ABSTRACT

Rahmat Mulyana (Q1A1 15 098 Development of powder functional beverage products from Seaweed (Euchema cottonii) and Palm Sugar (Arenga pinnata.) Supervised by Prof. Dr. Hj. Sri Wahyuni, M.Sc as supervisor I and Dr. Ir. Asnani, M. Si as a guide II).

The purpose of this study was to determine the differences in preference for cinnamon and clove palm sugar powder and clove and ginger with the treatment without seaweed and the addition of seaweed. This study uses an experimental design and t test. Formulations without seaweed (palm sugar 94%: cinnamon 2%: lemongrass 4%) and (palm sugar 94%: clove 2%: ginger 4%) and formulations with the addition of seaweed (seaweed 50%: palm sugar 44% : cinnamon 2%: lemongrass 4%) and (seaweed 50%: palm sugar 44%: cloves 2%: ginger 4%). Observation variables included analysis of water content, crude fiber content, antioxidant activity, pH, viscosity and reducing sugar content. Descriptive and hedonic organoleptic results show that powdered drinks without seaweed and the addition of seaweed have a significant effect on color and no significant effect on aroma and taste. While the physicochemical analysis research was significantly different in water content, fiber content and not significantly different in reducing sugar content, pH, viscosity and solubility. The highest descriptive organoleptic assessment of cinnamon and lemongrass formulations with the addition of seaweed 4.00 (light brown) while the highest hedonic color of cinnamon and lemongrass formulations with the addition of seaweed 3.97 (likes). Organoleptic assessment of the highest aroma aroma of clove and ginger formulations without the addition of seaweed 4.60 (very strong) while the highest hedonic aroma of cinnamon and lemongrass formulations with the addition of seaweed 4.07 (likes). Descriptive organoleptic assessment of the highest flavor of cinnamon and lemongrass formulations with the addition of seaweed 4.20 (sweet) while the highest hedonic flavor of cinnamon and lemongrass formulations with the addition of seaweed 3.6 (likes). Physicochemical analysis of the lowest moisture content of cinnamon and lemongrass formulations with the addition of seaweed 2.39%. The highest levels of crude fiber formulation of cinnamon and lemongrass with the addition of seaweed 1.35%. The pH of cinnamon and lemongrass formulations with the addition of seaweed 5.8. The highest viscosity in cinnamon and lemongrass formulations with the addition of seaweed 1.36%. The highest antioxidant formulation of cinnamon and lemongrass with the addition of seaweed 7.94 µg / mL. The results of this study can be accepted and liked by panelists and in accordance with SNI for powdered drinks.

Keywords: Functional drinks, seaweed powder, palm sugar