

Growth rates of live *Lophelia pertusa* and *Madrepora oculata* from the Mediterranean Sea maintained in aquaria

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Fig. 1 Growth of *Lophelia pertusa* between December 2006 and November 2007, showing the enlargement of the polyp calyx (arrowed), and in November 2007 the addition of two new polyps (arrowed)

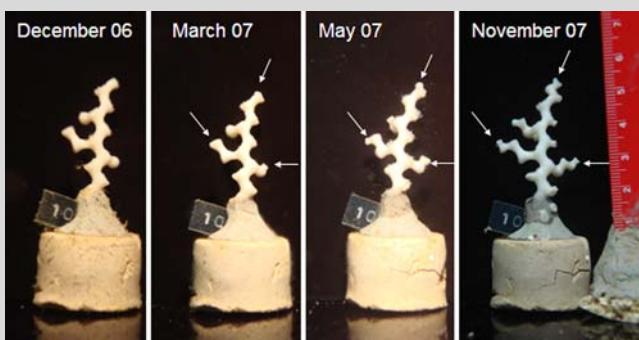


Fig. 2 Growth of *Madrepora oculata* between December 2006 and November 2007, showing the lengthening of branches (arrowed), new polyps and the covering of the artificial base by new tissue. Color differences in the last photograph are due to different lighting during photography

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C. Orejas (✉) · A. Gori · J. M. Gili

Instituto de Ciencias del Mar (CSIC), Passeig Maritim de la Barceloneta 37-49, 08003 Barcelona, Spain
e-mail: cova@icm.csic.es

Specimens of the corals *Lophelia pertusa* (Linnaeus, 1758) and *Madrepora oculata* (Linnaeus, 1758) were collected from depths of 218 and 214 m in the Cap de Creus Canyon ($42^{\circ}23'23''N$, $3^{\circ}18'53''E$; $42^{\circ}23'05''N$, $3^{\circ}19'E$), NW Mediterranean. For 15 months they were maintained in aquaria supplied with filtered natural seawater and frozen food (*Artemia* sp. and *Mysidacea*) once a day, under dark conditions. Water temperature varied from 11.5 to 12.5°C. During this period, the vertical linear extension of *L. pertusa* was 15–17 mm yr⁻¹, with an addition of 4 polyp yr⁻¹ (Fig. 1). The extension of *M. oculata* (Fig. 2) varied between 3 and 18 mm yr⁻¹, and 5 polyp yr⁻¹. Despite the general oligotrophic Mediterranean Sea environment (~ 1 mg Chl *a* l⁻¹ yr⁻¹), growth rates for both species were in the same range and in some cases higher than in situ measured rates for *L. pertusa* from the North Sea (Gass and Roberts 2006) and other deep coral species from Canadian waters (Risk et al. 2002).

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References

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