

{rokbox title=|Paramuricea macrospina population on a maërl bed on the Menorca Channel's continental shelf at 75 m depth :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-reproduccion-gorgonia-paramuricea-macrospina-grinyo-et-al-2018-thumb.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-reproduccion-gorgonia-paramuricea-macrospina-grinyo-et-al-2018.jpg{/rokbox}

Jordi Grinyó, Núria Viladrich, **David Díaz**, **Anabel Muñoz**, **Sandra Malloí**, Janire Salazar, Raquel Castillo, Josep-Maria Gili, Andrea Gori, 2018.

[Reproduction, energy storage and metabolic requirements in a mesophotic population of the gorgonian *Paramuricea macrospina*](#)

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Abstract: This study examined the sexual reproductive cycle, energy storage and metabolic requirements of a Mediterranean gorgonian in a mesophotic ecosystem (~70 m depth).

Paramuricea macrospina

resulted to be a gonochoric internal brooding species with a 1:1 population sex ratio. Oogenesis lasted ~12–14 months, whereas spermatogenesis was significantly shorter, only lasting 6 months. Fertilization occurred during late summer (August) and larval release occurred during autumn (September–October). The organic matter and total lipid content showed a slight seasonal variability. Stable isotopic composition remained constant throughout the year, reflecting a general stability in gorgonian food sources. Conversely, the free fatty acid composition varied seasonally, reflecting changes in *P. macrospina* energetic demands probably related to gametogenesis and larval brooding. The reproductive ecology and biochemical composition of

P. macrospina

significantly differ from shallow coastal gorgonian species, reflecting the higher environmental stability of deeper environments.

Keywords: