{rokbox title=|Larval collector sites in the Western Mediterranean and Adriatic seas :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-recruitment-disruption-role-unaffected-populations-recovery-pinna-nobilis-mass-mortality-event-kersting-et-al-2020-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-recruitment-disruption-role-unaffected-populations-recovery-pinna-nobilis-mass-mortality-event-kersting-et-al-2020.jpg{/rokbox}

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Recruitment Disruption and the Role of Unaffected Populations for Potential Recovery After the *Pinna nobilis* Mass Mortality Event.

Front. Mar. Sci. 7:594378. doi: 10.3389/fmars.2020.594378.

Abstract: A devastating mass mortality event (MME) very likely caused by the protozoan *Haplosporidium pinnae*
first detected in 2016 in the Western Mediterranean Sea, is pushing the endemic bivalve *Pinna nobilis*
to near extinction. Populations recovery, if possible, will rely on larval dispersal from unaffected sites and potential recolonization through recruitment of resistant juveniles. To assess the impact of the MME on the species' larval recruitment, an unprecedented network of larval collector stations was implemented over several thousands of kilometers along the Western Mediterranean coasts during the 3 years after the onset of the MME. The findings of this network showed a generalized disruption in recruitment with dramatic consequences for the recovery of the species. However, there were exceptions to this pattern and recruits were recorded in a few sites where the resident population had been decimated. This hints to the importance of unaffected populations as larval exporting sources and the role of oceanographic currents in larval transport in the area, representing a beacon of hope in the current extremely worrying scenario for this emblematic species.

Keywords: critically endangered, mass mortality, recruitment, larval connectivity, Mediterranean

Sea, hydrodynamic model, Lagrangian trajectories, recovery