عنوان مقاله:

Research Article: Effect of saffron nanoemulsion on the shelf life extension of shrimp, Penaeus semisulcatus using an ultrasonic homogenizer

محل انتشار:

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خلاصه مقاله:

As the prolongation of shelf life in fish processing is one of the industrial importance, it seems that food and aquatic scientists have been moving toward a point where more novel and efficient methods for refraining from food wastage like integrative systems using nanotechnology-based approaches. Penaeus semisulcatus(n=۲۴) were covered with saffron nanoemulsionat ۰% (control, group ۱), ۳% (group ۱), and ۵%(group ۲).They were kept at ۴ and ۸°C until further testing. The samples were assessed for microorganisms, sensory quality, peroxide value (PV), and pH.The lowest total count of bacteria, coliform count, and psychrophilic count were observed in the shrimp samples covered with ۳ and ۵% saffron nanoemulsions stored at ۴and ۸°C, respectively (p<۰.۰۵). The lowest PV and pH were seen in the shrimp samples covered with ۳-۵% saffron nanoemulsions stored at ۴°C (p<۰.۰۵).It is concluded that nanoemulsions of saffron ۳% or ۵% can enhance the shelf life of shrimp,P. semisulcatus stored at ۴°C and ۸°C.

کلمات کلیدی:

Saffron extract, Nanoemulsion, Ultrasonic, Shelf life, Penaeus semisulcatus