

Accepted Manuscript

Megafauna benthic of outer margins of the continental shelf of Yucatan Peninsula

Juan Carlos Rubio-Polania, Daniel Torruco-Gómez, Alicia González, Jose Ordaz, Yuleila Caamal-Jiménez



PII: S2352-4855(18)30210-X
DOI: <https://doi.org/10.1016/j.rsma.2018.08.014>
Reference: RSMA 418

To appear in: *Regional Studies in Marine Science*

Received date: 30 May 2018
Revised date: 21 August 2018
Accepted date: 23 August 2018

Please cite this article as: Rubio-Polania J.C., Torruco-Gómez D., González A., Ordaz J., Caamal-Jiménez Y., Megafauna benthic of outer margins of the continental shelf of Yucatan Peninsula. *Regional Studies in Marine Science* (2018), <https://doi.org/10.1016/j.rsma.2018.08.014>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final 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.

1 Megafauna benthic of outer margins of the continental shelf of Yucatan Peninsula

2 Juan Carlos Rubio-Polania¹, Daniel Torruco-Gómez^{2*}, Alicia González³, Jose Ordaz⁴, Yuleila
3 Caamal-Jiménez⁵

4 ¹⁻⁵Functional groups of Coral Reefs Laboratory, Centro de Estudios Avanzados y Educación
5 Superior CINVESTAV-IPN, Mérida, Yucatán, México. Antigua carretera a Progreso km 6,
6 Cordemex 97310. Mérida, Yucatán.

7 *Corresponding author: <dantor@cinvestav.mx>; phone number (052) 999 9429400 ext. 2588

8 Abstract

9 Megabenthic community on the continental shelf of the Yucatan Peninsula was evaluated
10 during November 2015 and April 2016. Samples were collected at sixteen sites with a trawl
11 net within a depth range of 50 to 200 m, in three sectors (west, central and east) relative to the
12 Yucatan Current. Total abundance was 228,545 Ind km⁻² which represent a total biomass
13 value of 456.43 kg AFDW km⁻². Main abundant taxa were crustaceans and mollusks (94,974
14 Ind km⁻² and 88,891 Ind km⁻², respectively), while crustaceans and poriferans showed highest
15 biomass values (352.5 kg AFDW km⁻² and 35 kg AFDW km⁻², respectively). *Achelous*
16 *spinicarpus* (53,938 Ind km⁻²) and *Turritela radula* (21,577 Ind km⁻²) were the most abundant
17 species, meanwhile highest contribution to the community biomass was provided by *P. argus*
18 (146 kg AFDW km⁻²) and *A. spinicarpus* (45 kg AFDW km⁻²). Abundance and biomass
19 values were higher in the west sector than the others. Values for H' fluctuated from 0.55 to
20 3.34, with the highest values in the west sector. Evenness was high at almost all sampling
21 sites. Multisite beta diversity had values of Beta_{sor}>0.85, Beta_{sim}>0.78 and Beta_{nest}< 0.09.

Download English Version:

<https://daneshyari.com/en/article/10115906>

Download Persian Version:

<https://daneshyari.com/article/10115906>

[Daneshyari.com](https://daneshyari.com)