V. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

The findings from this study are as follows:

a. A significant interaction exists between the type of nitrogen fertilizer used and the planting distance treatments. Specifically, the combination of urea nitrogen fertilizer applied at a rate of 200 $kg.ha^{-1}$ and a planting distance of 70 x 40 cm demonstrated the most favorable significant interaction concerning the parameter of ear length without husks. Additionally, the combination of KNO_3 nitrogen fertilizer at a dosage of 200 $kg.ha^{-1}$ with a planting distance of 70 x 40 cm substantially interacted with the sweetness index parameter.
b. Furthermore, the treatment involving urea nitrogen fertilizer at a dosage of 350 $kg.ha^{-1}$ produced the most pronounced significant effect on plant height measured from 28 to 42 days after planting (DAP) and leaf color at 49 DAP. The application of urea nitrogen fertilizer at 200 $kg.ha^{-1}$ yielded the most significant effects on the parameters of ear length with husks, ear length without husks, and ear weight without husks.
c. The planting distance treatment of 70 x 20 cm showed the most significant effect on plant height at 21 DAP, 28 DAP, and 42 DAP, as well as on ear weight with husks and ear weight without husks per plot, in addition to ear weight with husks and without husks per hectare. Conversely, the planting distance of 70 x 40 cm had the most significant effect on ear diameter with husks, ear diameter without husks, ear weight with husks, ear weight without husks, and the leaf color chart.

5.2. Recommendations

The findings of this study indicate that a planting distance of 70 x 40 cm is optimal for enhancing the quality of sweet corn. In comparison, a planting distance of 70 x 20 cm is recommended to maximize the production of sweet corn. Furthermore, applying nitrogen fertilizer at a rate of 200 $kg.ha^{-1}$ is advised to achieve optimal quality and yield in sweet corn cultivation. To facilitate a

more thorough analysis of the responses of sweet corn plants, it is advisable to incorporate additional observation variables, such as the number of seeds per ear and the weight of 1000 seeds.