{rokbox title=|Ejemplar de Astropecten :: Foto: Marc Baeta (ICM-CSIC)| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-montserrat-ramon-astropecten-baeta-et-al-2013-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-montserrat-ramon-astropecten-baeta-et-al-2013.jpg{/rokbox}

Marc Baeta, **Montserrat Ramón**, (2013). **Feeding ecology of three species of Astropecten (Asteroidea) coexisting on shallow sandy bottoms of the northwestern Mediterranean Sea** . Marine Biology. DOI 10.1007/s00227-013-2270-0

Abstract: Predation and competition are important biotic interactions influencing populations and communities in marine soft sediments. Sea stars are ubiquitous predators with diverse diets that play functionally important roles in the benthos. In this study, we examined the diet and the ecological roles of three sympatric species of the genus Astropecten (*A. aranciacus*, *A. irregularis pentacanthus* and *A. platyacanthus*). The study was performed between March 2010 and February 2011 on the Maresme coast (northwestern Mediterranean Sea). Results showed that their main diet consisted on gastropods and bivalves, such as *Glycymeris glycymeris* , *Callista chione* , *Gibbula guttadauri* and *Cyclope neritea* . Food competition between species was avoided by partition of prey resources. Intraspecific differences in the dietary compositions between seasons were found, but not between size classes. Ontogenetic patterns of prey size consumption were recognized in the three species. A large diet overlap was detected between *A. aranciacus* and *A. platyacanthus* in winter, due to changes in prey availability. Nevertheless, the analysis of the infaunal community composition and stomach contents indicated that food selection was not associated with prey availability.

Keywords: predator–prey relationships, sea stars, food selection, Maresme coast