

**MYCELIAL GROWTH OF PHILIPPINE EDIBLE STRAW MUSHROOM (*Volvariella  
volvacea*) GROWN IN BANANA LEAF CULTURE MEDIUM ADDED WITH  
DIFFERENT LEVELS OF TABLE SUGAR**

A Project Report

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By

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**ABSTRACT**

This study was conducted from January 30 to February 6, 2020 at the Western Visayas Integrated Agricultural Research Center (WESVIARC), Jaro, Iloilo City. This study aimed to determine the mycelial growth of Philippine edible straw mushroom (*Volvariella volvacea*) grown in banana leaf culture medium added with different levels of table sugar. The treatments consisted of different levels of table sugar such as: zero (control), 5, 10, 15, and 20 g/ per half liter of culture medium. The experimental treatments were laid out in a completely randomized design with three replications. Results of the study revealed that the first appearance of mycelia was observed from day 1 until day 2.7. The data showed that the mean no. of days to first mycelial appearance very slightly varied between 1.2 to 2.1 days ( $P>0.05$ ). The highest spawning percentage (89 %) was observed from the control culture medium and the one with 5 g of table sugar and lowest contamination percentage of 11 %. The medium added with 10 g had 67 % spawning percentage and 33 % contamination. Moreover, the culture medium with 15 g and 20 g of table sugar had the lowest spawning and highest contamination percentage of 55.3 % and 45 %, respectively. Observed differences on both treatment means are not significantly different ( $P>0.05$ ). Furthermore, the spawn-run diameter of Philippine edible straw mushroom (*Volvariella volvacea*) six days after inoculation revealed that spawn grown in control culture medium had the widest diameter of 5.93 cm, followed by 5 g of table sugar at 5.73 cm. Culture medium with 10 g and 15 g of table sugar had a spawn-run diameter of 4.90 cm and 4.83 cm, respectively. The narrowest spawn-run was obtained from culture medium with 20 g of

table sugar at 4.20 cm. Just like other data calculated, statistical analysis revealed no significant difference ( $P>0.05$ ) among treatment means.