ABSTRACT

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UTILIZATION OF BLACK EAR MUSHROOM (Auricularia polytricha) IN MUSHROOM FIBER DRINK

(xiv + 42 pages: 5 tables, 19 figures, and 6 appendices)

Black ear mushroom (Auricularia polytricha) is widely cultivated in Indonesia. It rich in protein and dietary fiber and has anti-cholesterol effects. The objective of this research is to develop mushroom fiber drink which is stable and acceptable towards consumer in order to improve the dietary fiber intake. Four different concentration of black ear mushroom powder (0.5, 1, 1.5, and 2%) and three different CMC concentration (0.1, 0.2, and 0.3%) were used as treatment. The increase of mushroom powder and CMC concentration resulted in the increase of viscosity and stability but decrease the lightness of the samples. The total solid are affected by the concentration of mushroom powder and CMC, which the increase of mushroom powder and CMC concentration the total solid is increasing however there are no interaction between mushroom powder and CMC concentration towards the total solid of the sample. pH of the sample is only affected by mushroom powder concentration, as mushroom powder concentration increase the pH of the sample is decreasing. Based on the sensory evaluation, there are interaction between mushroom powder and CMC concentration, as the increase of mushroom powder and CMC concentration resulted in higher off-flavor product with lower taste acceptance, higher viscosity of the product and lower aroma acceptance. The increase of mushroom powder resulted in darker brown color with lower lower color acceptance, higher sample grittiness with lower texture acceptance, and higher off-odor. The viscosity of the samples is affected by Mushroom powder and CMC concentration, as the increase of mushroom powder and CMC concentration resulted in more viscous sample, however there are no interactions between these two factors. The sample with 0.5% mushroom powder and 0.2% CMC was chosen as the best formulation based on consumer acceptance and stability.

Keywords: fiber drink, black ear mushroom, stabilizer, carboxymethyl cellulose
References: 21 (1991-2012)