



## A new extraction method of fucoidan from the soaked water of brown seaweed (*Laminaria japonica*)

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### ABSTRACT

In this paper, a new extraction method of fucoidan from the soaked water of seaweed (*Laminaria japonica*) was introduced. Studies were carried out to compare, the effect of chitosan (CTS) and NaOH on the extraction of polysaccharide mixture from the soaked water of seaweed which are used for the production of alginate. And the conditions for the extraction of fucoidan were optimized. The results showed that chitosan was better than NaOH which were used to remove polysaccharide mixture in the algae industry. And the optimal conditions for extracting fucoidan were as followed the added volume of 1% CTS of 10 ml/150 ml soaked water, flocculation time of 8.0 h and pH of the soaked water of 6.0.

*Keywords:* Fucoidan; Chitosan; NaOH; Extraction; Soaked water of seaweed

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