

# The first record of *Drymonema dalmatinum* from the northern Alboran Sea (western Mediterranean)

Karen Kienberger<sup>1</sup> · Laura Prieto<sup>1</sup>

Received: 9 February 2016 / Revised: 30 November 2016 / Accepted: 2 December 2016 / Published online: 13 December 2016  
© Senckenberg Gesellschaft für Naturforschung and Springer-Verlag Berlin Heidelberg 2016

The large scyphozoan jellyfish *Drymonema dalmatinum* was first described by Haeckel (1880) from material collected off the Dalmatian coast of the Adriatic Sea (eastern Mediterranean). In 1882, Haeckel renamed *D. dalmatinum* as *D. victoria*, describing the species in more detail and adding a single partial sample from material collected by the HMS Challenger expedition in 1873, near Gibraltar, considering this medusa as a deep-water species. Since then, there has been no report of *D. dalmatinum* in the western Mediterranean. Based on genetic and morphological data, Bayha and Dawson (2010) established a new semaeostome family, Drymonematidae, to accommodate three valid *Drymonema* species (Bayha and Dawson 2010): the rare *D. dalmatinum* Haeckel, 1880 from the Mediterranean, *D. larsoni* Bayha and Dawson 2010 from the Caribbean, and *D. gorgo* Müller 1883 from the Brazilian region. Recently, Malej et al. (2014) reported an increased frequency of sightings of *D. dalmatinum* in the last 15 years from the Adriatic and eastern Mediterranean Sea.

We report the sighting of single specimen observed on April 30, 2013, at the dive location known as Marina del Este, La Herradura, southern Spain (36.720278°N, 3.728333°W) by scuba divers (see Fig. 1). The jellyfish was found near the sea floor at a depth of 12 m, with a bell diameter of approximate 70 cm, the orientation of the umbrella was upwards, with its tentacles trailing below and accompanied by many small fishes. The sea temperature and salinity were 14.97°C and 35.082, respectively.

From the photographic material taken in situ, it can be determined that the specimen belongs to *D. dalmatinum* showing the following morphological characters: the bell is milkish-white, shield-shaped and flatly rounded with a thicker central part (Fig. 1a). The numerous tentacles are longer than the diameter of the bell and of unequal lengths and thickness and are not grouped in separated clusters (Fig. 1b). It is to be noted that the exumbrellar markings seen in some Mediterranean animals are not visible in this individual, but may be imperceptible because of the quality of the photographic material (Fig. 1c). Figure 1d shows the complexly folded veil-like oral arms, which are almost as long as the bell diameter. The genus *Drymonema* is distinguished from *Cyanea* and *Desmonema* by the fact that its tentacles arise from the middle zone of the subumbrella and not in separated clusters.

Haeckel's finding from the Strait of Gibraltar has been questioned by Mayer (1910) and being such a rare medusa, it seemed important to document this occurrence.

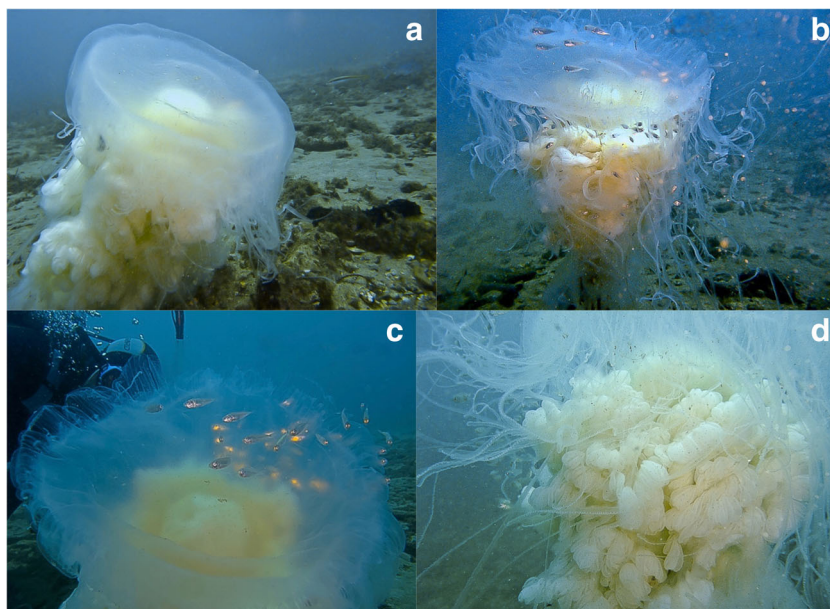
---

Communicated by S. Piraino

✉ Karen Kienberger  
kienberger@correo.ugr.es

<sup>1</sup> Department of Ecology and Coastal Management, Instituto de Ciencias Marinas de Andalucía (CSIC), Republica Saharaui 2, Puerto Real 11519, Cádiz, Spain

**Fig. 1** *Drymonema dalmatinum* from La Herradura, NE Alboran Sea, photographed on April 30, 2013. **a, b** Side view. **c** Aboral view. **d** Close-up of the oral arms (Photographic credits: S. Bellamy)



**Acknowledgements** We sincerely appreciate Dr. Alenka Malej, expert in this field, who was consulted and kindly confirmed the identification of the species. We thank S. Bellamy from Lacuna Beach Dive Centre (Torrox Costa, Malaga) for the report of the sighting. This work was financially supported by project PERSEUS (FP7-287600). K.K. was financially sustained by a PhD fellowship from the Rotary Foundation.

## References

- Bayha KM, Dawson MN (2010) New family of allomorphic jellyfishes, Drymonematidae (scyphozoa, Discomedusae), emphasizes evolution in the functional morphology and trophic ecology of gelatinous zooplankton. Biol Bull 219:249–267
- Haeckel E (1880) System der Acraspeden. Zweite Hälfte des System der Medusen. Verlag von Gustav Fischer, Jena, pp 361–672
- Malej A, Vodopivec M, Pestorić B, Lucić D, Onofri I (2014) The lesser-known medusa *Drymonema dalmatinum* Haeckel 1880 (Scyphozoa, Discomedusae) in the Adriatic sea. ANNALES Ser Hist Nat 9:79–86
- Mayer AG (1910) Medusae of the world, vol III: the Scyphomedusae. Carnegie Institution of Washington, Washington, DC.