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DOI 10.1007/s12526-016-0611-1

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OCEANARIUM

First sighting of a siphonophore of the genus *Bathyphysa* from the South Atlantic

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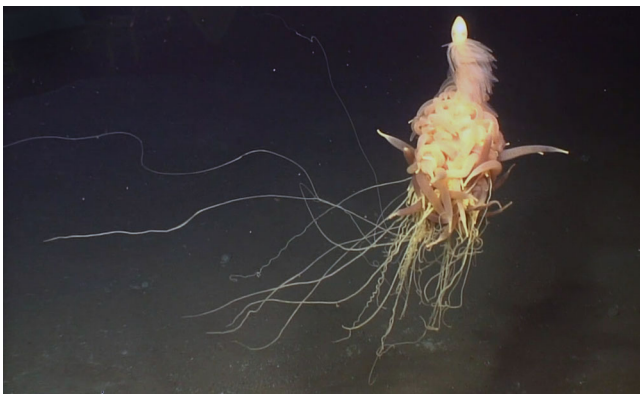
Received: 1 March 2016 / Revised: 31 October 2016 / Accepted: 21 November 2016

Image



Caption

Rhizophysid siphonophore, *Bathyphysa conifera*, observed in the deep sea off Angola

Explanatory text

Bathyphysa conifera is a deep-water siphonophore that can reach a length of several metres. It is a fragile open-ocean gelatinous organism and rarely encountered worldwide. It was initially described by Studer (1878) from Atlantic specimens that had wrapped themselves around plumb lines. It was first observed in situ by manned submersible off Rhode Island in 1987 (Janssen et al. 1989) and it has been only seen on a handful of occasions since, including in Monterey Bay at depths between 180 and 540 m (MBARI 2016).

During routine oil industry operations, around an oil well in Angola (Block 18), a single specimen of *Bathyphysa conifera* was observed using an Oceaneering *Millennium* Remotely Operated Vehicle (ROV). The observations began at 15:35:32 local time (UTC + 1) on 15th June 2015 at a position of 07° 52′ 00.650″ S 12° 08′ 33.432″ E. Video was taken at 1,325 m water depth at 0–3 m altitude, above a soft-sediment seabed. No material was collected. The photograph presented here is a still extracted from a 3:19 min video (available at https://youtu.be/yREFw0ZZVPk).

There are only four rhizophysid cystonect species, split evenly between two genera, *Rhizophysa* and *Bathyphysa*. *Bathyphysa* species are distinguished from *Rhizophysas* by the large lateral expansions or wings on young feeding zooids, situated immediately below the float, which are clearly visible on the photograph. The two *Bathyphysa* species are distinguished according to whether the tentacle has side branches, tentilla (*B. sibogae*), or not (*B. conifera*). Colonies of *Bathyphysa conifera*, as can be seen in the photograph, are very simple. They consist of a large anterior float and a long narrow stem on which the feeding polyps, each with a single tentacle, and the complex sexual assemblages are inserted at fairly regular intervals (illustrated in Dunn and Wagner 2006, Fig. 2b, for *B. sibogae*). In the image the colony is in a largely contracted state, with all the zooids bunched together. The large grape-like float is visible at the top of the photograph, and below it a developmental series of pinkish feeding polyps that have yet to develop their tentacles. Finally, the yellowish mature feeding polyps and their tentacles all clustered together. Each colony is unisexual.

In-situ videos of siphonophores are always important and, at minimum, provide further geographical and depth

Communicated by S. Piraino

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Published online: 30 November 2016

distributional data. They can also provide important information about the behaviour of these fascinating animals, which cannot be ascertained from a preserved specimen. Owing to its resemblance to a satirical deity, the flying spaghetti monster, this video has also received extensive interest (see https://goo.gl/jTGFF2 for a comprehensive list of web coverage), greatly increasing public awareness of this group.

Acknowledgements Thanks to Rob O'Brien, Shirley Oliveira, and Clemente Joao for providing access to this observation, which was obtained by BP Exploration (Angola) Limited and Sociedade Nacional de Combustíveis de Angola, E.P. (Sonangol). This is an output of the SERPENT Project www.serpentproject.com. DJ was supported by UK Natural Environment Research Council National Capability funding.

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