The Extraction and Environmental Applications of Chitosan

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In this study, we extracted the chitosan from shrimp shell, and we tested its environmental applications. First, the dry shrimp shell treated CaCO3, HCl and then with NaOH to get the chitosan as explained in the experimental section. To ensure that the extracted material is chitosan an NMR test has been applied to confirm the compound. Three environmental studies have been applied to our extracted chitosan: adsorption of the industrial dyes by the chitosan, in agriculture to enhance the growth of the plants, and biodegradable chitosan plastic as environmentally friendly plastic bags. The extracted chitosan shows a promising result in the three studies.

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