Review of: "Revolutionizing Precision Agriculture with Drone-Based Imaging and Fuzzy Intelligent Algorithms"

Jyoti Snehi

Potential competing interests: No potential competing interests to declare.

This paper gives an account of the current perspective of applying innovation in precision farming. Precision agriculture lays the groundwork to support its context and lays emphasis on drones and fuzzy intelligent algorithms as the means to enhance resource management and organizational decisions. The objectives were mentioned in the introduction while outlining the coverage of the study; this could have specifically used samples of drones in agriculture and a proper explanation of why weather data is important at the local level. The relations to the subject in the context of the literature analyses for this research are the themes involving the aspect of drones in agriculture that pertain to topics regarding the extensive use of quadcopters and the issues arising from that application.

Hence, while detailing the roles of UAVs in various application areas, the paper is centered towards the relevance of surveillance, delivery services, and planning with reference to urban cities. However, it should be noted that the issues and opportunities relevant to each of these sectors are not described in more detail. While the narrative provided about plant infections and their treatment is lavish in insertions, it has remained mostly isolated and could belong much more naturally in the specific section on drone-based technologies and fuzzy intelligent systems; such as the use of drones and fuzzy intelligent systems in the identification of diseases and their control in agriculture. In the results and discussion part, the writer successfully draws attention to the identification of the causes of unhealthy paddy leaves. Lastly, the conclusion discusses the prospect of utilizing the techniques of precision agriculture but offers fewer propositions regarding how the examined methods may be advanced in future studies and practices, as well as revealing the limitations of the existing approaches in the field. The paper offers a good foundation for further studies on the use of drones in precision agriculture and could have provided more specific examples and a more extensive discussion of the matters concerning the augmentation of the described solutions and the possibilities of implementation.