DIVERSITY OF NATIVE AND EXOTIC PERACARID SPECIES IN MARINE PORTS OF SOUTHWESTERN ATLANTIC

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Ports are considered important sites for reception and dispersion of marine exotic species throughout the world, making monitoring studies necessary to determine the vulnerability of these areas to those species. Peracarids are characterized by larval stages restricted to female brood pouch and juveniles with a low dispersal rate. However, several species have invaded a large number of environments worldwide, making them an excellent model for invasion studies. The main objective of this work was to study the diversity of peracarid species in two ports of Argentina (Mar del Plata: MDP, 38°02'S-57°32'W; Puerto Madryn: PMY, 42°44'S-65°01'W) in order to establish the current status of exotic and native species. In addition, we compared these results with previous data from other ports of the region, to discuss the susceptibility of these areas to biological invasions. We collected 5 samples seasonally from 2016 to 2017, by hand and scuba diving, scraping fouling in 0.20x0.20 m quadrants. Each sample was kept in plastic bags with ethanol 96%. In the laboratory, peracarid specimens were separated, identified and classified as exotic, native and cryptogenic (i.e. species that cannot be reliably demonstrated as being either introduced or native). In MDP port we registered 7 exotic species (*Erichthonius brasiliensis*, *Jassa marmorata*, *Jassa slatteryi*, *Monocorophium acherusicum*, *Paracerceis sculpta*, *Dynamene edwardsi*, *Sphaeroma serratum*) and 3 cryptogenic (*Caprella dilatata*, *Caprella equilibra*, *Tanais dulongii*); while, in PMY port we recorded 2 exotic species (*J. marmorata*, *M. acherusicum*), 2 native (*Cymodoce bentonica*, *Exosphaeroma lanceolatum*), 1 cryptogenic (*T. dulongii*), 2 could not be taxonomically determined (*Leucothoe* cf. *spinicarpa*; *Pseudosphaeroma* sp) and 1 species could have been settled by natural dispersion (*Idotea balthica*). When comparing among ports, MDP showed the highest number of exotic and cryptogenic species (n=10); while in the rest of the 9 ports surveyed, from Quequén (38°S) to Ushuaia (54°S), only 0-4 species have been recorded. This study and previous records, including the first review of exotic species in the region, revealed that the total number of exotic and cryptogenic peracarid species from coastal environments of SW Atlantic has increased in ca. 50%. We suggest that the observed differences in exotic and cryptogenic species richness are closely related to dissimilarities in ports structure, their activity and to environmental factors.

Keywords: Argentina, exotic species, native species, Peracarida, ports.