

**EFFECT OF VARIOUS TYPES OF SUBSTRATES ON  
GROWTH OF *Volvarella volvacea***

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This Final Year Project Report entitled “**Effect of various types of substrates on growth of *Volvariella Volvacea***” was submitted by Fatimah Binti Hasbullah, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by



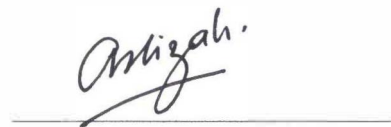
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## ABSTRACT

### **EFFECT OF VARIOUS TYPES OF SUBSTRATES ON GROWTH OF *VOLVARIELLA VOLVACEA***

The cultivation of mushroom, *Volvariella volvacea* on three different types of agrowastes was conducted with the aimed to determine the growth of these mushroom on various types of agrowastes and the effectiveness of composting period. The observation was made according to the duration of the pinhead appearance after spawning, the number of fruiting bodies and the different composting period. This study used some different stages of method which each of stages have been observed to measure the growth of mushroom. The method that have been used were composting, spawning, pinning and harvesting and the results showed that the different composting period produce higher yield of fruiting bodies on sugarcane bagasse followed by empty fruit bunch but no growth on banana leaves wastes. While for days of pin head appearances after spawning, it presented that all those substrates have a delayed appearance of pinhead than the previous studies (7 to 10 days) where the empty fruit bunch and sugarcane bagasse took 16 days while banana leaves wastes took 20 days. The low production of fruiting bodies and delayed of pinhead appearances are influenced by a few factors which are insufficient carbon-nitrogen ratio, short period of composting, environmental factors (pH, temperature, moisture), and seasonal productivity.