

Author's Accepted Manuscript

Live and dead deep-sea benthic foraminiferal macrofauna of the Levantine basin (SE Mediterranean) and their ecological characteristics

Orit Hyams-Kaphzan, Hadas Lubinevsky, Onn Crouvi, Yehudit Harlavan, Barak Herut, Mor Kanari, Moshe Tom, Ahuva Almogi-Labin



www.elsevier.com

PII: S0967-0637(17)30236-4
DOI: <https://doi.org/10.1016/j.dsr.2018.04.004>
Reference: DSR12901

To appear in: *Deep-Sea Research Part I*

Received date: 23 July 2017
Revised date: 3 April 2018
Accepted date: 10 April 2018

Cite this article as: Orit Hyams-Kaphzan, Hadas Lubinevsky, Onn Crouvi, Yehudit Harlavan, Barak Herut, Mor Kanari, Moshe Tom and Ahuva Almogi-Labin, Live and dead deep-sea benthic foraminiferal macrofauna of the Levantine basin (SE Mediterranean) and their ecological characteristics, *Deep-Sea Research Part I*, <https://doi.org/10.1016/j.dsr.2018.04.004>

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 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.

Live and dead deep-sea benthic foraminiferal macrofauna of the Levantine basin (SE Mediterranean) and their ecological characteristics

Orit Hyams-Kaphzan^a, Hadas Lubinevsky^b, Onn Crouvi^a, Yehudit Harlavan^a, Barak Herut^b, Mor Kanari^b, Moshe Tom^b, Ahuva Almogi-Labin^a

^aGeological Survey of Israel, 30 Malkei Israel, Jerusalem 9550161, Israel

^bIsrael Oceanographic and Limnological Research, P.O.B. 8030, Haifa, 31080, Israel

Corresponding author: Dr. Orit Hyams-Kaphzan, Geological Survey of Israel, 30 Malkei Israel, Jerusalem 9550161, Israel. Telephone: 972-2-5314234, E mail: orithy@gsi.gov.il

ABSTRACT

The present study sought to quantitatively characterize the live and dead benthic foraminifera communities of the deep southeastern Levantine basin of the Mediterranean Sea (33.4-31.7 N, 31.3-34.9 E; 100 - 1900 m water depth) and their relationships to environmental conditions. Box corer samples were collected at 50 sites between June and July 2013. The foraminiferal macrofauna (> 250 μm) were enumerated and identified (76% to the species level). Six live foraminiferal assemblages were identified, inhabiting six biotopes, the shelf margin (SM), two upper continental slopes (UCS1 and UCS2), the lower continental slope (LCS), the eastern bathyal plain (EBP) and the western bathyal plain (WBP). The dead communities were divided into four biotopes, generally compatible with the live ones, excluding the UCS2 and the EBP. The foraminiferal density in the various live biotopes was relatively stable across the studied area, excluding the UCS2 and EBP, unlike the density of the dead shells, which increased with depth. The number of taxa per biotope was estimated by rarefaction curves and compared to the observed numbers, with a decreasing number of live taxa with water depth. The alpha-diversity, which was evaluated in relation to the number of sampled individuals, reached an asymptote in all biotopes, with very low values in the WBP. The within-biotope heterogeneity was evaluated by the average Chao-Sørensen similarity index and by a beta-diversity index ($\exp(\gamma)$

Download English Version:

<https://daneshyari.com/en/article/8884220>

Download Persian Version:

<https://daneshyari.com/article/8884220>

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