

## **An outline of amphipod assemblage along the Mediterranean Israel coast: data from 2010 to 2017.**

Iaciofano D.<sup>1</sup>, Mancini E.<sup>2,3</sup>, Hadas Lubinevsky<sup>4</sup>, Lo Brutto S.<sup>1,3</sup>

<sup>1</sup> Dept. DiSTeM, University of Palermo, via Archirafi 20, Palermo, Italy

<sup>2</sup> Department of Biological and Environmental Sciences and Technologies, DiSTeBA, University of Salento, 73100, Lecce, Italy

<sup>3</sup> National Biodiversity Future Center (NBFC), University of Palermo, Italy

<sup>4</sup> Israel Oceanographic and Limnological Research, P.O.B 8030, Haifa 31080, Israel

Presenting author: Sabrina Lo Brutto [sabrina.lobritto@unipa.it](mailto:sabrina.lobritto@unipa.it)

In the last decades, the Levantine Basin has been influenced by increasing anthropogenic pressures. Locally, intense human activities and increased maritime transportation imposed heavy pressure on the coastal and deep-water ecosystems. A monitoring taxonomic survey covering a period ranging from 2010 to 2017 was addressed to identify macrozoobenthos including the crustacean amphipods. It was a period that preceded a government decision (December 2018) to expand the National Monitoring Program in line with the United Nations Environmental Program's (UNEP) Integrated Monitoring and Assessment Program (IMAP).

A study of the amphipod fauna – a dominant taxon of the benthic ecosystems – was conducted on a soft littoral bottom area. A total of 25 species were detected under the monitoring survey on the same sites, all georeferenced, in Haifa Bay and neighbouring areas. The dataset showed a stable assemblage of the most common species, with sporadic records of a second group of species usually associated with sediments of macroalgae or seagrasses. Five species showed the greatest abundance and a temporally constant presence: the Levantine endemic *Cheiriphotis mediterranea*; the NE-Atlantic–Mediterranean *Bathyporeia guilliamsoniana* and *Perioculodes longimanus*; and the widely distributed *Urothoe grimaldii*, a species with a presumable distribution in the Atlantic Ocean, the Mediterranean Sea and the Indian Ocean. Other species were rare and recorded only one time (e.g. *Apolochus neapolitanus* and *Synchelidium longidigitatum*). In addition, an alien species was found, the circumtropical aorid *Grandidierella bonnieroides* which resulted naturalized. Such temporal pattern provided a knowledge baseline for the successive monitoring years and contributed to implementing the identification of the marine biogeographic regions.