SEAWEED WINE

THE PROBLEM

Seaweed wine presents a unique opportunity to address the underutilization of diverse seaweed species found in regions like Panay Island, where only a few are commercially farmed. Unlike traditional red wines, which can pose health risks due to higher alcohol and sugar content, seaweed wine is rich in antioxidants, flavonoids, and terpenoids, potentially offering enhanced health benefits such as disease prevention. Its lower alcohol levels appeal to health-conscious consumers, while its distinctive flavor profiles cater to culinary enthusiasts. Moreover, seaweed farming is more sustainable than traditional agriculture, aligning with the values of environmentally-aware individuals. By focusing on education and awareness of its nutritional advantages and sustainable production, seaweed wine can carve out a niche market that positions it as a compelling alternative to conventional grape wines.

THE SOLUTION

The Iloilo Science and Technology University (ISATU) spearheaded the development to create new products from seaweeds which could be beneficial not only to the consumers but also to the coastal communities by providing livelihood. It also aligns with the provincial and municipal government initiatives to strengthen the seaweed industry in Northern Iloilo. Turbinaria spp., Ulva spp., and Acanthophora spicifera were selected as the target seaweed species for the study due to their abundance in the coastal towns of San Dionisio, Concepcion, and Estancia in Northern Iloilo. Although these species are currently underutilized, they have demonstrated potential as raw materials for wine production because of their high phytochemical content. The resulting seaweed wines have a pH of 4.0 to 5.0 and an alcohol content ranging from 8.2% to 11.4%. Pure blends of the seaweed wines were found to contain higher levels of total phenolics, flavonoids, and tannins compared to commercially available wines. To improve the taste and aroma, formulations with added fruits like mangoes and pineapples were also developed.

TECHNOLOGY GENERATOR

Iloilo Science and Technology University
Project Leader: Prof. Hilario S. Taberna, Jr.

TECHNOLOGY DEVELOPMENT

The technology is currently at Technology Readiness Level (TRL) 4. The research team is currently working on conducting safety assays before proceeding to sensory evaluations for consumer acceptability.

The technology owner is looking for partnership with local seaweed suppliers to ensure a sustainable and consistent raw material supply. Additionally, partnering with retailers and e-commerce platforms to create effective distribution channels to reach the target market. Interested parties may send letters of intent to contact details provided below.

Interested technology adopters may send a letter of intent addressed to:

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