

**POTENTIAL OF SEAWEED-BASED
BIODEGRADABLE FOOD WRAPPERS FOR
COMMERCIAL USE:
A REVIEW**

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ABSTRACT

POTENTIAL OF SEAWEED-BASED BIODEGRADABLE FOOD WRAPPERS FOR COMMERCIAL USE: A REVIEW

Seaweed is marine algae that can usually be found in lake, ocean and other water bodies. The three main types of seaweed are green algae (*Chlorophyta*), red algae (*Rhodophyta*) and brown algae (*Phaeophyta*). Seaweed is widely used in food industry for consumption purposes such as making dried seaweed as a snack and also edible wrapper which usually used for sushi. Some are used in medical field such as in the making of penicillin. These days, seaweed polysaccharides have been used in attempt to create biodegradable product to reduce the usage of plastic bags and polystyrene. The purpose of this review is to review the production of seaweed-based biodegradable food wrapper for food industry and analyze starch as the reinforced polysaccharide to the food wrapper. Based on previous researches, the methods of extracting the polysaccharides needed are involving removing the impurities and hot extraction process. According to the finding of this review, seaweed-based biodegradable food wrappers is suitable for commercial use especially when the characteristics of the food wrapper such as solubility, tensile strength and biodegradability in soil can be improved to make it a better container. A comparison between the biodegradable food wrapper and conventional plastic was also made in this review based on its values such as medicinal, industrial, benefits and effects on the environment such as water and soil pollution.

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