

# Review of: "Sustainable Agriculture: Aquaponics-Integrated Greenhouse Cultivation of Cantaloupe with Drip Irrigation System"

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Potential competing interests: No potential competing interests to declare.

This title, "Sustainable Agriculture: Aquaponics-Integrated Greenhouse Cultivation of Cantaloupe with Drip Irrigation System," effectively communicates the main focus of the study. The title is concise and to the point, which is important for capturing the reader's attention and conveying the main topic of the study efficiently.

The abstract provides a concise overview of the integration of aquaponics into greenhouse cultivation of cantaloupe in Vietnam, highlighting its benefits and successes.

The introduction provides a comprehensive overview of the use of agricultural membrane technology in greenhouse cultivation, specifically focusing on cantaloupe production. However, it could be helpful to provide a brief explanation of the project's objectives and how the greenhouse cultivation of cantaloupe aligns with those objectives.

The Methods of Implementation section provides a detailed overview of the procedures and techniques used in implementing the cantaloupe cultivation model within greenhouses equipped with a drip irrigation system. However, providing visual aids, such as diagrams or illustrations in English, could help readers better understand the layout and functioning of the system. In the subsection on Process and Technique of Growing Cantaloupes, it could benefit from further elaboration on specific practices and procedures used in caring for cantaloupe vines. One major revision is the Statistical Processing Method subsection; it could be beneficial to mention any specific statistical tests or analyses planned for interpreting the results.

The Results and Discussion section provides a comprehensive analysis of the outcomes of the cantaloupe cultivation model, covering various stages from seedling to harvest, as well as assessments of yield and quality. Additionally, the recommendation to compensate for seed loss during the nursery process adds practical value to the discussion. In the Stage After Planting subsection, the comparison with findings from other provinces enriches the discussion and provides valuable context for evaluating the model's performance. Moreover, the discussion on differences in melon varieties and their implications for yield and quality contributes to the richness of the analysis.

The Conclusions and Recommendations section effectively summarizes the key findings and outcomes of the cantaloupe cultivation model, providing actionable insights for future implementation and improvement. It involves emphasizing the

significance of aquaponics in climate change adaptation in Ben Tre and highlighting the potential integration of this innovative agricultural method with tourism and environmental education. Additionally, there is an emphasis on the importance of exploring additional disease prevention measures or considering crop rotation during susceptible periods to mitigate the impact of harmful fungi on melon crops. Furthermore, the section underscores the need for continued monitoring, refinement, and replication of the cantaloupe cultivation model across multiple crops to enhance economic efficiency and sustainability. Finally, there is a call for establishing production linkages and diversifying sales channels to maximize the value and profitability of the model while supporting agricultural development in the region.