Review of: "Aquaponics Unveiled: Efficient Household Farming"

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Potential competing interests: No potential competing interests to declare.

The article is overview and informative regarding a number of aspects of aquaponic systems, clarifying their constituent elements, their roles and interconnection mechanisms. Not only are the system components of an aquaponic system presented, but their functionality and importance in ensuring the efficiency of the entire system is also clarified. The material is written in a technical style, but at the same time understandable, and I think it will be useful to a wide range of specialists.

I think the first title „Aquaponics: System Layout and Components“ fits the content more specifically. In addition, there is talk of a commercial application, so it is good to add "Business Application" to the title or drop the "Household Farming" specification altogether.

A big omission is that the cited authors are missing from the article itself. They are marked at the end, but not in the text, so it is not clear where exactly the author quoted them. They are also relatively authors, considering the large number of scientific publications developed over the years on the subject.

Nothing is mentioned about comparing between classical coupled aquaponic systems and decoupled aquaponic systems. See: Baganz G., R. Junge, M. Portella et al. The aquaponic principle – It is all about coupling. In Reviews in Aquaculture, 2021, 00:1–13.

Since three types of beds that are most common in aquaponics are described: Media-based grow bed (MGB), Deep-Water Culture system (DWC or RAFT) and Nutrient Film Technique (NFT) as separate options for growing plants in water environment it is good to mention that there is a possibility to combine all the possibilities in one system, the modification of which is the most effective known to date. See: Gosh K. and S. Chowdhury. Review of aquaponics system: searching for a technically feasible and economically profitable aquaponics system. In Journal of Agricultural, Environmental and Consumer Sciences, 2019, 19, 5-13 and Love D., J. Fry, X. Li, E. Hill, L. Genello, K. Semmens, R. Thompson. Commercial aquaponics production and profitability: Findings from an international survey. In Aquaculture, 2015, 435, 67–74.

The article should go through further correction, additions and refinement in order to acquire a scientific character.