{rokbox title=|Pasiphaeid shrimps :: Image: Pere Abelló (ICM-CSIC)| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-variabilidad-geografica-distribucion-pasiphaeid-shrimps-western-mediterranean-simao-et-al-2015-thumb.jpg|} images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-variabilidad-geografica-distribucion-pasiphaeid-shrimps-western-mediterranean-simao-et-al-2015.jpg{/rokbox}

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Abstract: This work aimed to analyse the main characteristics of the bathymetric and geographic distribution, population size structure and size at maturity of the continental slope caridean shrimps *Pasiphaea sivado* and *Pasiphaea multidentata* in the western Mediterranean, as well as to try to relate the patterns obtained with geomorphologic and hydrographic characteristics. The study area encompassed the Mediterranean coast of the Iberian Peninsula. In both species, marked differences in depth distribution, density, and population size structure were found between Algerian basin populations, particularly in the Alboran Sea, and those in the Catalano-Balearic basin. Both shrimps showed a shallower bathymetric range in the westernmost region of the Algerian basin than in the rest of geographic sectors, linked to the occurrence of upwelling areas on the northwestern edges of the Alboran Sea. Populations of *P. sivado* reached larger densities, sizes and maturity size in the Algerian basin. No recruitment of *P. multidentata* was detected in the Algerian basin, whereas it was present in the Catalano-Balearic basin. In both species, the window range of bottom temperature and salinity was larger in juveniles than in adults. These different distribution and population dynamics imply that ecological functioning of these species differs between the two geomorphological basins of the western Mediterranean Sea.

Keywords: Pasiphaea, density, biomass, recruitment, maturity size, population dynamics, size structure