

Offshore invertebrate monitoring and development of field identification guide

In collaboration with the Department of Agriculture, Forestry and Fisheries (DAFF) and Department of Environmental Affairs (DEA), SAEON Egagasini facilitated development of appropriate sampling protocol for offshore invertebrates associated with the annual demersal research trawl surveys (i.e. soft sediment benthic epifauna). In establishing this monitoring initiative, it was recognized that very few invertebrate species retained in the research trawl net were accurately recorded at the species level. The need for an offshore trawl invertebrate field identification guide was identified and is under development, led by SAEON Egagasini. Through this collaborative initiative, all invertebrates retained in the demersal research surveys are now monitored on an annual basis and accurately identified. Such information on benthic fauna diversity and abundance will provide valuable information on ecosystem changes that may develop in the future. Although DAFF demersal surveys have been conducted using commercial fishing vessels from 2013 until 2016, collection and identification of invertebrates continued. With the re-launch of the *R/V Africana* in August 2016, invertebrate surveys will continue to be a part of the regular fish surveys.

A new component of this project is an online Species Database that is being developed to house all invertebrate data and images associated with this project. The database will also be used to generate the field identification guide pages.

Plans are in progress towards formal publication of the Offshore Invertebrate ID Guide to be made available to use by the wider marine community Watch this space.....



Fig. 4. Representative invertebrate specimens retained in a demersal research trawl conducted at 375 m depth on the west coast of South Africa.

Phylum: Cnidaria

Class: **Actinozoa**

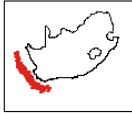
Order: **Actinoidea (anemones)**

Family: **Thomastidae**

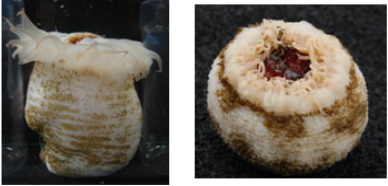
Genus: **Actinauge**

Species: **granulata**

Common name: White anemone



Actinauge granulata
(ActRic)



Distinguishing features: Tough, leathery body wall, cylindrical in shape, often covered with fine sediment. Tentacles mostly or completely retracted when on deck but will emerge when placed in sea water and relaxed. ~~Bright red to brown mouth area.~~

Colour: White exterior body walls often covered with fine sediment.

Size: Up to 100 mm height

Distribution: West Coast

Similar species: None known

References: Identified by Megan Laird

Fig. 5. Example page from Offshore trawl invertebrate field identification guide.