

Prophylactic effect of



This paper explores the possibility of using the supernatant of *Haslea ostrearia* culture containing marennine, a natural microalgal pigment, as an antimicrobial in bivalve hatcheries. The blue mussel *Mytilus edulis* and the scallop *Placopecten magellanicus* were used as model animals, and the pathogenic marine bacteria *Vibrio splendidus* was used to induce larval mortality. The hypothesis tested was that *V. splendidus* pathogenicity in larval rearings can be controlled by using marennine-containing culture supernatants. The effect of three marennine concentrations was tested on a larval rearing over 20 days for *M. edulis* and 9 days for *P. magellanicus*. At a low dose (0.1 mg L⁻¹), survival and physiological condition were both higher than in the control. In bacterial challenges, larvae were exposed to *V. splendidus* for 72 h, with or without marennine. The bacterial challenge caused significant mortality when compared to controls, while the marennine-treated larvae showed significantly higher survival. Results show that marennine is an interesting molecule for pathogen control in hatcheries as it is active at low concentrations and significantly enhanced

larval survival and physiological condition.

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