

A MESOPHOTIC HOTEL: THE OCTOCORAL *BEBRYCE* CF *GRANDICALYX* AS A HOST

Davide Maggioni, Simone Montano, Oliver Voigt, Davide Seveso, and Paolo Galli

Study Description

Mesophotic coral reefs are ecosystems found below 30 m and down to 150 m depth. Even though interest in these ecosystems has increased in recent years, several aspects still need further attention, including symbiotic associations. During survey of the upper mesophotic reefs in Faafu Atoll, Republic of Maldives, we observed a stable, and likely mutualistic, association between the octocoral *Bebryce* cf *grandicalyx*, a sponge belonging to the family Suberitidae, and the hydrozoan *Zanclaea timida*. Additionally, several other organisms were found dwelling on the octocoral and sponge surface, including amphipods, barnacles, entoprocts, flatworms, brittle stars, and foraminiferans.



Photo 1. A branch of a *Bebyrce* cf. *grandicalyx* colony associated with a dense colony of *Zanclea timida*. The surface of the octocoral, as well as the base of polyps, is completely overgrown by the sponge. Photo credit: Davide Maggioni.

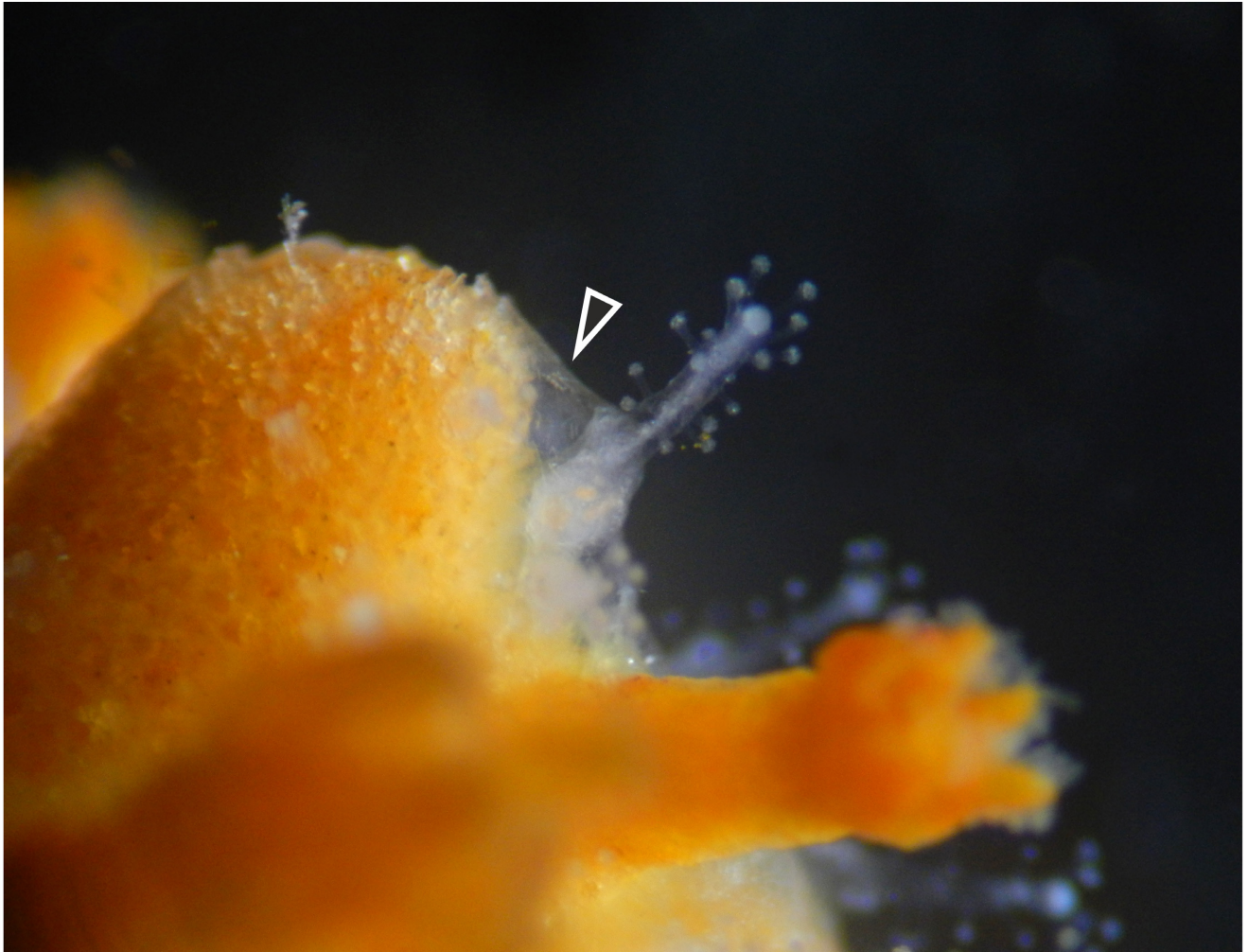


Photo 2. Close-up of the three-way association showing a polyp of *Zanclea timida* extending from *Bebryce* cf. *grandicalyx*. The arrowhead indicates the sponge covering the octocoral surface and the basal portion of the hydrozoan polyp. Photo credit: Davide Maggioni.



Photo 3. An amphipod observed on the octocoral–sponge surface, likely taking advantage from the increased habitat availability provided by the octocoral–sponge association. Photo credit: Davide Maggioni.

These photographs illustrate the article “A mesophotic hotel: the octocoral *Bebryce cf grandicalyx* as a host” by D. Maggioni, S. Montano, O. Voigt, D. Seveso and P. Galli published in *Ecology*. <https://doi.org/10.1002/ecy.2950>