

Ecological Aspects of Algal Infectious Diseases

Juan A. Correa & Pablo A. Sánchez

Abstract

This study reports some epidemiological aspects of the infections of *Mazzaella laminarioides* by *Endophyton* sp. and *Pleurocapsa* sp., the organisms associated with the green patch and deformative diseases respectively.

Infections affected an important segment of the host population and persisted throughout the year. The main infecting organism was *Endophyton* sp. Frequency, density and intensity index showed seasonal variations, with lower values in winter. It is suggested that tissue weakening and changes in the biomechanical properties of the infected individuals could be the responsible for this seasonal pattern of variation.

This study demonstrates that, at the host population level, the two life history stages of *M. laminarioides* are susceptible to the pathogens. We also detected an association between reproduction of the host and infection, although the basis for it are unknown.

The two pathogens showed different intra-frond distribution, with *Endophyton* sp. affecting preferentially the base of the frond. The spatial distribution within the beach was different for each pathogen. The main impact of *Pleurocapsa* sp. was recorded at the center, more protected sector of the beach.