

## Review of: "Modelling of Quadcopter for Precision Agriculture and Surveillance Purposes"

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Potential competing interests: No potential competing interests to declare.

The title of this paper seems interesting, but by reading it carefully, you can understand that this article is only a scientific review for modeling a 5 or 7 kg drone. Because no innovative work has been done in this research and it is only based on previous studies and basic mathematical modeling. Below are several key points identified for improvement that could enhance the guality of the mentioned paper:

- 1. The keywords could be more precise and numerous. (Page 1)
- 2. The introduction section is excessively lengthy, constituting nearly half of the entire paper.
- 3. Numerous sentences in the introduction section lack references. Where can their references be found? (Page 1)
- 4. On the third page, it states: "Drones are currently regarded as relatively young, and even less developed tools in comparison to other new technologies being utilized in smart or precision agriculture." What basis does this statement have, especially when drones have demonstrated considerable advancement relative to other agricultural equipment? (Page 3)
- 5. The third page mentions that generally, two types of drones are used in agriculture (Medium Sized and Large Sized!), which is not accurate in practice. Currently, the agricultural sector utilizes a diverse range of drones for various purposes. Additionally, when classifying drones, they are primarily categorized into two types: fixed-wing and multi-rotor. (Page 3)
- 6. Some abbreviations, such as "UAS," are not adequately defined. (Page 4)
- 7. In the Materials and Methods section, no explanation has been given about the design process or design method of the drone. Therefore, it is not clear what the dimensions of the drone were based on. (Page 8)
- 8. The paper appears to incorrectly use the term "Altitude" in place of "Attitude" on several occasions. (Page 9)
- 9. In the Mathematical Model section, Figure 4 is mistakenly referenced instead of Figure 5. (Page 10)
- 10. In Figure 6, the labels for the YYZ-axis are incorrectly typed as the XYZ-axis.
- 11. The modeling section of the paper is unclear and resembles a basic overview of mathematical equations.



- 12. The simulation section is overly brief and lacks clarity regarding the method (algorithm) used by the authors for simulation. (Page 15)
- 13. In the Results and Discussion section, there is mention of improvements and modifications to the control system, but specific details about what these enhancements and corrections entailed, as well as the challenges the authors encountered in this project, are not provided. (Page 16)
- 14. In the Results and Discussion section, part 3.1 is absent! (Page 16)
- 15. In the references section, there should be an inclusion of more recent papers, particularly those published in 2020 and later.
- 16. As previously mentioned, this article lacks originality and innovation, merely offering a review of basic mathematical models.
- 17. The simulation and its results require significant revision. The details of what is being simulated and any simplifications made are unclear, leading to results that are either too sparse or ambiguous.
- 18. In this paper, there is no comparative analysis between the proposed quadcopter model and the existing models.