

Special Issue

The Role of UAVs in Modern Agriculture: Precision Spraying and Crop Health Analysis

Message from the Guest Editors

Unmanned aerial vehicles (UAVs) play an increasingly important role in agriculture, especially in crop health monitoring, pest detection, and precision spraying. Their mobility and access to hard-to-reach areas make them valuable tools. Equipped with advanced sensors and AI, UAVs enable rapid, accurate assessment of plant conditions, allowing timely, targeted treatments that reduce losses and environmental impact. This Special Issue welcomes original research and reviews on UAV use in pest detection and control. Topics include:

- Optical sensors and cameras for pest identification
- UAV-based mapping of pests, weeds, and diseases
- Drone design and spraying precision
- Efficacy and analysis of UAV-applied treatments
- AI and automation in pest detection and spraying
- Simulations of physical processes during spraying

We look forward to your contributions.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Drones is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

Editor-in-Chief

Prof. Dr. Diego González-Aguilera

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