

عنوان مقاله:

Determination the changes of E. coli depuration times in Ruditapes decussatus and Venus verrucosa by production area and species differences

محل انتشار:

دومین همایش بین المللی و چهارمین همایش ملی توسعه پایدار دریا محور (سال: 1402)

تعداد صفحات اصل مقاله: 5

نویسندگان:

İbrahim Ender KÜNLİ - Çanakkale Onsekiz Mart Üniversitesi, Deniz Bilimleri ve Teknolojisi Fakültesi, Avlama ve İşleme Teknolojisi Bölümü, Çanakkale, Türkiye

Selin Özge DİNÇ - Çanakkale Onsekiz Mart Üniversitesi, Çanakkale Uygulamalı Bilimler Fakültesi, Gıda Teknolojisi Bölümü, Çanakkale, Türkiye

خلاصه مقاله:

In this study, two important economic bivalve mollusc species, grooved carpet shell (*Ruditapes decussatus*) and warty venus (*Venus verrucosa*) were contaminated with *Escherichia coli* (*E. coli*) and the time-dependent changes in their ability to depuration process. At the same time, after the natural *E. coli* loads of these two species were determined, the natural depuration times were also determined by subjecting them to depuration process separately. In addition to this, it was also tried to determine whether the differences in both bacterial load and production area influence the depuration time by comparing the species grown in production areas with different commercial fishing permits for the carpet shell. The natural *E. coli* loads of the carpet shell and warty venus samples used in the research were determined as 1500 MPN/100 g in batch-A samples, 430 MPN/100 g in batch-B samples while the level was determined as 74 MPN/100 g warty venus samples. The naturally loaded sample decontamination process was completed 18 hours after the start of the process for batch-A samples and 6 hours after the start of the process for batch-B and warty venus samples, and it was determined that the products reached Class A production area standards. In the contamination application and *E. coli* level 2900 MPN loaded batch A-B and warty venus samples; warty venus samples were decontaminated at the 12th hour, batch A-B samples were decontaminated at the 18th hour, and they reached class A production area standard (<230 MPN). As for the samples loaded with 4600 MPN, batch-A and warty venus samples reached the Class A production area standard after 24 hours and batch B samples reached the Class A production area standard after 48 hours. As a conclusion, species, and sample collection sites may have effect on depuration characteristics of *E. coli* and this may be related to physiological conditions of the specimens during the collection sites.

کلمات کلیدی:

*Ruditapes decussatus*, *Venus verrucosa*, *E. coli*, depuration, bivalve

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1972643>

