

{rokbox title=|Misidáceos :: Foto: Carmen Barberá (COB-IEO)|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-carmen-barbera-misidaceos-posidonia-barbera-et-al-2013-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-carmen-barbera-misidaceos-posidonia-barbera-et-al-2013.jpg{/rokbox}

Carmen Barberá, Pablo Sanchez-Jerez, Jean Claude Sorbe, (2013). [Population structure and secondary production of *Siriella clausii*, a dominant detritus feeding mysid in *Posidonia oceanica* meadows \(W Mediterranean Sea\)](#)

. Estuarine, Coastal and Shelf Science. Volume 131, 10 October 2013, Pages 103–116.

Abstract: Temporal trends in abundance, demographic structure of the population and secondary production of *Siriella clausii* were studied at three different sectors of *Posidonia oceanica*

meadows in the SE Iberian Peninsula, with different levels of habitat complexity. Secondary production was calculated through three methods widely employed in marine invertebrates: the Hynes method (based on demographic structure data) and models by Morin-Bourassa and Brey (based on biomass data). This filter/grazer and detritus feeder is the most abundant mysid in *P. oceanica*

seagrass meadows in the Mediterranean. The population structure was similar in the three sectors, but the temporal pattern of abundance was different, at times even opposite. This pattern may be related to the aggregated spatial distribution, metapopulation dynamics or stochastic factors, but other potential factors could be involved, such as habitat features or predation rates. The values of production oscillated between 25 and 60 mgAFDW/m²/year, depending on the calculation method that was applied, and showed differences between sites and seagrass complexity. The present values are intermediate between those characterising highly productive systems, such as estuaries, and systems of limited productivity (bathyal habitats). Compared to other peracarids, mysid production is greater than that of isopods and less than amphipod production. This is possibly related to the life cycle and reproductive strategies. Detritus feeders such as

S. clausii

may play an important trophic role due their capacity to use as food the biomass associated to detritus, which constitutes larges reservoirs of carbon derived from seagrass primary production.

Keywords: secondary production, demographic structure, mysids, detritus feeder, seagrass, *Posidonia oceanica* meadows, habitat complexity, trawling effects