{rokbox title=|A: imagen in situ de una colonia del coral negro Antipathella wollastoni, B: detalle de una rama, C: detalle de los pólipos :: Image: Autores| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-biologia-reproduccion-coral-negro-antipathella-wollastoni-azores-rakka-et-al-2016-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-biologia-reproduccion-coral-negro-antipathella-wollastoni-azores-rakka-et-al-2016.jpg{/rokbox}

Maria Rakka, **Covadonga Orejas**, Iris Sampaio, João Monteiro, Hugo Parra, Marina Carreiro-Silva, 2016. **Reproductive biology of the black coral *Antipathella wollastoni* (Cnidaria: Antipatharia) in the Azores (NE Atlantic)**. Deep Sea Research Part II: Topical Studies in Oceanography. doi:10.1016/j.dsr2.2016.05.011

Abstract: *Antipathella wollastoni* is an antipatharian species common to Macaronesia, occurring in depths between 20 and 1425 m. Despite its importance as a habitat-forming species, there is no information about its basic biology. The aim of the current study is to describe its reproductive strategy, gametogenic cycle and reproductive timing. Sampling was performed monthly on six tagged colonies during one year and specimens were histologically processed. *A. wollastoni* was found to be a gonochoric broadcast spawner. Gametogenesis took place within the primary transversal mesenteries, and followed an annual cycle. The reproductive season coincided with an increase in seawater temperature but spawning, inferred from the disappearance of gametes, likely happened after the sea surface temperature peak of the year (September 2009). Polyp fecundity ranged from 1 to 309 oocytes/polyp. A decrease in polyp fecundity was detected in samples at the higher pre-spawning maturity stage, indicating possible repetitive spawning or oocyte absorption. Intra-colonial comparisons revealed a longer duration of the reproductive cycle in the medial colony section, and a gradient of increased oocyte size towards the apical section, possibly due to intra-colonial differences in energy allocation between reproduction and other biological processes, or as a strategy against predation on gametes/larvae. Colony height was positively correlated with polyp fecundity indicating that the reproductive output increases with colony size.

Keywords: Antipatharia, reproductive patterns, gametogenesis, Atlantic Ocean, Azores