

# 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 paper presents the model of a quadcopter with a payload of 7 kg and a general overview of its use for precision crop spraying. The paper is very interesting and is in line with the aims of the Journal; it is well written and clear, although some parts could be improved. Some typos must be corrected. I suggest reading the paper again deeply.

The introduction can be improved. On the one hand, I would suggest adding the following paper, which deals with the hierarchical real-time control of unmanned aerial vehicles (UAVs) with a rule-based strategy for mission time and energetic references generator based on optimal control theory.

Bianchi, D., Borri, A., Di Gennaro S., and Preziuso, M. (2022). UAV trajectory control with rule-based minimum-energy reference generation, 2022 European Control Conference (ECC), London, United Kingdom, 2022, pp. 1497-1502, doi: 10.23919/ECC55457.2022.9838173.

I suggest adding this article because in precision agriculture, energy savings are important, so reference generation assumes a main role during drone missions.

On the other hand, to better emphasize the innovative contribution of the paper with respect to the literature.

In general, figures (1, 2, 3) seem to be taken from some sources. Their quality is low, and I suggest in general drawing them by authors using ipe (if you use LaTeX) or PP (if you use Word).

Variables that are not always defined are used in the model (do a check); the paper must be self-contained. Furthermore, I would include a reference to where the mathematical model was obtained, as it is known in the literature.

In simulations, improve the quality of the figures.