Sensory Quality Screening and Consumer Preference Test of Seaweed and Tropical Fruit Beverage.

- **Author(s):** Pet Anthony Pascual ,Lorelie Q. Escabal ,Pet Roey L. Pascual ,Ivy J. Dematawaran ,Jerwin S. Zanoria ,Gladys L. Pascual ,Rosalyn P. Alburo

- **Abstract:** Seaweed extracts are abundant in polyphenolic compounds which are known to have antioxidants. They also exhibit antimicrobial activities against major food pathogenic and spoilage microorganisms. The possibility of using Eucheuma cottonii Weber Bosse seaweed as a bioactive component in food products need to be explored. This research investigates the potential variables that will affect the sensory qualities and physico-chemical properties of blended beverages from seaweed and tropical fruits. Using the Plackett-Burman Design, three variables; types of tropical fruits, levels of tropical fruits and levels of sugar, were found to significantly affect the sensory qualities of the blended beverages such as sweetness, sourness, aroma, and general acceptability. The positive effect estimates for both sugar and level of tropical fruits signifies that higher levels of which produce more acceptable beverages. Moreover, the mango flavor was found significantly favorable over the pineapple flavor. The seaweed-mango blended beverage was then evaluated against seaweed-tablea (cacao paste) blended beverage for consumer preference test. Both these flavors were chosen for consumers preference based on the familiarity of consumers to the flavor and the availability of ingredients. Four age brackets (3-12, 13-22, 23-32 and 33-42 years) considered for the study preferred the seaweed-tablea blended beverage over the seaweed-mango blended beverage. Interestingly, the older age bracket (43-52 and 53 to 60 years) preferred the seaweed-mango blended beverage. Also, this is the same age bracket where some panelist preferred both flavors. Their primary reason was flavor, except for the age group between 13-22 years old which prefers beverage based on its overall acceptability.

- **Keywords:** antioxidants, physico-chemical properties, sweetness, sourness, aroma