THE EFFECT OF COMPOSITION OF SUGARCANE BAGASSE AND SENGON SAWDUST AS GROWTH MEDIUM ON QUALITY OYSTER MUSHROOM (*Pleurotus ostreatus*)

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ABSTRACT

This research was conducted to assess the yield of oyster mushroom (*Pleurotus ostreatus*) derived from the substitution of growth medium by using sugarcane bagasse. Sugarcane bagasse mixed with sengon sawdust with the composition of 0:100 (control), 25:75, 50:50, 75:25, and 100:0 correspondingly. Oyster mushroom have tested physically and nutritional analysis. The results of physical testing that includes mushroom mass, number of caps, thickness of the cap, and length have the best result in ratio of 100:0 are 171.67 gram, 23.14 cm, and 1.2 cm, whereas for the largest diameter in second position after composition of 50:50 is 11.7 cm. The nutritional analysis include are moisture content, crude fat content, crude protein content, carbohydrate content, crude fiber content, and ash content. The results shown in the composition of 75:25 has a relatively good nutrition with a low moisture content, ash content, and crude protein content are quite high at 89.65%, 0.42% and 1.60%. Crude fiber content was highest in the mushroom at composition of 50:50 is 38.02% and the lowest carbohydrate content was found in mushroom at composition of 0:100 is 6.12%. Based on the results of physically and nutrition in mushroom give the better using sugarcane bagasse as growth medium rather than sengon sawdust.

Keywords: physically test, nutritional analysis, sengon sawdust, bagasse, oyster mushroom, *Pleurotus ostreatus*