

**PRODUCTION OF SINGLE CELL PROTEIN FROM FUNGI ISOLATED FROM
ONION FIELD USING RICE BRAN AS SUBSTRATE**

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ABSTRACT

ALCANTARA, RACHELLE C., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2019, PRODUCTION OF SINGLE CELL PROTEIN FROM FUNGI ISOLATED FROM ONION FIELD USING RICE BRAN AS SUBSTRATE**

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This study evaluated the ability of three fungi isolated from onion field namely *Penicillium citrinum*, *Scopulariopsis brevicaulis* and *Aspergillus niger* in the production of single cell protein and enriching the proximate composition of rice bran. One hundred fifty (150) grams of rice bran with 176 ml of distilled water was inoculated with 20 ml of fungal suspension and solid state fermentation was made. After 20 days, it was harvested and the proximate composition were determined. Results showed a remarkable increased in the crude protein content, crude fat, crude fiber, ash and moisture content of the fungal enriched rice bran were recorded. For the crude protein, *A. niger* growth in rice bran had the highest percentage crude protein of 13.91% and most percentage increase of 18.38%. Meanwhile, *S. brevicaulis* growth in rice bran had the highest moisture content with 20.58%, for the ash content, *A. niger* growth in rice bran recorded the highest ash and crude fat content of 9.96% and 16.64%, respectively. Lastly, *P. citrinum* growth in rice bran exhibited the highest value of crude fiber content which is 8.42%. Thus, the ability of the aforementioned fungal isolates to enhance the proximate composition of rice bran.

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