Accepted Manuscript

Reduction of diarrhetic shellfish poisoning (DSP) toxins accumulation in cultured mussels by means of rope clustering and hydrodynamic barriers

Juan Blanco, Helena Martín, Carmen Mariño

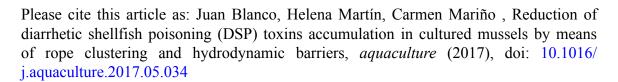
PII: S0044-8486(17)31048-7

DOI: doi: 10.1016/j.aquaculture.2017.05.034

Reference: AQUA 632667

To appear in: aquaculture

Received date: 29 June 2016 Revised date: 19 May 2017 Accepted date: 26 May 2017



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Reduction of diarrhetic shellfish poisoning (DSP) toxins accumulation in cultured mussels by means of rope clustering and hydrodynamic barriers

Juan Blanco¹, Helena Martín, Carmen Mariño

Centro de Investigacións Mariñas, Xunta de Galicia, Pedras de Corón s/n, Apdo 13, 36620 Vilanova de Arousa. Spain.

Keywords: DSP; diarrhetic shellfish poisoning; Mitigation; Mussel; hydrodynamic barrier; grouping; accumulation

Abstract

Accumulation of marine toxins in the organisms is one of the most important problems of the bivalve aquaculture. Mitigation methods are difficult to implement especially in species, as the mussel Mytilusgalloprovincialis, which have a relatively low commercial value. For this species, one possible way of decreasing the toxin accumulation is to restrict the availability of toxic cells to the mussels by means of the reduction of the water flow around the perimeter of the culture ropes. We have checked the effectivity to decrease the accumulation of DSP toxins (okadaic acid) in mussels of two ways of obtaining that reduction: surrounding the ropes with a fishing net (1 cm mesh); and grouping the ropes (groups of four). During a four week period –with relatively high concentrations of particulate matter– those two ways were tested and shown to effectively

¹ Corresponding Author: Phone: +34886206364; e-mail: juan.carlos.blanco.perez@xunta.gal

Download English Version:

https://daneshyari.com/en/article/5539283

Download Persian Version:

https://daneshyari.com/article/5539283

<u>Daneshyari.com</u>