

**MICRO-CLIMATE CHARACTERIZATION OF DIFFERENT BEDDING
MATERIALS FOR STRAW MUSHROOM (*Volvariella volvacea*
Bull. Ex-Fr. Singer) PRODUCTION**

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An Undergraduate Thesis Submitted to the Faculty of the Department of Agricultural
and Biosystems Engineering, College of Engineering, Central Luzon State
University, Science City of Muñoz, Nueva Ecija, Philippines
in Partial Fulfillment of the Requirements
for the Degree of

**BACHELOR OF SCIENCE IN AGRICULTURAL AND
BIOSYSTEMS ENGINEERING
(Agricultural and Bio-Process Engineering)**


JUNE 2019

ACCEPTANCE SHEET


This undergraduate thesis entitled **“MICRO-CLIMATE CHARACTERIZATION OF DIFFERENT BEDDING MATERIALS FOR STRAW MUSHROOM (*Volvariella volvacea* Bull. Ex-Fr. Singer) PRODUCTION**, prepared and submitted by **DANISSE GRACE A. PATUNGAN** in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING (AGRICULTURAL AND BIO-PROCESS ENGINEERING)** is hereby accepted:


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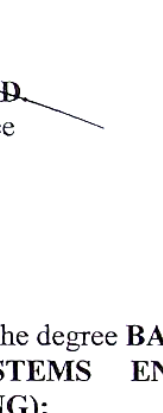

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BIOGRAPHICAL SKETCH

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ACKNOWLEDGEMENT

After a long run of struggle to meet the endpoint, success is almost at hand. The author wishes to express her profound gratitude and unending appreciation to the following people who in their own way or another have assisted, contributed and inspired them to made this simple piece of work a remarkable deed.

To Dr. Victorino T. Taylan, chairperson of the advisory committee, for sharing his knowledge, guidance, full support in the conduct of the study, for his patience, for lending her some of the materials used during the conduct of the study, and for sparing his time for consultation due to his busy schedule;

To Engr. Marlon T. Delos Santos and Engr. Claire Marie M. Castillo, members of the advisory committee, for their invaluable guidance, suggestions, comments and support which contributed to a significant improvement of the study;

To her loving parents, Roberto and Imelda Patungan, to her Nanay Myra, and her loving sister Anne, for all the hardship and sacrifice, for their unending support, morally, spiritually, and financially, for the unconditional love and care they have given her and for being the author's inspiration.

To her super friends Art, Reñel, and Hyleen, who unselfishly devoted their time and sweats. The never-ending support and comedy boosted her up and inspired her to continue on her pursue on the realization of this study.

To her teammates especially Geanne, Candace, Shaira and Ethyl for helping and giving her endless support during the conduct of the study.

To Kuya Nato Domingo for his kindness, guidance, time, suggestions, and support during the conduct and completion of this thesis. His patience never failed in answering the author's enquiry, providing and lending her all equipment and facilities used in the conduct of the study.

To the College of Engineering, specially the Department of Agricultural and Biosystems Engineering for sharing knowledge and concern to all students under their supervision;

To the Society of Agricultural Engineering Students - Philippine Society of Agricultural Engineers (SAGES-PSAE), partners for life, for the cheer ups, humours, love, and comradeship. The time spent with them can never be forgotten;

To all her BSABE 5 classmates who always pursued and encouraged her not to give up and continue to progress in times of hopeless days while doing all the requirements.

And above all, to the Almighty God for His countless blessing, inspiration and guidance which gave courage and strength to the author to complete and pursue this study.

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ABSTRACT

PATUNGAN, DANISSE GRACE ALBAY, Department of Agricultural and Biosystems Engineering, College of Engineering, Central Luzon State University, Science City of Muñoz, Nueva Ecija, **JUNE 2019, MICRO-CLIMATE CHARACTERIZATION OF DIFFERENT BEDDING MATERIALS FOR STRAW MUSHROOM (*Volvariella volvacea* Bull. Ex-Fr. Singer) PRODUCTION.**

Adviser: **VICTORINO T. TAYLAN, Ph.D.**

This study aimed to characterized the micro-climate condition during the production of straw mushroom (*V. volvacea*) using rice straw, banana leaves, and water hyacinth as bedding materials. The specific objectives include the evaluation of the temperature and relative humidity inside the covered mushroom crib and to evaluate the growth and yield performance of straw mushroom.

The bedding materials were dried, tied, and soaked. The bedding materials were evaluated in terms of number of days from planting to first harvest, yield, number of harvested buttons, and size of the harvested buttons. The study was laid out in a Randomized Complete Block Design (RCBD).

The best temperature range for straw mushroom production is 32-34°C and 75-83% for relative humidity. Results revealed that the number of days from planting to first harvest ranges from 12-13 days. The banana leaves have performed positively in terms of number of harvested buttons (22 buttons), yield (195.36 g), and size of the mushroom (41.8 mm in length and 37 mm in width). The straw mushroom cultivated outside with the mean day temperature and relative humidity range of 32-35°C and 70.7-82.7% recorded higher yields (237.23 grams) than inside the greenhouse and room.

Keywords: temperature, relative humidity, straw mushroom, cribs

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