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SUGPOLYMER: UTILIZATION OF PRAWN SHELL WASTE AS CHITOSAN BIOPLASTIC SHEET MATERIAL

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Shrimp is one of the country's two major aquaculture exports. The Philippines has an estimated annual tiger prawn production of 49,000 metric tons (mt) according to the BFAR Fisheries Statistics 2012-2016, which constitutes to an estimated annual tiger prawn waste generation of 19,600 mt. Prawn shell contains chitin and chitosan, known natural biopolymers found in the exoskeletons of crustaceans. Chitin and chitosan are commonly used in the biological and biomedical applications. Recent studies show the use of chitin and chitosan as an additive employed in building materials. This research explores the potential use of chitin and chitosan extracted from prawn shell waste, as natural biopolymer used in creating bioplastic sheet material.

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