

Antarctic shallow subtidal echinoderms: Is the ecological success of broadcasters related to ice disturbance?

Palma, Alvaro T.

Poulin, Elie

Silva, Marcelo G.

San Martín, Roberto B.

Muñoz, Carlos A.

Díaz, Angie D.

One characteristic pattern found in the marine Antarctic shallow environments is the unusually high proportion of species with protected and pelagic lecithotrophic development modes. However, species with planktotrophic development generally appear as the most conspicuous types of organisms in these environments. The Antarctic shallow benthos is considered as one of the most disturbed in the world, mainly due to the action of ice, thus one could hypothesize that such an environment should favor organisms with high dispersal capability. In order to test this general hypothesis, for two consecutive summers (2004-2005) and at two locations, we quantified the abundance and size distribution of most echinoderms present along bathymetric transects. Our results show the predominance of broadcasters (i.e., *Sterechinus neumayeri* and *Odontaster validus*) at a location where disturbances are common, while brooders (e.g., *Abatus agassizii*) only occurred at shallower depths of the least disturbed loc