GROWTH AND YIELD PERFORMANCE OF LOOSE-LEAF LETTUCE (*Lactuca sativa*) UNDER GREENOUSE CONDITION USING DIFFERENT LEVELS OF VENTILATION IN BARANGAY KAPATAGAN, DIGOS CITY DAVAO DEL SUR

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ABSTRACT

RAGOMIO, RANEL Q., Davao del Sur State College (DSSC) – Institute of Computing, Engineering and Technology (ICET), Matti, Digos City. June 2024. **"GROWTH AND YIELD PERFORMANCE OF LOOSE-LEAF LETTUCE (*Lactuca sativa*) UNDER GREENHOUSE CONDITION USING DIFFERENT LEVELS OF VENTILATION IN BARANGAY KAPATAGAN, DIGOS CITY DAVAO DEL SUR.".** Undergraduate Thesis.

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The study was conducted to evaluate the growth and yield performance of loose-leaf lettuce (*Lactuca sativa*) under greenhouse condition using different levels of ventilation in Brgy. Kapatagan, Digos City, Davao del Sur. A Complete Randomized Design was used as the experimental layout of the study with 3 treatments replicated 3 times. The treatments used were as follows: Treatment 1 ($T_{1)}$ = Ambient Airflow, Treatment 2 (T_2) = 1 Intake Fan and 1 Exhaust Fan and Treatment 3 (T_3) = 2 Intake Fans and 2 Exhaust Fans. It was evaluated during 15th, 30th and 40th day after transplanting. Data were statistically analyzed using Single Factorial Analysis of Variance (ANOVA) and Tukey's test was used to identify treatments that are significantly different from each other. The result on analysis of variance (ANOVA), shows that there were

significantly difference among treatments in terms of plant height, number of leaves and yield of loose-leaf lettuce. Tukey's test results, revealed that the plant height of loose-leaf lettuce during 15th day after transplanting T1 and T2, T1 and T3 significantly differ from each other while, T2 and T3 has no significant difference. Result also revealed that on 30th and 40th day after transplanting T1, T2 and T3 has a significant difference from each other. In terms on the number of leaves on 15th and 30th day after transplanting Treatment 1 has significant difference against Treatment 2 and Treatment 3. However, Treatment 2 and Treatment 3 have no significant difference from each other. While on 40th day after transplanting results shows that T1, T2 and T3 has a significance difference to each other. In terms on the yield (g) of loose-leaf lettuce, all treatments show significant difference against each other. Result also shows that Treatment 3 was observed to be the best experimental treatments in all parameters.