Application of nanocomposites for control of biofouling organisms in marine aquaculture

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Abstract

One of the major problems in marine aquaculture is the existence of biofouling or sticky organisms, which, by sticking to cage nets, lead to biofilms and thus block or tear the nets, escape the fish, cage heavier, and lack of optimal oxygen transfer and ultimately disorder their destructive effects. The techniques used to reduce biofouling are called anti-fouling. Different mechanical, chemical and biological methods exist to reduce sticky organisms, each with its own advantages and disadvantages. In this study, nanocomposites-based biological anti-fouling, that is used to reduce biofouling organisms in marine environments were evaluated.

Keywords: biofouling organisms, marine aquaculture, nanocomposites, anti-fouling