Reef sites

In situ broadcast spawning of *Corynactis* sp. in Chilean Patagonia

Fig. 1 Spawning of *Corynactis* sp. in Comau Fjord, 12–15 m depth: specimen releasing eggs (a, b) and sperm (c, d); note specimens with extraordinarily large diameter compared to regular-sized specimens on top of picture c. Scale bars 10 mm. Photos: a–c: Vreni Häussermann, d: Ulrich Pörschmann. © Vreni Häussermann, all rights reserved

Mass spawning is well documented for many species of gamete-releasing scleractinians and for some species of actinarians, but little information is available for coral-llimorpharians. Here, we report in situ observations of broadcast spawning of a corallimorpharian anemone.

The benthos of Chilean Patagonian fjords is dominated by filter feeders and, below the low salinity layer, often by anthozoans. Cold-water coral banks and gorgonian meadows are the most eye-catching anthozoan communities in shallow water, but sea and jewel anemones may locally

be even more abundant. Specimens of the species *Corynactis* sp. form large clonal aggregations by longitudinal fission (Häussermann and Försterra 2009).

During a monitoring dive on June 21, the 8th day after full moon and the winter solstice, at the site “Cross Huinay North” (42°23′10.56″S; 72°27′43.08″W), we observed male and female *Corynactis* sp. spawning synchronously (Fig. 1). While specimens at the site normally have a column diameter of up to 1 cm, spawning individuals were more than twice that size (Fig. 1b). When diving at the same site the following day, no anemones were seen releasing gametes.

Corynactis australis has been reported to spawn twice a year, once in June and once in July (southern winter) (<http://www.natureseye.co.nz/spawning-jewel-anemones-nz/>).

Corynactis californica, a temperate species has been observed with spent gonads in late November and early December (early northern winter; Holts and Beauchamp 1993).

Inspired by the event, we are monitoring gametogenesis in *Corynactis* to discover the periodicity and detect the triggers for spawning, and to be able to bring fertile animals to the aquarium in order to study larval biology in a taxon whose reproductive biology is poorly understood.

References

- Häussermann V, Försterra G (2009) Marine benthic fauna of Chilean Patagonia. Nature in Focus, Puerto Montt
- Holts LJ, Beauchamp KA (1993) Sexual reproduction in the corallimorpharian sea anemone *Corynactis californica* in a central California kelp forest. Mar Biol 116:129–136

V. Häussermann (✉) · G. Försterra
Escuela de Ciencias del Mar, Pontificia Universidad Católica de Valparaíso, Avda. Brasil 2950, Valparaíso, Chile
e-mail: v.hausermann@gmail.com

Received: 12 August 2014 / Accepted: 19 December 2014 / Published online: 11 January 2015
© Springer-Verlag Berlin Heidelberg 2015

Coral Reefs (2015) 34:119
DOI 10.1007/s00338-014-1256-9