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Foto: Luis Dantart

the meiofauna. No differences were detected between the two stations in terms of meiofauna composition and diversity but meiobenthos densities were significantly higher (2996 ind/10 cm⁻² on yearly average) in the station with less *Zostera* biomass. It was shown that the *Zostera* root densities had a negative effect on the meiobenthic densities.

The use of digital photography for benthic coastal community characterization and quantification.

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Sampling benthic communities usually requires intensive field and lab work which is generally performed by skilled staff. In places where algae are the dominant organisms covering rocky shores, such as the Azores, biotope characterization studies focus on the more conspicuous algae species, thus reducing the required skill level of species identification. The present study intends to compare in situ quadrat quantifications conducted by a skilled reader, with computer based quadrat quantifications using digital photographic records of the same areas read in situ, conducted by skilled and non-skilled readers. The study was conducted inter- and subtidally at various shore heights/depths. Quantification of algal coverage, both in situ and computer based, used the point to point method with quadrats of 25x25cm for the intertidal, and 50x50cm for the subtidal surveys, both subdivided into 36 intersection points. Significant differences were found between in situ readings and computer based readings of photographic records conducted both by experienced and inexperienced readers.

Adivine cuántas larvas se esconden en el estrecho de Bransfield, Antártica

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Desde finales del siglo XIX, se han propuesto numerosos paradigmas sobre la biología de invertebra-

dos marinos de la Antártida. Según la hipótesis de Thorson, a medida que aumenta la latitud y la profundidad disminuye el número de especies con estadio larvario pelágico y de alimentación debido a la reducida disponibilidad de alimento. Sin embargo, recientes investigaciones a cerca del meroplancton antártico han revelado una alta diversidad y abundancia de formas larvarias de invertebrados bentónicos. En el presente estudio, intentamos demostrar que la presencia de larvas de invertebrados marinos en la Antártida es mucho más general de lo que se creía y cómo los factores físicos afectan a su distribución. Las muestras fueron recogidas con una red múltiple de plancton (BIONESS) modificada para este proyecto en una BIONESS DUAL NET, en cinco intervalos de profundidades a lo largo de cuatro transectos en el Estrecho de Bransfield, entre Diciembre de 2002 y Enero de 2003. De los 25 tipos larvarios que existen hemos encontrado 16, siendo las nectoquetas de poliquetos y las braquiolarias de asteroideos los más abundantes. La mayor abundancia larvaria está asociada a la corriente procedente del Mar de Bellingshausen que discurre paralela al archipiélago de las Shetland del Sur, formando el frente del talud, capas de mezcla y de máxima corriente; mientras que en la fría corriente de Weddell, próxima a la Península Antártica, las larvas son escasas. Hemos encontrado una fuerte dependencia larvaria de las masas de agua, profundidades y frentes.

Changes in the composition and structure of Mediterranean rocky-shore communities following a gradient of sewage pollution: assessment f water regarding macroalgae.

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Changes in the species composition and structure of Mediterranean macroalgal-dominated communities from the upper sublittoral zone are described along a gradient of sewage pollution. Ulva-dominated communities only appear close to the sewage outfall. Corallina-dominated communities replace ulvacean algae at intermediate levels of pollution. Cystoseira-dominated communities thrive in the reference site but already appear at nutrient levels that are three-fold higher than those reported from unpolluted sites. Assemblage variability of Cystoseira-dominated communities decreases along the gradient of pollution. Methods based on the functional-form groups of macroalgae to assess the water quality provide equivocal results at intermediate levels of pollution because species belonging to the same group can display a completely different response to pollution. On the other side, methods based on indicator species - found with correlational evidences among species abundances and pollution levels - seem to have better performances in water quality assessment.