by long and stiff setae. Carpus with irregular row of strong spines on dorso-mesial margin. Mesial face of propodus of <u>second pereopod</u> <u>with longitudinal keel</u> (see pictures).

#### Colour

Pereopods, eyestalks and shield bright orange, corneas of eyes black. Tips of dactyls and fingers corneous and black.

#### Size

Up to 9.3 mm shield length, total length 80 mm.

#### Distribution

South Coast of South Africa. Single individuals occasionally caught in deep trawls along Agulhas Shelf. Elsewhere recorded from 200-915 m and found in variety of gastropod shells.

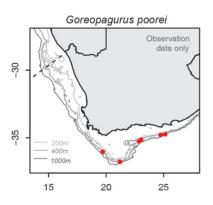
## **Similar species**

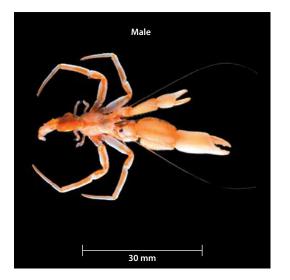
Potentially confused with the parapagurid species *Sympagurus*, *Parapagurus* and *Paragiopagurus*, which can also be orange, but longitudinal keel on second walking legs and spiny chelae of *P. deprofundis* are distinctive. *Pagurus cuanenis* occurs in shallower waters.

#### Reference

McLaughlin PA and Forest J. 1999. Hermit crabs of the genus *Pagurus* Fabricius (Crustacea, Decapoda, Paguridae) from south-eastern South Africa. *Annals* of the South African Museum 105: 297-344.

Goreopagurus poorei (Goreo)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Paguridae
Genus:	Goreopagurus
Species:	poorei
Common name:	Broad-clawed hermit crab





Immediately identifiable by very uniquely shaped, large right cheliped (even larger in males, as depicted), with carpus dorsoventrally flattened and produced to the sides, flared, with sharp spines around the inner margin. Chela long and elongated, not bearing any spines. Left cheliped slender. Eyestalks short and stout, about half the length of shield.

## Colour

General background colouration orange. Shield light orange, fading to white medially and near rostrum. Eyestalks mottled orange and white, distally white near black corneas. Chelipeds mostly orange with pale orange chela and fingers. Pereopods with weakly-defined orange stripe on lateral and mesial faces.

#### Size

Up to 60 mm in total length.

## Distribution

Along edge of Agulhas shelf, South Africa, 334-622 m.

## **Similar species**

Could be confused with *Anapagurus hendersoni*, which has a similar appearance, but *G. poorei* occurs much deeper and has a light orange colouration with black eyes. *G. poorei* co-occurs with *Propagurus deprofundis*, but is easily distinguishable from the latter by the smooth claw.

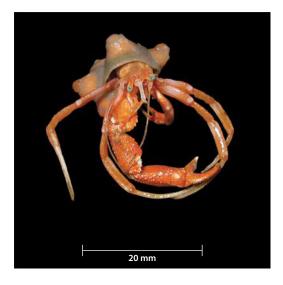
### References

Landschoff J and Lemaitre R. 2017. Crossing the Indian Ocean: a range extension for *Goreopagurus poorei* Lemaitre & McLaughlin, 2003 (Crustacea: Decapoda: Paguridae). *Zootaxa*, 4306(2): 271-278.

Lemaitre R and McLaughlin PA. 2003. New species of *Goreopagurus* (Decapoda: Anomura: Paguridae) from Tasmania and re-evaluation of sexual tubes in hermit crab systematics. *Memoirs of Museum Victoria* 60(2): 221-227.

Paragiopagurus atkinsonae (ParAtk)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Parapaguridae
Genus:	Paragiopagurus
Species:	atkinsonae
Common name:	Green-eyed hermit





Very similar to *S. dimorphus*, but smaller, with same dimorphism: large right cheliped in males, in females shorter and chela rounded to oval shape. Without any obvious distinguishing characters, but overall appearance different to *S. dimorphus*. Pereopods longer and more slender, eyes shorter. Right cheliped not very setose. Inhabits same colonial anemone as *S. dimorphus*. Not recorded from gastropod shells. <u>Distinctive colouration</u>.

#### Colour

More uniformly orange than *S. dimorphus*. Chelipeds orange, with white tubercules or spines. Segments of pereopods commonly with dorsal white spots (see arrows). <u>Eyes usually green</u> and eyestalks with orange pattern dorsally, not forming clear, continuous orange-red stripe, as in *S. dimorphus*.

#### Size

Shield length < 10 mm; total length up to 50 mm.



#### Distribution

South African endemic. Localised area on the West Coast of South Africa, not reported from South Coast. Known from depths 199-277 m.

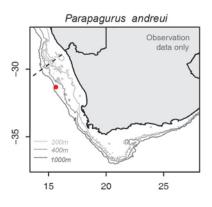
### **Similar species**

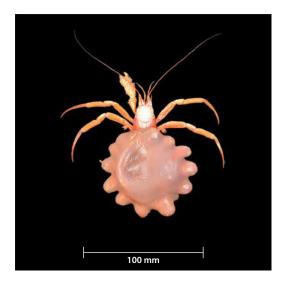
Sympagurus dimorphus and Parapagurus bouvieri, but distinctive colouration and green eyes of *P. atkinsonae* are distinguishing characters. Adults half the size of fully-grown *S. dimorpus* or *P. bouvieri*.

#### Reference

Landschoff J and Lemaitre R. 2017. Differentiation of three common deep-water hermit crabs (Crustacea: Decapoda: Anomura: Parapaguridae) from the South African demersal abundance surveys, including the description of a new species of *Paragiopagurus* Lemaitre, 1996. *Zookeys* 676: 21-45.

Parapagurus andreui (ParAnd)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Parapaguridae
Genus:	Parapagurus
Species:	andreui
Common name:	Sun-anemone hermit

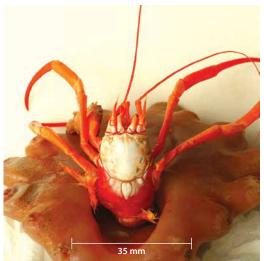




Right cheliped very large (missing in photographed specimen), and both chelipeds densely setose. Shield about as broad as long and usually well calcified. Eyestalks less than half the length of shield. Very few morphological features for identification on deck, but colour might be characteristic. Known to occupy zooanthids that have > 10 polyps arranged in a circle around the lower margin of the shell. However, a few other species might occupy the same type of zooanthid.

## Colour

In South Africa only known from photographed specimen. Shield and bases of cephalic appendage (antennae and eyestalks) white-washed orange to mouldy white. Chelipeds appear yellowish due to heavy setation, walking legs brownish orange, colour intensified in dactyls.



## Size

Between 100-120 mm total length.

#### Distribution

West Coast of South Africa; 731 m.

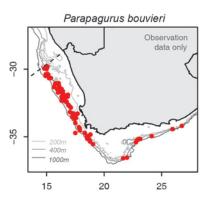
## **Similar species**

*Parapagurus bouvieri*, but *P. andreui* has well-calcified legs and even more densely setose chelipeds. It also occupies a different type of zooanthid.

## Reference

Lemaitre R. 1999. Crustacea Decapoda: a review of the species of the genus *Parapagurus* Smith, 1879 (Parapaguridae) from the Pacific and Indian Oceans. *Mémoires du Muséum National D'Histoire Naturell* 180: 303-378.

Parapagurus bouvieri (ParPil)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Parapaguridae
Genus:	Parapagurus
Species:	bouvieri
Common name:	Hairy-clawed hermit crab





Both left and right cheliped densely setose, right cheliped much longer. Weakly calcified lateral faces of meri of second and third pereopods diagnostic. Exclusively inhabit pseudoshells of a single species of colonial zooanthid, which form a smooth, slimy, pinkish cloak. Zoanthid polyps arranged around bottom margin of pseudoshell (unlike evenlydistributed polyps of the epizoanthid colonising *Sympagurus dimorphus* and *Paragiopagurus atkinsonae*).

## Colour

Adult with conspicuous white band along dorsal and ventral margins of pereopods. Ventral faces of pereopods orange. Chelae often with orangepink fingertips. Some specimens have pale orange or yellow pereopods without distinctive colour patterns.

## Size

Up to 15 mm shield length, overall size up to 100 mm.



#### Distribution

Southern African endemic. Namibia to Cape St Francis, South Africa, 63-814 m (preferred depth range 400-499 m).

### **Similar species**

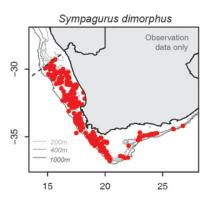
*Sympagurus dimorphus*, but *P. bouvieri* chelipeds extensively covered with hair. *Parapagurus andreui*, but *P. bouvieri* has weakly calcified lateral faces of meri of pereopods.

### References

Landschoff J and Lemaitre R. 2017. Differentiation of three common deep-water hermit crabs (Crustacea: Decapoda: Anomura: Parapaguridae) from the South African demersal abundance surveys, including the description of a new species of *Paragiopagurus* Lemaitre, 1996. *Zookeys* 676: 21-45.

Lemaitre R. 1999. Crustacea Decapoda: a review of the species of the genus *Parapagurus* Smith, 1879 (Parapaguridae) from the Pacific and Indian Oceans. *Mémoires du Muséum National D'Histoire Naturell* 180: 203-378.

Sympagurus dimorphus (ParDim)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Parapaguridae
Genus:	Sympagurus
Species:	dimorphus
Common name:	Dimorphic hermit crab





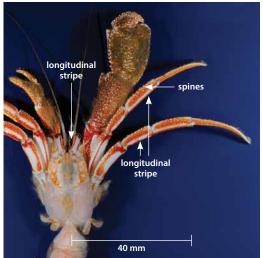
Right cheliped much larger than left. Right one sexually dimorphic (two forms), massively enlarged in male where it cannot be retracted into shell. Carpus with dorsal row of spines. Most, but not all, individuals inhabit 'pseudoshells' made of epizoanthids (colonial anemones). Pseudoshell coarse in texture (gritty) and light brown; > 10 orange nodules (polyps) of different sizes unevenly distributed over entire surface.

### Colour

Colour variable orange-red. Chelipeds from pale orange to almost bright red, but with cream spines or tubercles. Propodus and carpus of pereopods usually with longitudinal white stripes; sometimes entirely white. Meri of chelipeds and pereopods white with orange-red patches. Eyestalks dorsally with orange-red longitudinal stripe.

## Size

Up to 30 mm shield length; overall size up to 100 mm.



## Distribution

Southern African endemic. Namibia to Plettenberg Bay, South Africa, 30-814 m (preferred depth range 200-249 m).

### **Similar species**

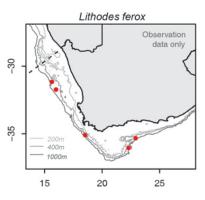
Paragiopagurus atkinsonae and Parapagurus bouvieri, but S. dimorphus has distinctly coloured pereopods.

### References

Landschoff J and Lemaitre R. 2017. Differentiation of three common deep-water hermit crabs (Crustacea: Decapoda: Anomura: Parapaguridae) from the South African demersal abundance surveys, including the description of a new species of *Paragiopagurus* Lemaitre, 1996. *Zookeys* 676: 21-45.

Lemaitre R. 2004. A worldwide review of hermit crab species of the genus *Sympagurus* Smith, 1883 (Crustacea: Decapoda: Parapaguridae). *Tropical Deep-Sea Benthos* 23: 85-149.

Lithodes ferox (LitFer)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Lithodidae
Genus:	Lithodes
Species:	ferox
Common name:	Fierce king crab





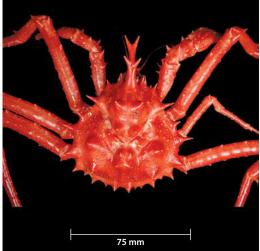
Three major pairs of pereopods visible (remaining two greatly reduced and hidden), plus chelipeds. Carapace rounded, becoming more triangular and pointed anteriorly, both gastric and cardiac regions of carapace with four prominent square-patterned spines. Rostrum strongly produced and bifid (rarely simple), with a pair of dorsal spines on corneal level. Right cheliped slightly larger, and larger in males. Chelipeds and pereopods with variously sized, strong spines.

#### Colour

Bright red to pale pink or orange in colour, with reddened dactyls of pereopods.

### Size

Up to 65-70 mm carapace width; pereopods up to 170 mm long.



#### Distribution

West and South Coasts of South Africa.

### **Similar species**

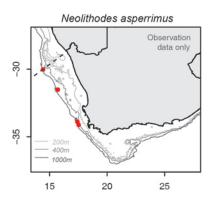
*Neolithodes asperrimus*, but *L. ferox* is considerably smaller and has a long projecting double-pronged two-spined rostrum.

### References

Abelló P and Macpherson E. 1991. Distribution patterns and migration of *Lithodes ferox* (Filhol) (Anomura: Lithodidae) off Namibia. *Journal of Crustacean Biology* 11: 261-268.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing. Vol 2, pp. 85-89.

Neolithodes asperrimus (NeoAsp)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Lithodidae
Genus:	Neolithodes
Species:	asperrimus
Common name:	Rough stone crab





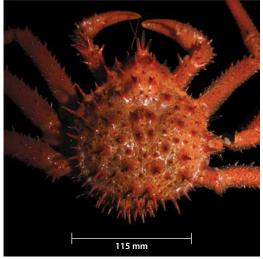
Three pairs of pereopods visible (remaining two greatly reduced and hidden), plus chelipeds. Carapace with large and small spines, upper surface thickly sprinkled with small, sharp granules; gastric region of carapace with four central prominent spines in shape of a square and one additional lateral spine on each side, one single smaller spine in centre of square; cardiac area with four prominent square-patterned spines. <u>Rostrum with one simple</u> <u>upward slanting spine and two dorsal spines near</u> <u>base</u>. Chelipeds and pereopods <u>thickly covered with</u> <u>sharp granules</u>, more so in females than in males.

### Colour

Orange.

## Size

Large; carapace width up to 200 mm; pereopods up to 500 mm long.



## Distribution

West Coast of South Africa and northwards to Mauritania.

### **Similar species**

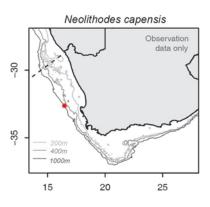
*Neolithodes capensis* and *Lithodes ferox*, but this species can be differentiated by the prickly pereopods and the different spine patterns. In lithodids the length of the spinulation is highly variable depending on age.

### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 408-413.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing. Vol 2, pp. 90-93.

Neolithodes capensis (NeoCap)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Anomura
Family:	Lithodidae
Genus:	Neolithodes
Species:	capensis
Common name:	Cape stone crab





Three pairs of pereopods visible (remaining two greatly reduced and hidden), plus chelipeds. Carapace with scattered small spines amongst larger ones. Gastric region of carapace with six prominent, hexagonally-arranged spines, cardiac region with two pairs of spines, followed by a single median one. Chelipeds and pereopods with surface somewhat smooth, scattered small and larger spines.

## Colour

Deep brick red.

### Size

Large; carapace up to 200 mm wide; pereopods up to 500 mm long.



#### Distribution

Endemic. West Coast of South Africa.

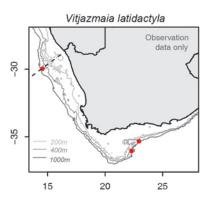
### **Similar species**

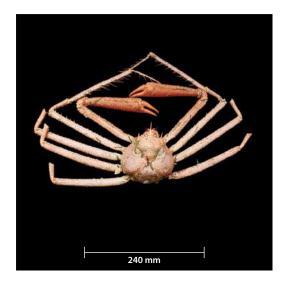
Lithodes ferox and Neolithodes asperrimus, but N. capensis lacks the distinct double-pronged projecting rostrum of L. ferox and the heavily prickly legs of N. asperrimus.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 408-410.

<i>Vitjazmaia latidactyla</i> (VitJaz)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Vitjazmaia
Species:	latidactyla
Common name:	Horned eyestalk deep-water crab







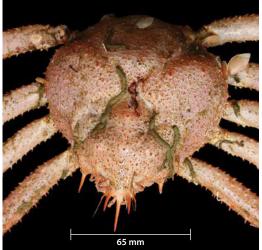
Carapace nearly round, covered with small spines and numerous regular spinules, all curved anteriorly. Rostrum long, with long rostral spine and a pair of pseudo-rostral spines. Pseudo-rostral spines with two small spines at base of each. One very strong, long spine outside each eye, and one above each eye. Cluster of spiniform horns (2-5) visible on the eye stalk. Five pairs (chelipeds included) of very long and flat pereopods. Walking legs with surfaces covered with small, sharp spinules. Second pair of pereopods with long, sharp spines. Males with stronger and heavier tapered pincers.

## Colour

Pale orange to peach, with darker spicules on carapace. Dactyls darker in colour.

## Size

Up to 150 mm carapace width.



## Distribution

West and South Coasts of South Africa, common in New Zealand and some West Indian Ocean regions.

## **Similar species**

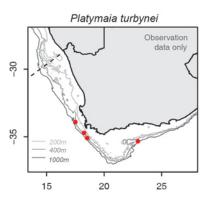
Closely related to *Platymaia turbynei*; not to be confused with the lithodid crabs *Neolithodes* spp. and *Lithodes ferox*, which only have four instead of five fully developed pereopods (chelipeds included).

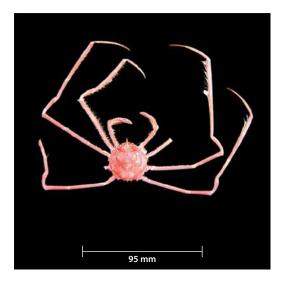
#### References

Naylor JR, Webber WR and Booth JD. 2005. A guide to common offshore crabs in New Zealand waters. *New Zealand Aquatic Environmental and Biodiversity Report* No 2, Ministry of Fisheries, Wellington, ISSN 1176-9440, 47pp.

Webber R. 1995. Deep sea Majidae. *Journal of the Royal Society of New Zealand*, 25: 502-506.

Platymaia turbynei (PlaTur)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Platymaia
Species:	turbynei
Common name:	Three-spined spider crab







Carapace rounded in shape, length slightly greater than width, surface with several small acute spines. Rostrum trispinose, with one major spine projecting forward, markedly overarching the anterior margin of carapace. Inner margin of orbit without spine. Buccal cavity with blunt denticulate tooth at outer angle. Chelipeds elongate in males. Pereopods very long and slender, second and third pereopods with long and medium-long spines, respectively, dactyls and propodi of fourth and fifth pereopods with fringes of long, fine setae along ventral margins.

#### Colour

Pink, pale orange to salmon pink; legs with very broad orange bands.

## Size

Carapace width up to 45 mm.

## Distribution

West and South Coasts of South Africa, Eastern Cape and KwaZulu-Natal, 200-960 m.



### **Similar species**

The only species of the genus recorded in South Africa, but *Platymaia alcocki* occurs in the Indian Ocean to Mozambique. It differs from *P. turbynei* by having a narrower and smoother carapace and dense hairs on the chelipeds. *Platymaia longimana* is reported from Namibia.

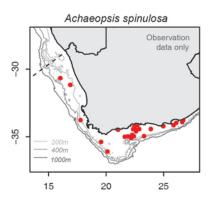
#### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 31-32.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing. Vol 2, pp. 468-469.

Griffin DJG. 1974. Spider crabs (Crustacea: Brachyura: Majidae) from the International Indian Ocean Expedition, 1963-1964. *Smithsonian Contributions to Zoology* 182: 1-35.

Achaeopsis spinulosa (AchSpi)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Achaeopsis
Species:	spinulosa
Common name:	Short-spined/Hotlips spider crab





Carapace pear-shaped, broad posteriorly, tapering strongly anteriorly. Two short, stubby rostral spines extend to end of peduncle (base) apex of antennae 2. Spines slightly divergent and widely separated proximally. Strong, erect median spine on gastric region, stronger spine on cardiac region, smaller tubercle or spine on antero-lateral portion of gastric region. Total of eight spines clearly visible on dorsal carapace, similar to *D. thomsoni*. No visible spines at apex of fourth joint of second to fifth pereopods. Pereopods very long and slender, chelipeds rounded, bulbous.

## Colour

Orange to salmon colour when alive, with white and red mottled chelipeds. Pereopods with wide bands of orange and white (often faint).



#### Size

Up to 20 mm carapace width.

### Distribution

West and South Coasts of South Africa. Widely distributed in Atlantic and Indian Oceans, usually occurring shallower than *D. thomsoni*.

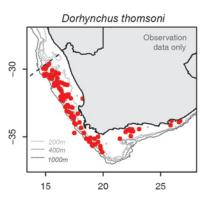
### Similar species

Rochinia hertwigi (flattened tubercles), Macropodia falcifera (more pronounced dorsal spines) and Dorhynchus thomsoni (longer rostral spines).

### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837, pp. 23-25.

Dorhynchus thomsoni (AchTho)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Dorhynchus
Species:	thomsoni
Common name:	Long-spined spider crab





Carapace pear-shaped with strong, erect median spine on gastric region and stronger spine on cardiac region. Smaller spines on antero-lateral portion of gastric region. Total of eight spines on carapace, distinct, but not as pronounced as those of *Macropodia falcifera*, which has only four dorsal spines. Two rostral spines, slightly divergent distally, but close together, longer than *Achaeopsis spinulosa*. Rostral spines extend distinctly beyond peduncle (base) apex of antennae 2. Chelipeds more slender than *A. spinulosa* and rostral spines longer and closer together. Pereopods <u>very long</u>, with dorsodistal <u>spine on merus of second to fifth pair</u> (see red circles, distinguishes between *D. thomsoni* and *A. spinulosa*).

#### Colour

Orange to salmon when live, with white and red mottling on chelipeds. Pereopods with wide bands of orange and white (often faint).



### Size

Up to 20 mm carapace width.

#### Distribution

Predominantly West Coast, but do occur on South Coast of South Africa. Widely distributed in Atlantic and Indian Oceans, usually deeper than *A. spinulosa*.

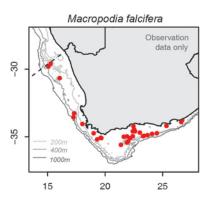
## **Similar species**

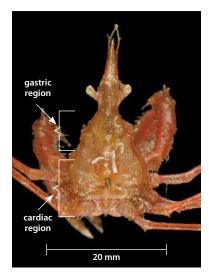
Rochinia hertwigi (flattened tubercles), Macropodia falcifera (more pronounced dorsal spines) and Achaeopsis spinulosa (shorter rostral spines).

### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 23-25.

Macropodia falcifera (MacFal)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Macropodia
Species:	falcifera
Common name:	Cape long-rostrum spider crab







Carapace with single long erect spine in gastric region and on cardiac region, with two smaller spines on each dorso-lateral edge. Long, elongated rostrum of two sharp appressed (close together) spines, extending well beyond end of antennal peduncle (base), usually to end of flagellum of antennae 2. Eyes on long stalks, situated at distal end of extended carapace. Apex of merus of pereopods has either three, two or one small spine(s) – not to be confused with *D. thomsoni*, which has a single spine.

### Colour

Pale orange to pink or red, often with darker red speckled chelipeds.

#### Size

Carapace up to 15 mm width.

#### Distribution

Widespread, West and South Coasts of South Africa, although predominantly South Coast.

## **Similar species**

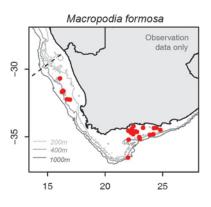
Rochinia hertwigi (flattened tubercles), Dorhynchus thomsoni, Achaeopsis spinulosa and Macropodia formosa.

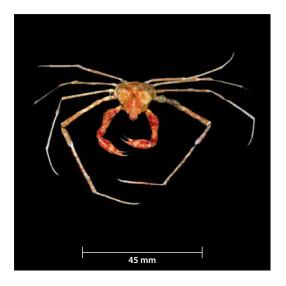
### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 465-467.

Ng PK, Richer De Forges B, Jones G. 2013. Taxonomy and ecology of the Cape Town Spider Crab, *Macropodia falcifera* (Stimpson, 1858) (Crustacea: Decapoda: Brachyura: Inachidae). *Zootaxa* 3626: 391-396.

Macropodia formosa (MacFor)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachidae
Genus:	Macropodia
Species:	formosa
Common name:	Cape long-legged spider crab





Carapace pear-shaped, with single long erect spine in gastric region and another on cardiac region, plus two smaller spines on each dorso-lateral edge. <u>Rostrum short</u>, not extending beyond end of peduncle (base). Spines present on basal joints of antenna. <u>Apex of merus</u> of pereopods <u>has either</u> <u>three, two or one small spine(s)</u> present – not to be confused with *D. thomsoni*, which has a single spine.

## Colour

Pale orange to pink or red, often with darker red speckled chelipeds.

### Size

Carapace up to 20 mm wide.



#### Distribution

South African endemic. Widespread, predominantly South Coast of South Africa to Mozambique.

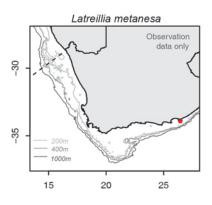
## Similar species

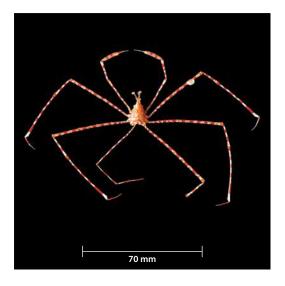
Rochinia hertwigi, Dorhynchus thomsoni, Achaeopsis spinulosa and Macropodia falcifera.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 13-18.

Latreillia metanesa (LatMet)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Latreilliidae
Genus:	Latreillia
Species:	metanesa
Common name:	Candycane crab





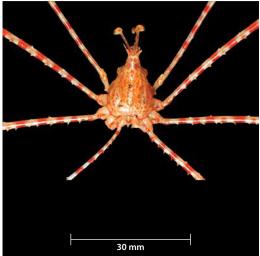
Very distinctive, with small, pear-shaped carapace bearing dorsal knobs. Rostrum triangular and consisting of three long spikes, one projecting medially forward and two laterally. Eyes disproportionately large and borne on extremely elongate eyestalks that are composed of two parts, a proximal slender section and a second much stouter section. Long spindly pereopods appear out of proportion to fragile body.

## Colour

Carapace pale pink to red or orange. Pereopods vividly striped in red and white.

### Size

Carapace up to 15 mm length; legs up to 150 mm.



### Distribution

Pacific to Mozambique, Madagascar and South Africa.

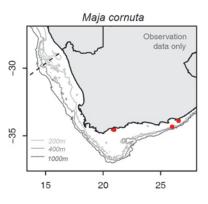
### **Similar species**

Unmistakable – *L. valide* (not depicted) also occurs in the region and has similar striped legs, but a round carapace.

### Reference

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing. Vol 2, pp. 241-244 (notes in entry on *L. valide*).

<i>Maja cornuta</i> (MamCap)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Majidae
Genus:	Маја
Species:	cornuta
Common name:	Agulhas spider crab





Carapace pear-shaped, behind the post-ocular tooth four large marginal teeth, followed by one small submarginal tooth on hind part of branchial region, in the middle line three prominent spines on gastric region, rest of surface with smaller scattered spines, a pair of short spines on hind margin. Cheliped with granules on merus and carpus, fingers gaping at base in full-grown males. Body often camouflaged with attached animals. Previously called *Maja capensis*.

## Colour

Yellow brown to orange-red or carmine.

#### Size

Up to 100-150 mm carapace width.



#### Distribution

South Coast of South Africa, from False Bay to Durban; 10-60 m depth.

## **Similar species**

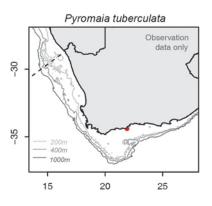
None.

### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 59-60 (as *Mamaia capensis*).

Ng PKL and Richer de Forbes B. 2015. Revision of the spider crab genus *Maja* Lamarck, 1801 (Crustacea: Brachyura: Majoidea: Majidae), with descriptions of seven new genera and 17 new species from the Atlantic and Indo-West Pacific. *Raffles Bulletin of Zoology* 63: 110-225.

Pyromaia tuberculata (PyrSpp)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Inachoididae
Genus:	Pyromaia
Species:	tuberculata
Common name:	Tuberculate pear crab





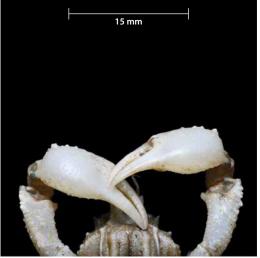
Carapace pear-shaped and convex, with four large tubercles, one anteriorly central and three larger ones posteriorly, each covered in small knobbly projections. Rostrum pointed, curved spine behind eye. Chelae inflated in male (shown), much more slender in female. Pereopods slender and elongate, with long dactyls.

## Colour

Off-white with light brown mottled areas.

## Size

Carapace width up to 15-20 mm.



## Distribution

Native range is Pacific North America. Potentially introduced species to South Africa.

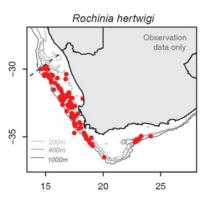
## **Similar species**

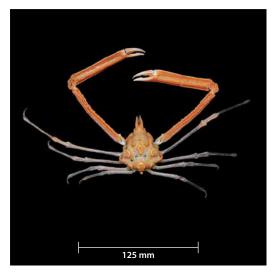
Superficially similar to *Rochinia hertwigi*, *Dorhynchus thomsoni*, *Achaeopsis spinulosa* and *Macropodia falcifera*, but distinguished by inflated tubercles.

## Reference

Ahyong ST. 2005. Range extension of two invasive crab species in Eastern Australia: *Carcinus meanas* (Linnaeus) and *Pyromaia tuberculata* (Lockington). *Marine Pollution Bulletin* 50: 460-462.

Rochinia hertwigi (ScyHer)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Epialtidae
Genus:	Rochinia
Species:	hertwigi
Common name:	Rochinia sunday/Two prong crab





Carapace with several distinctive flat-topped projecting tubercles. Male (left) with larger chelipeds than female (right). Carapace pearshaped, produced anteriorly into distinctive rostrum composed of two slender, long, tapering spines, separated at their bases. Flat-topped tubercles often not well-developed, or hidden by bulbous swellings in posterior lateral regions. Chelipeds and pereopods long and slender.

## Colour

Pale orange – frequently covered in mud, hydroids and tunicates, etc.

### Size

Male length up to 63 mm, female up to 43 mm.



### Distribution

West and South Coasts of South Africa.

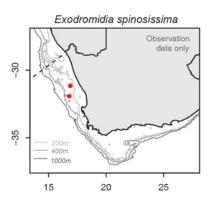
### **Similar species**

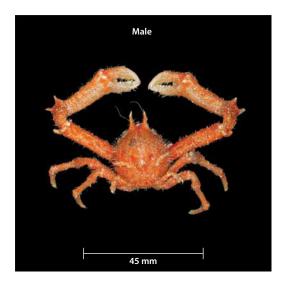
Unmistakable with the flat-topped tubercles and long tapering rostral spines. Larger and more robust than *Dorhynchus thomsoni, Achaeopsis spinulosa* and *Macropodia falcifera*.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 50-51 (as *Scyramathia hertwigi*).

Exodromidia spinosissima (ExoBic)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Exodromidia
Species:	spinosissima
Common name:	Horned baboon crab





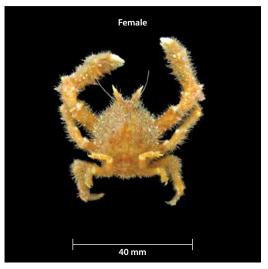
Carapace roundly elongate, with two prominent, divergent spiniform processes projecting from front of carapace. Chelipeds long with strong chelae. Last two pereopods modified to be "carrier" legs folded behind carapace. Covered with short stiff hairs, longer bristles towards edges of carapace, chelipeds and pereopods. Chelipeds larger in males than females.

## Colour

Marbled orange to brick-red with white.

#### Size

Up to 18 mm carapace diameter, 20 mm length.



## Distribution

Endemic. West Coast of South Africa to Agulhas Bank.

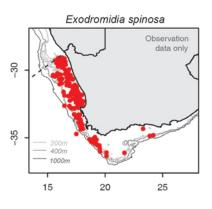
## **Similar species**

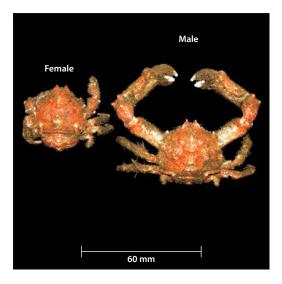
Similar to *Exodromidia spinosa*, but with longer chelipeds and pronounced anterior spines on carapace, and also less common.

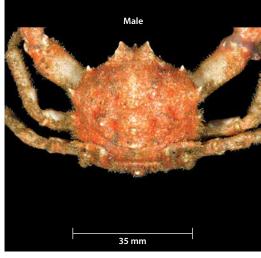
## Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. p. 327 (as *E. bicornis*).

Exodromidia spinosa (ExoSpi)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Exodromidia
Species:	spinosa
Common name:	Furry baboon crab







Rounded crab, especially when chelipeds are held close to body. Often covered in mud and sand and looks like a stone. Carapace convex, mottled orange to red, covered with fine short hairs and with scattered small, conical tubercles dorsally. Frontal lobes large and triangular. Lateral margin with three distinct teeth. Male chelipeds much larger and longer than female; female chelipeds often tucked under carapace. Last two pairs of pereopods reduced and folded behind carapace, occasionally used to carry sponges or ascidians.

#### Colour

Bright orange/brick-red, mottled with white. Tips of chelipeds white.

## Size

Male carapace width up to 34-35 mm, female 22-25 mm.

#### Distribution

Southern African endemic. Mainly West Coast of South Africa.

### **Similar species**

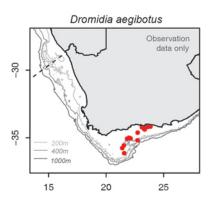
*Exodromidia spinosissima*, which has longer, more pronounced spine-like frontal lobes. Often occurs together with *Rochinia hertwigi* and *Dorhynchus thomsoni*. Sometimes associated with *Suberites* sp. sponge pieces held onto dorsal carapace.

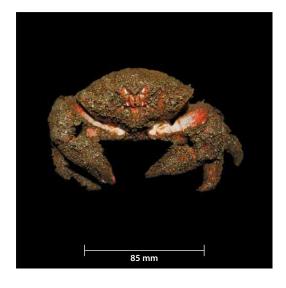
#### References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. p. 326.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 214-216.

Dromidia aegibotus (DroPer)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Dromidia
Species:	aegibotus
Common name:	Sponge crab







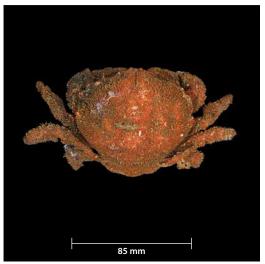
Fairly large, furry crab with domed carapace; four teeth on either side of front margin of carapace. Body and pereopods covered with dense brown coating of short hairs. Last two pairs of pereopods shortened and bent back over carapace, may carry sponge.

## Colour

Red with brown, mud-covered hairy layer.

## Size

Carapace up to 80-90 mm wide.



## Distribution

Endemic. South Coast of South Africa.

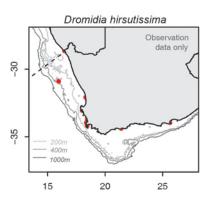
## **Similar species**

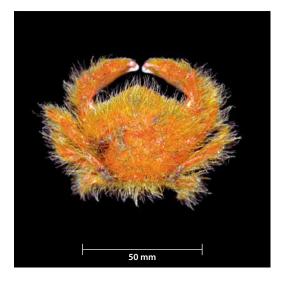
*Dromidia hirsutissima*, but *D. aegibotus* is larger, and has shorter, stiff hairs.

## Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 322-323.

Dromidia hirsutissima (DroHir)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Dromidia
Species:	hirsutissima
Common name:	Shaggy sponge crab





Body covered with short, stiff pile and long, dense, fibrous and shaggy brown or yellow hairs. Carapace broader than long, with several teeth on front margin and one on lateral margin. Fifth pereopods not markedly shorter in length than fourth, but more slender and folded back over carapace. Typically carry a cloak of sponge or ascidian over carapace (photo on right).

## Colour

Muddy brown, orange or yellow. Tips of chelipeds white.

## Size

Up to 55 mm carapace width.



### Distribution

Endemic. West and South Coasts of South Africa.

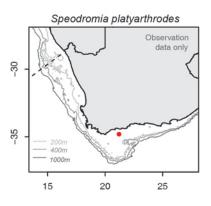
## **Similar species**

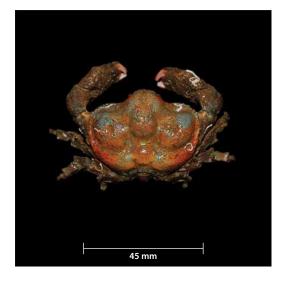
*Exodromidia* spp., but claws of *D. hirsutissima* folded close to mouth parts, more compact body shape and considerably longer, denser hairs.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 320-321.

Speodromia platyarthrodes (SpePla)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Speodromia
Species:	platyarthrodes
Common name:	Boxer/Muscle crab





Upper surface of carapace inflated into three large humps, surface studded with minute sessile, scalelike setae; frontal margin with rounded projection. Undersurface of carapace bearing unusual deep cavity thought to be associated with respiration; closed anteriorly by cheliped and posteriorly by pereopods 2-4.

## Colour

Orange mottled with paler areas.

### Size

Up to 38 mm carapace width.



## Distribution

Endemic. South Coast of South Africa.

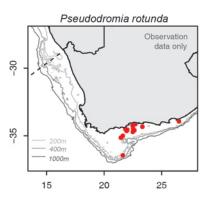
# Similar species

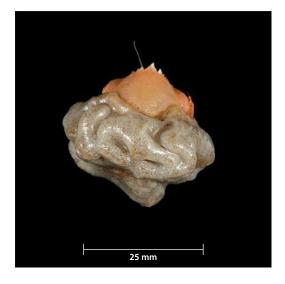
None.

### Reference

Ng PK. 2016. The taxonomy of *Speodromia platyarthrodes* (Stebbing, 1905) (Crustacea: Brachyura), an unusual dromiid crab endemic to South Africa. *Zootaxa* 4111(3): 261-275.

Pseudodromia rotunda (PsuRot)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Pseudodromia
Species:	rotunda
Common name:	Rounded sponge crab





Characterised by rounded, strongly convex carapace and unusualy elongate last pair of pereopods folded upwards to hold ascidian cloak. <u>Two upper frontal</u> <u>teeth are slightly divergent</u>, allowing the <u>lower</u> <u>median tooth to be seen</u> in dorsal view.

#### Colour

Crab inside ascidian is pale orange to peach in colour.

# Size

Up to 40 mm carapace width.

#### Distribution

Saldanha to Southern Mozambique, predominantly South Coast of South Africa.



#### **Similar species**

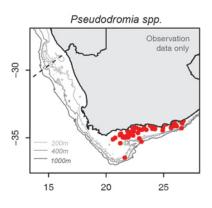
*Pseudodromidia latens*, but distinguished by divergent frontal teeth, and lower median tooth visible in dorsal view.

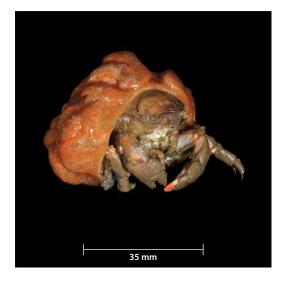
### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 222-224.

Stewart BA, Gouws G, Daniels SR and Matthee CA. 2004. Delimitation of morphologically similar sponge crab species of the genus *Pseudodromia* (Crustacea, Decapoda, Dromiidae) from South Africa. *Zoologica Scripta* 33: 45-55.

Pseudodromia spp. (Psddrm)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Dromiidae
Genus:	Pseudodromia
Species:	spp.
Common name:	Cloaked ascidian crab





Crab almost fully enclosed by ascidian growing on dorsal carapace. Tips of chelipeds usually red and white in colour.

# Colour

Diverse range of colour, shapes and texture of ascidian coating the dorsal carapace. Crab usually muddy brown but pale orange, crimson or rose red when cleaned and abdomen more or less mottled or speckled.

# Size

Usually between 20-40 mm carapace width.



## Distribution

Predominantly South Coast of South Africa.

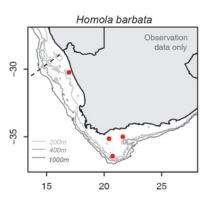
# **Similar species**

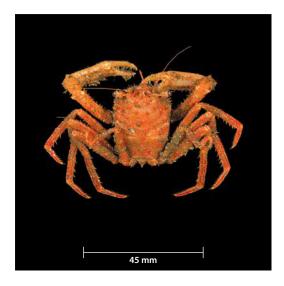
*Pseudromidia rotunda*, which is distinct in the form of frontal teeth and lower medial tooth.

#### Reference

Stewart BA, Gouws G, Daniels SR and Matthee CA. 2004. Delimitation of morphologically similar sponge crab species of the genus *Pseudodromia* (Crustacea, Decapoda, Dromiidae) from South Africa. *Zoologica Scripta* 33: 45-55.

Homola barbata (HomBar)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Homolidae
Genus:	Homola
Species:	barbata
Common name:	Periscope eye crab





Carapace squarish, longer than wide, prominent spines covering frontal portion of dorsal carapace, with two lateral spines projecting from front corners. Covered in short, fine orange hairs. Eyestalks long and eyes large. Last pereopods modified to fold back over carapace and often carries sponge over back. Often covered in mud.

# Colour

Orange with paler speckles.

# Size

Usually between 16-28 mm carapace width (male), and 22 mm carapace length (ovigerous female).



## Distribution

South Coast of South Africa; depth 10-679 m.

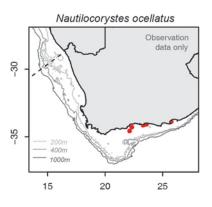
#### **Similar species**

*Miersiograpsus kingsleyi*, but *H. barbata* is larger and has distinct spines on frontal portion of dorsal carapace.

# Reference

Manning RB and Holthuis LB. 1981. West African Brachyuran crabs (Crustacea: Decapoda). *Smithsonian Contributions to Zoology* 306: 1-379.

Nautilocorystes ocellatus (NauOce)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Thiidae
Genus:	Nautilocorystes
Species:	ocellatus
Common name:	Ringed porcelain crab





Easily recognised by the unusual elongated carapace with its rounded front armed with four sharp teeth on either side. Antennae elongated and held together by interlocking hairs to form a tube, down which water is drawn while the crab is buried in the sand.

#### Colour

Light brown-orange, with <u>thin reddish-brown lines</u> forming four circlular patches on carapace.

### Size

Up to 34 mm length in males (28 mm in females) and 24-38 mm width.

#### Distribution

South Coast of South Africa and South-West Africa northward to Angola and off the Congo; depths 0-82 m. Burrows in sand.



# **Similar species**

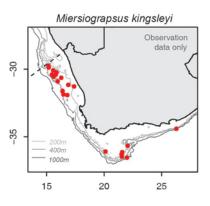
None.

## References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 640-642.

Manning RB and Holthuis LB. 1981. West African Brachyuran crabs (Crustacea: Decapoda). *Smithsonian Contributions to Zoology* 306: 1-379 p. 72.

Miersiograpsus kingsleyi (LitKin)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Plagusiidae
Genus:	Miersiograpsus
Species:	kingsleyi
Common name:	Orange hairy sponge crab





<u>Small crab</u> often co-occurring with sponges. Carapace square, front margin bilobed from dorsal view, distinct tooth outside eye and another on side of carapace. Eyestalks covered in fine hairs. Pereopods <u>covered in bristly hairs</u>, chelae strong, lower margin of merus serrated.

# Colour

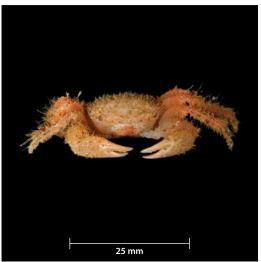
Pale orange to yellowish, with pale amber hairs.

### Size

Carapace width no more than 15 mm.

# Distribution

West Coast of South Africa to KwaZulu-Natal.



#### **Similar species**

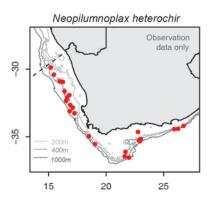
*Homola barbata* has a more elongated, rectangular carapace and spines on carapace.

## References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 294-5 (as *Litocheira kingsleyi*).

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 3, pp. 224-226.

Neopilumnoplax heterochir (Dyspan)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Mathildellidae
Genus:	Neopilumnoplax
Species:	heterochir
Common name:	Smooth choc-tip crab/ Smooth dark fingered crab





Relatively smooth orange-golden to brown carapace with <u>well-defined epibranchial ridges</u> (ridge on midlateral dorsal carapace). Frontal margin (rostrum) straight, with three fairly large lateral teeth behind eyes, <u>second two pronounced and curved</u>. Chelipeds subequal, left side slightly larger, upper surface granulate, claw fingers dark brown or black. Row of knobs along upper edge of pereopods.

# Colour

Golden brown to orange, with brown to black fingertips of cheliped. Pereopods orange with pale white bands.

# Size

Up to 35-40 mm carapace width.



## Distribution

West and South Coasts of South Africa, extending to East London. Reported from 137-710 m.

#### **Similar species**

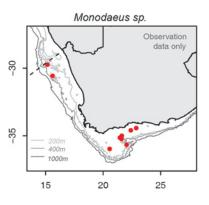
*Monodaeus* spp. are much more granular with knobs and ridges on carapace.

#### References

Ahyong ST and Ng PKL. 2016. The species of *Mathildella* Guinot and Richer de Forges, 1981 and *Neopilumnoplax* Serène in Guinot, 1969 (Decapoda: Brachyura: Mathildellidae). *Journal of Crustacean Biology* 36(4): 538-552.

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 289-290 (Fig. 54 as *Pilumnoplax heterochir*).

<i>Monodaeus</i> sp. (Xanthi)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Xanthidae
Genus:	Monodaeus
Species:	sp.
Common name:	Furrowed brow choc-tip crab







Carapace orange- to red-speckled, nodular and marked with distinct grooves running back from anterior edge. <u>Four blunt spines</u> projecting from lateral edge to just before eye, posterior spines have white tips. Rostrum square with no projections. Pereopods hairy and frequently coated in mud. Chelae subequal, ends of finger and hand black.

#### Colour

Orange-red-brown speckled, with paler portions of body, fingers black.

# Size

Usually  $\pm$  40 mm diameter carapace width.

#### Distribution

West and South Coasts of South Africa, extending into West Africa.

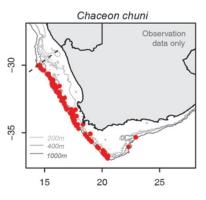
# **Similar species**

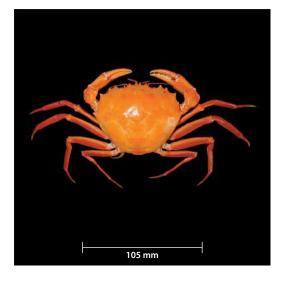
*Neopilumnoplax heterochir* has a much smoother carapace.

#### Reference

Guinot D and Macpherson E. 1988. Remarques sur le genre *Monodaeus* Guinot, 1967, avec la description de deux espèces nouvelles (Crustacea Decapoda Brachyura). *Bulletin du Muséum national d'Histoire naturelle,* Paris, 4, 10: 731-757.

<i>Chaceon chuni</i> (ChaChu)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Geryonidae
Genus:	Chaceon
Species:	chuni
Common name:	Red crab





Large orange crab, sometimes with black mottled carapace. Carapace quadrangular, smooth, lateral margin with five teeth on each side of eye, second and fourth smaller. Pereopods long and unmodified. Dactyls of fifth pereopod laterally flattened (from sides). Commonly caught in trawl nets in large numbers (> 100).

# Colour

Bright orange, sometimes with black mottled colouration.

# Size

Average 80 mm width, 68 mm length. Maximum recorded: 138 mm width, 122 mm length.



## Distribution

West and South Coasts of South Africa between 300-1 400 m depth.

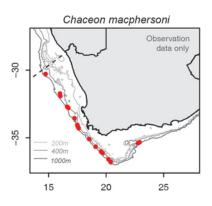
#### **Similar species**

*Chaceon macphersoni* and *Chaceon maritae*, however these are paler than *C. chuni*, which is generally smaller in size, has a smoother carapace and flattened dactyl of fifth pereopod.

## Reference

Manning KB and Holthius LB. 1988. South African species of the genus *Geryon* (Crustacea, Decapoda, Geryonidae). *Annals of the South African Museum* 98 (3): 77-92.

Chaceon macphersoni (ChaMac)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Geryonidae
Genus:	Chaceon
Species:	macphersoni
Common name:	White-leg crab





Large crab, often co-occurring with *Chaceon chuni* in trawl catches. Clearly distinguished by the white pereopods with orange tips and orange blotches of shading on carapace. Carapace is <u>granular in</u> <u>texture</u> and has characteristic markings. Lateral margin with five teeth on each side of eye, second and fourth smaller. <u>Tips of</u> pereopods <u>are dorsoventrally flattened (from top to bottom).</u>

### Colour

White pereopods with orange tips and orange shading on carapace, no orange tips on chelae.

#### Size

Average 80 mm carapace width (on average larger than *C. chuni*), but recorded up to 150 mm carapace width.

# Distribution

Southern African endemic. West and South Coasts of South Africa; 250-900 m depth.



## **Similar species**

*Chaceon chuni* and *Chaceon maritae*, but distinguished by very white pereopods, orange dactyl tips and granulated carapace.

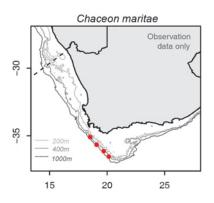
#### References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 541-545.

Groeneveld JC, Everett BI, Fennessy ST, Kirkman SP, Santos J, Robertson WD. 2013. Spatial distribution patterns, abundance and population structure of deep-sea crab *Chaceon macphersoni*, based on complementary analyses of trap and trawl data. *Marine and Freshwater Research* 64(6): 507-517.

Manning KB and Holthius LB. 1988. South African species of the genus *Geryon* (Crustacea, Decapoda, Geryonidae). *Annals of the South African Museum* 98 (3): 77-92.

Chaceon maritae (Nrcrb)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Geryonidae
Genus:	Chaceon
Species:	maritae
Common name:	Northern/Deep-sea red crab





Similar in appearance to other *Chaceon* species, having five teeth on each side of eye, second and fourth smaller or obsolete. <u>Tips</u> of pereopods <u>are dorso-ventrally flattened (from top to bottom)</u>. Carapace can be granulated in frontal portion.

## Colour

Pale orange to yellow.

# Size

Average carapace width 95 mm, reported up to 131 mm.

#### Distribution

From Agulhas Bank along Atlantic coast into North-West Africa forming part of an important fishery; between 100 and 900+ m depth.

# **Similar species**

*Chaceon chuni* and *C. macphersoni*, but *C. maritae* has dorso-ventrally flattened dactyls of pereopods and different colouration to *C. macphersoni*.

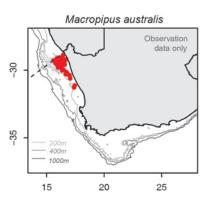
#### References

De B Beyers CJ. 1994. Population size and density of the deep-sea red crab *Chaceon maritae* (Manning and Holthuis) off Namibia determined from tagrecapture. *South African Journal of Marine Science* 14: 1-9.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 545-551.

Manning KB and Holthuis LB. 1988. South African species of the genus *Geryon* (Crustacea, Decapoda, Geryonidae). *Annals of the South African Museum* 98 (3): 77-92.

Macropipus australis (MacAus)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Polybiidae
Genus:	Macropipus
Species:	australis
Common name:	Painted swimming crab





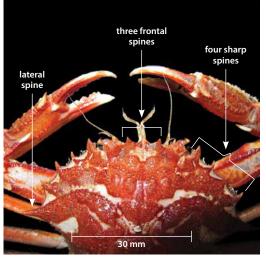
Carapace with three frontal and four sharp lateral spines, and one lateral spine projecting horizontally. Has distinct symmetrical white markings against deep red colouration, giving a painted appearance. Fifth pair of pereopods modified as swimming paddles.

#### Colour

Brick red to maroon colouration with white markings.

# Size

Average 60-70 mm carapace width.



#### Distribution

West Coast of South Africa extending northwards to Namibia and Angola.

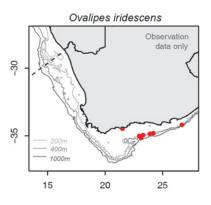
## Similar species

*Bathynectes piperitus*, which has a notably larger, longer lateral spine and colouration not as contrasting.

# Reference

Manning RB and Holthuis LB. 1981. West African Brachyuran crabs (Crustacea: Decapoda). *Smithsonian Contributions to Zoology* 306: 1-379, p. 85.

Ovalipes iridescens (Ovalri)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Ovalipidae
Genus:	Ovalipes
Species:	iridescens
Common name:	Iridescent swimming crab





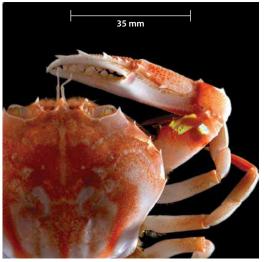
Carapace with three sharp teeth between eyes, broad orbital notch and then five lateral teeth to side, dorsal surface finely granulated except two paler oval membranous areas posteriorly. Chelipeds two to five distinct spines on upper surface. Last pair of pereopods modified for swimming.

## Colour

Red markings on paler yellowish background, chelae white-tipped. Iridescent, particularly on chelipeds and carapace.

#### Size

Up to 80 mm carapace width.



## Distribution

South and East Coasts of South Africa, to eastern Pacific.

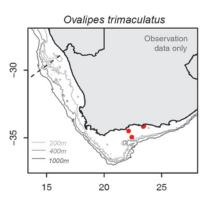
# **Similar species**

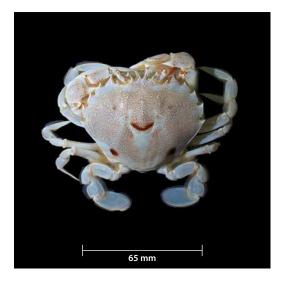
*Ovalipes trimaculatus*, but easily distinguished by colour.

# Reference

Koch M, Duris Z, Huang JF and Chan TY. 2014. First report of the swimming crab *Ovalipes iridiscens* (Meirs, 1886) (Brachyura, Portunidae) from Taiwan. *Crustaceana* 87(14): 1640-1647.

Ovalipes trimaculatus (Tssc)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Ovalipidae
Genus:	Ovalipes
Species:	trimaculatus
Common name:	Three-spot swimming crab





Carapace pink, finely granulate, front with four teeth between eyes, a tooth on upper orbital margin and four strong teeth on antero-lateral margin behind outer orbital tooth, three distinctive red marks – a central curved mark and two dots on posterior corners. Last pair of pereopods modified for swimming. Formerly known as *Ovalipes punctatus*.

### Colour

Creamy grey or pale buff, speckled with reddish dots, a median crescentric red mark and an oval red spot near each postero-lateral corner.

#### Size

Up to 80-100 mm carapace width.



#### Distribution

West and South Coasts of South Africa (and widespread around Southern Hemisphere).

## **Similar species**

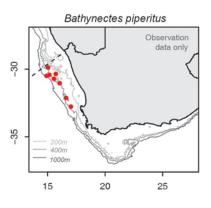
*Ovalipes iridescens*, but *O. trimaculatus* has distinctive three-spot marking.

#### References

Du Preez HH and McLachlan A. 1984. Biology of the Three-spot swimming crab *Ovalipes punctatus* (de Haan), 1 Morphometrics and relative growth (Decapoda, Portunidae). *Crustaceana* 47: 72-82.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 555-559.

Bathynectes piperitus (BatPip)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Polybiidae
Genus:	Bathynectes
Species:	piperitus
Common name:	Red and white legged swimming crab





Carapace oval, with scalloped ridge running horizontally across centre. Four rounded projections across front of carapace. Four spines on anterior margin of each side, then one very elongated and pointed spine projecting from each side. Fifth pair of pereopods modified as swimming paddles.

## Colour

Orange carapace with distinct red and white banded legs.

#### Size

Carapace width between 15-86 mm (including lateral spine).

#### Distribution

West Coast of South Africa; 200-628 m depths.



## **Similar species**

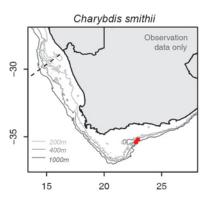
*Macropipus australis*, but *B. piperitus* has larger, more distinct lateral projecting spines and red and white banded legs.

#### References

Abello P and Macpherson E. 1989. Distribution of *Bathynectes piperitus* (Brachyura: Portunidae) in the Benguela Upwelling Region and its relationship with some environmental parameters. *Journal of Crustacean Biology* 6 (3): 373-380.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique*. Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 563-568.

Charybdis smithii (ChaSmi)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Portunidae
Genus:	Charybdis
Species:	smithii
Common name:	Smith's swimming crab





Carapace smooth, front edge with four pairs of short teeth, sides with four broad, peg-like marginal teeth and a single pointed tooth. Outstretched chelipeds easily double carapace width. Chelipeds with five to six longitudinal rows of tubercles.

#### Colour

Mottled reddish-brown.

# Size

Up to 120 mm carapace width.

#### Distribution

South and East Coasts of South Africa, aggregate in upper 150 m layer, sometimes in large densities where they can be important prey for epipelagic predators.



# **Similar species**

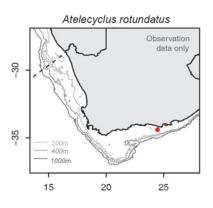
None.

## References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 625-630.

Romanov E, Potier M, Zamorov V and Menard F. 2009. The swimming crab *Charybdis smithii*, distribution, biology and trophic role in the pelagic ecosystem of the Western Indian Ocean. *Marine Biology* 156:1089.

Atelecyclus rotundatus (AteRot)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Atelecyclidae
Genus:	Atelecyclus
Species:	rotundatus
Common name:	Round sand crab/Old man's face crab





Carapace rounded, surface granular, thickly setose (with bristles) around margins and anteriorly around mouthparts; tridentate between eyes, lateral margin with about 10 serrate teeth. Chelipeds equal, large and powerful, held closely up against front of body, strongly setose dorsally. Chela with horizontal lines of granules, fingers darker. Pereopods short, setose around margins and granular.

# Colour

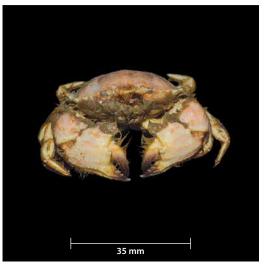
Pinkish brown, chela with darker fingers.

#### Size

Carapace width up to 30 mm.

#### Distribution

West Coast, Saldanha Bay to South Coast of South Africa, Port Elizabeth and widespread through North and South Atlantic.



# **Similar species**

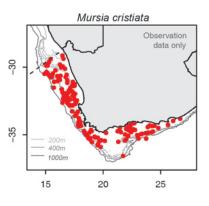
None.

# References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837 (p. 197-198, Fig. 36 d, e, as *A. septemdentatus*).

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 304-307.

Mursia cristiata (MurCri)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Calappidae
Genus:	Mursia
Species:	cristiata
Common name:	Red spotted/Masked crab





Carapace roughly oval, pale orange with bright red tubercles. Front lateral edges of carapace crenulate, with about 10 small teeth, followed by a much larger, sharp spine projecting laterally. Chelipeds broad and strongly spinose, mostly held close to the mouth, hence the name 'masked' crab.

#### Colour

Pale orange with red tubercles.

#### Size

Carapace width up to 40 mm.

### Distribution

West and South Coasts of South Africa, extending to Durban.



#### **Similar species**

*Calappa hepatica*, found from Durban northwards – mottled green box crab with strong dorsal ridge on nippers.

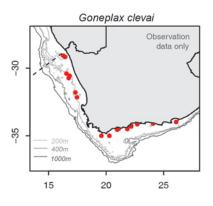
### References

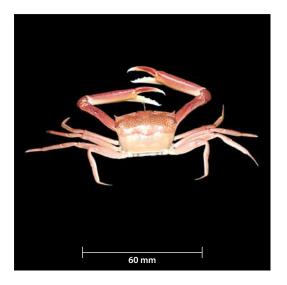
Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 354-356.

Branch GM, Griffiths CL, Branch ML and Beckley LE. 2010. *Two Oceans: A Guide to the Marine Life of Southern Africa*. Struik Nature, Cape Town, p. 118.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 288-292.

Goneplax clevai (GonAng)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Goneplacidae
Genus:	Goneplax
Species:	clevai
Common name:	Angular/Waveline crab





Smooth, quadrangular carapace, wider than long and with two strong forward-directed lateral teeth. Colour pattern distinctive, marked with distinct scalloped line approximately midway across carapace. Front portion of carapace darker brown, rear half lighter brown. Pereopods long, male has much longer chelipeds than female (female depicted). Previously known as *Gonoplax rhomboides*, but South African material described as distinct new species by Guinot and Castro (2007).

## Colour

Red and orange – darker red patterned line across carapace, posterior part of carapace and pereopods paler.

## Size

Usually between 30-50 mm carapace width.



## Distribution

West Coast of South Africa to KwaZulu-Natal.

# Similar species

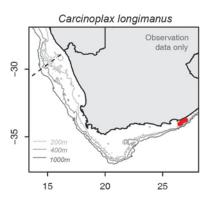
None.

## References

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 384-387.

Guinot D and Castro P. 2007. A new species of *Goneplax* Leach, 1814 (Crustacea, Decapoda, Brachyura, Goneplacidae) from the south Atlantic and the western limits of the Indo-West *G.rhomboides* (Linnaeus, 1758). *Zootaxa* 1577: 17-31.

Carcinoplax longimanus (CarLon)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Goneplacidae
Genus:	Carcinoplax
Species:	longimanus
Common name:	Long-arm pebble crab





Carapace rounded, smooth, antero-lateral margin with two slight knobs behind outer orbital tooth. Chelipeds vary in length with gender and age, but extremely elongate in adult males (see photo). Palm with a distinct rounded tubercle on inner surface.

#### Colour

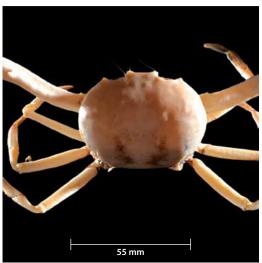
Buff or pale salmon.

# Size

Usually between 50-60 mm carapace width.

#### Distribution

South Coast of South Africa, extending up East Coast into Mozambique.



## **Similar species**

None.

# References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 287-288.

Emmerson WD. 2016. *A Guide to, and Checklist for, the Decapoda of Namibia, South Africa and Mozambique.* Cambridge Scholars Publishing, Newcastle upon Tyne. Vol 2, pp. 379-383.

Afrophila punctata (AfrPun)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Leucosiidae
Genus:	Afrophila
Species:	punctata
Common name:	Pebble crab

Not yet recorded during demersal surveys, but known to occur in the region.



# **Distinguishing features**

Carapace oval and swollen, surface finely granulate. Eyes small. Pereopods short and weak. Chelae robust, equal and elongate, especially in males. Previously known as *Philyra punctata*.

#### Colour

Off-white.

# Size

Carapace width up to 16 mm in female, 21 mm in male.

#### Distribution

Saldanha to Algoa Bay, South Africa.



#### **Similar species**

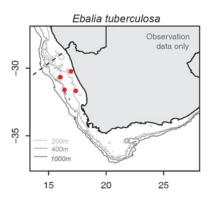
*Ebalia tuberculosa* is smaller with a more diamondshaped and granular carapace; *Carcinoplax longimanus* has more slender arms and is more pink.

# References

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 377-380 (as *Philyra punctata*).

Galil BS. 2009. An examination of the genus *Philyra* Leach, 1817 (Crustacea, Decapoda, Leucosiidae) with descriptions of seven new genera and six new species. *Zoosystema* 31(2): 279-320.

<i>Ebalia tuberculosa</i> (EbaTub)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Leucosiidae
Genus:	Ebalia
Species:	tuberculosa
Common name:	Speckled orange crab





Very small species. Carapace rounded-quadrangular with pair of tiny projections on posterior lateral edges. Carapace with distinctive fine red to orange speckles over entire surface, extending in patches onto legs and claws. Chelae elongate, merus cylindrical in cross section, chelipeds with powerful chelae.

# Colour

Mottled orange to white.

# Size

Carapace width between 5-15 mm.

## Distribution

West, South and East Coasts of South Africa.

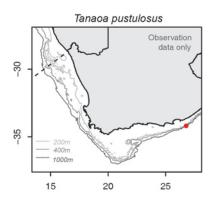
# Similar species

*Afrophila punctata*, which has a smoother, circular carapace.

#### Reference

Barnard KH. 1950. Descriptive catalogue of South African decapod Crustacea. *Annals of the South African Museum* 38: 1-837. pp. 367-368.

Tanaoa pustulosus (TanSpp)	
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Infraorder:	Brachyura
Family:	Leucosiidae
Genus:	Tanaoa
Species:	pustulosus
Common name:	Tail spike crab





Carapace rounded in dorsal view, surface covered in fine granules. Two small triangular projections above eyes and five small, evenly spaced granular projections around lateral margin of carapace. Posterior margin with one pair of larger tubercles ventrally, above which lies a distinctive <u>sharply</u> <u>pointed and upturned spike</u>. Chelae elongate with narrow claw.

# Colour

Orange to red.

#### Size

Carapace width usually about 34 mm in adults.

# Distribution

Indo-Pacific, recently recorded in South Africa, South Coast.

# Similar species

None.

## Reference

Galil BS. 2003. Four new genera of leucosiid crabs (Crustacea: Brachyura: Leucosiidae) for three new species and nine species previously described in the genus *Randallia* Stimpson, 1857, with a redescription of the type-species, *R. ornata* (Randell, 1939). *Proceedings of the Biological Society of Washington* 116: 395-422.