

# Review of: "Aquaponics Unveiled: Efficient Household Farming"

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**Potential competing interests:** No potential competing interests to declare.

## Introduction

This article tends to provide a comprehensive understanding of aquaponic system components with a number of pictures. Four main aquaponic systems are presented.

## Concern/Suggestion for improvement.

1. A table to tabulate the differences among 4 systems shall be provided in discussion section.
2. Related recent works with the 4 systems shall be cited and discussed.
3. Author shall have conduct quantitative analysis to support the claim.
4. As we know that "pH and total ammonia nitrogen (TAN) values are two critical water quality parameters that affect the growth rate and healthiness of fish. However, pH and TAN values are affected by uncontrollable factors e.g. weather, temperature, and biological process that occur in the water. Thus, it is important to frequently monitor the changes of pH and TAN values in order to maintain an optimum condition for the freshwater habitats."<sup>[1]</sup> . Thus, how the component selections affect the water quality shall be provided too. For instance, author states "A well-designed tank profile facilitates efficient waste removal and maintains superior water quality. " What is well-designed tank profile? How to have it? These are important info to be provided.
5. More engineering/scientific info shall be provided e.g. the relationship between tank sizing and number of fishes, etc.

## Conclusion of the review

Overall content may benefit readers who don't have any background about aquaponic with four different aquaponic system setups. However, more references and citation shall be provided for those four aquaponic systems. A comparison among them shall be provided too.

## References

1. <sup>^</sup> Nur Aisyah Syafinaz Suarin, Universiti Tun Hussein Onn Malaysia, Jia Sheng Lee, Kim Seng Chia, et al. (2022). Artificial Neural Network and Near Infrared Light in Water pH and Total Ammonia Nitrogen Prediction. IJIE, vol. 14 (4). doi:10.30880/ijie.2022.14.04.017.