

# 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.

The provided outcomes from implementing the greenhouse cultivation model for cantaloupes, coupled with a drip irrigation system, are promising and indicate success in various aspects. Here are critical comments and considerations for each section:

## **Production Arrangement and Organization Methodology:**

- Positive aspects: Effective organization of greenhouse components, irrigation system, substrate, and nutrition is highlighted.
- Recommendation: It would be beneficial to provide more specific details on the organization methodology for the benefit of readers who may want to replicate the model.

## **Melon Yield and Project Output:**

- Positive aspects: The achieved melon yield exceeds the project target, with favorable outcomes in terms of type 1 products, average melon weight, and Brix level.
- Recommendation: While the results are impressive, providing insights into the factors contributing to the success, such as pest control, disease management, and nutrient application, would enhance the comprehensiveness of the report.

## **Food Safety Certification:**

- Positive aspects: Mentioning the context of implementation during the Covid-19 pandemic adds relevance to the project.
- Recommendation: It would be useful to elaborate on the measures taken to ensure food safety during the pandemic, as this could be of interest to other projects facing similar challenges.

## **Training Initiatives:**

- Positive aspects: The initiative to organize training sessions is commendable.
- Recommendation: Providing more details on the content and format of the training sessions, as well as the audience's feedback or engagement, would add depth to this section.

## **Documentation Adjustments:**

- Positive aspects: The adaptation of documentation for local conditions is a proactive step.
- Recommendation: Including examples or excerpts from the revised documents could aid readers in understanding the specific adjustments made.

**Request Section:**

- Positive aspects: Highlighting the significance of aquaponics and addressing potential disease susceptibility during the melon growing season demonstrates foresight.
- Recommendation: Expanding on disease prevention measures and crop rotation strategies, as well as providing examples, would contribute to the practicality of the recommendations.

**Continued Monitoring and Implementation:**

- Positive aspects: Emphasizing the need for ongoing monitoring and extension of the model to different cantaloupe varieties is forward-thinking.
- Recommendation: Including specific plans for continuous monitoring and potential challenges anticipated in the extended implementation phase would enhance the section.

**Widespread Deployment and Replication:**

- Positive aspects: Recognizing the importance of widespread deployment and replication is crucial for the project's impact.
- Recommendation: Providing guidance on how other regions or entities can adapt the model to their specific conditions would strengthen the recommendation.

In summary, while the report presents significant achievements, adding more specific details, examples, and insights would enhance its comprehensiveness and practical utility for a broader audience.