Author's Accepted Manuscript

Reproduction of the cold-water coral *Primnoella chilensis* (Philippi, 1894)

Ashley M. Rossin, Rhian G. Waller, Gunter Försterra



 PII:
 S0278-4343(17)30068-7

 DOI:
 http://dx.doi.org/10.1016/j.csr.2017.06.010

 Reference:
 CSR3614

To appear in: Continental Shelf Research

Received date: 10 February 2017 Revised date: 13 June 2017 Accepted date: 13 June 2017

Cite this article as: Ashley M. Rossin, Rhian G. Waller and Gunter Försterra Reproduction of the cold-water coral *Primnoella chilensis* (Philippi, 1894) *Continental Shelf Research*, http://dx.doi.org/10.1016/j.csr.2017.06.010

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

CCEPTED MANUSCR

Reproduction of the cold-water coral *Primnoella chilensis* (Philippi, 1894)^{\ddagger}

Ashley M. Rossin¹, Rhian G. Waller^{1*}, Gunter Försterra²

¹School of Marine Sciences, The University of Maine, 193 Clarks Cove Rd, Walpole, ME, 04573, USA

²Pontificia Universidad Católica de Valparaíso, Facultad de Recursos Naturales, Escuela de Ciencias del Mar, Avda. Brasil 2950, Valparaíso, Chile, and Huinay Scientific Field Station, nanusci Casilla 462, Puerto Montt, Chile

*Corresponding author: rhian.waller@maine.edu

Abstract

This study examined the reproduction of a cold-water coral, Primnoella chilensis (Philippi, 1894) from the Comau and Reñihué fjords in Chilean Patagonia. Samples were collected in September and November of 2012 and April, June, and September of 2013 from three sites within the two fjords. The sexuality, reproductive mode, spermatocyst stage, oocyte size, and fecundity were determined using histological techniques. This species is gonochoristic with one aberrant hermaphrodite identified in this study. Reproduction was found to be seasonal, with the initiation of oogenesis in September and suggested a broadcast spawning event between June and September. The maximum oocyte size was 752.96µm, suggesting a lecithotrophic larvae. The maximum fecundity was 36 oocytes per polyp. Male individuals were only found in

^{*} Funding for this project was provided by National Geographic (GEFNE26-11) and the National Science Foundation (USA) Biological Oceanography RAPID program (OCE-1219554).

Download English Version:

https://daneshyari.com/en/article/5764450

Download Persian Version:

https://daneshyari.com/article/5764450

Daneshyari.com