ABSTRACT

Macaroni is one type of pasta that could be made from local ingredients. In this study, sago is used as the fundamental component in macaroni since it is gluten-free and has a high carbohydrate content. However, sago has a weakness since it contains low protein. To overcome that, plant-protein is chosen as the addition of protein content since it is affordable. One example of plant-protein is oyster mushroom. It was chosen since it contains protein around 10.5-30.4%. This research aimed to evaluate the effect of oyster mushroom concentration on macronutrient, ash, and water content of sago-based macaroni. The research was carried out using a Randomized Group Design. The proportion of sago starch to oyster mushroom flour is four levels, which is 100:0, 85: 15, 80: 20, and 75: 25. Proximate analytical data such as protein, fat, carbohydrate, water, and ash were acquired. The collected data would be analyzed using Analysis of Variance (ANOVA) with the significance level of 5%. This result showed about water content 8.11-10.37% ; ash content 0.63-1.29% ; protein content 0.03-4.53% ; fat content 0.42-1.42%, and lastly carbohydrate content 84.2-89.65%. The results showed that macaroni sago with addition of oyster mushrooms had a significant impact in increasing the protein and fat content, even though in F3 was decreased, meanwhile decreasing the water, ash, and carbohydrate content with p-value <0.05. All these results are claimed to fulfill the standard of macaroni production except the protein content.

Keyword : Macaroni, Modified Starch, Oyster mushroom, Pasta, Sago,