

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

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

Section 1 of the paper is an interesting review of the need for precision agriculture and how uncrewed aerial systems (UAS) could be effectively used on small farms. Coming from the UAS side of research, I did not know what VRT (variable rate technology?) was referring to in Figure 1.

I am not sure what the purpose of modeling a bespoke UAS in Section 2 was, especially given there are several commercially available UAS capable of carrying 7kg. More discussion of modeling the sprayer and its accuracy when carried by the drone would be a better use of effort. While it is claimed that the sprayer had a "uniformly distributed pattern of discharge of its content", there is no mention of how that conclusion was reached. Were factors such as the impact of the rotors' downdraft on the application of content taken into account?

I agree with other reviewers who have noted that expanding Section 1 into a review of UAS applications in precision agriculture would be a valuable contribution to the field.