Production Of Mushroom from Selected Bio-Waste

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Abstract

Mushrooms have been extensively studied. Besides nutritional properties, mushrooms have been attracting market attention because they are potential source of bioactive compounds able to perform several functions in organisms with benefit for consumer health. Mushrooms are popular valuable food because they are low in calories, carbohydrates, fat, and sodium: also, they are cholesterol-free. Besides, mushrooms provide important nutrients, including selenium, potassium, riboflavin, niacin, vitamin D, proteins, and fibre. In the current study, oyster mushroom (*Pleurotus ostreatus*) was grown using various agricultural wastes including corn husk, corn cob and sawdust in order to determine, growth, maturity time and consumer acceptance. The experiments were conducted in highly hygienic section in Science Laboratory Technology in a special room in Usen. 1500g of substrate A, B, C containing sawdust, corn cob and corn husk respectively were place in a bowl. The substrate was sterilized at 90^{o}C allowed to cool before applying the spawn. The results revealed that corn husk produced the highest mushroom of 121g within the period under the review. Sawdust had the lowest yield at the time of this report. It was also observed corn husk had the earliest harvesting time of nineteen days and the best yield while sawdust harvest started after twenty-seven days. This indicates that corn husk and corn cob can be a very good substrate for mushroom production.

Keywords: Bioactive compound, Mushroom and, Production, Nutrients, Edo State Nigeria.