Is invasive macroalgae *Lophocladia lallemandii* inducing changes in epiphyte community of endemic bivalve *Pinna nobilis*?

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Invasive species are one of the main factors that threat ecological communities. The red alga *Lophocladia lallemandii* (Montagne) F. Schmitz is a recognized invader in marine ecosystems around the Mediterranean. The aim of the present study is to characterize the structure of the epiphytic native species of *Pinna nobilis* population in the Archipelago of Cabrera National Park (ACNP) among which *L. lallemandii* is attaining high colonization rates. The study is integrated in a protected area where it is least influenced by human activity, and consequently, less impacted by invasive macroalgae. Although we found that more than a half of the population of *P. nobilis* in Cabrera was epiphyted by *L. lallemandii*. The study was carried out monthly during eight months, from April to November 2011, according to the length size distribution of *P. nobilis* population census in the ACNP: 3 small (≤19 cm), 4 medium (19-38 cm) and 3 large (>38 cm). It has been quantified a total of three size ranges in a population with a high number of individuals. The community of native epiphytes on the shell of *P. nobilis* has high ecological importance because it is a centre of aggregation and contributes to increase the biotope complexity level. The results suggest that the presence of the invasive macroalgae *L. lallemandii* produce changes on the composition of the native species on the fan mussel *P. nobilis* individuals in the ACNP. Native species of *P. nobilis* denote a high variability in the number of species, species coverage and species richness. Diversity of native species declines over time with the presence of *L. lallemandii*.

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