



The 3rd International Online Conference on Agriculture

22-24 October 2025 | Online

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The 3rd International Online Conference on Agriculture

22-24 October 2025 | Online



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Welcome from the Chair

Dear Colleagues,

It is a pleasure to announce the **3rd International Online Conference on Agriculture** (IOCAG2025). This e-conference is organized by *Agriculture* (ISSN: 2077-0472, Impact Factor: 3.6, CiteScore: 6.3), a peer-reviewed open access international journal of MDPI. The IOCAG2025 will be held online from **22 to 24 October 2025**.

Agriculture was a major development in human history, which led to the rise and flourishing of civilization. It plays a critical role in human society, serving as the backbone of the economic system. Modern agriculture provides raw materials for most of the world's food and for many industrial products, including textiles. Significant scientific and technological advances over the years have led to great increases in agricultural productivity as well as to reducing environmental impacts. Nevertheless, agricultural systems of the future face huge challenges in balancing and optimizing productivity and profitability against the stewardship of ecosystems and natural resources. This conference will provide an online open forum for agricultural scientists and engineers to discuss these challenges and share their latest research achievements in agricultural science and technology. Sessions of the conference will be organized around the following topics:

- Climate-Smart Agriculture: Practices, Determinants, Productivity, and Efficiency;
- Ecosystem, Environment, and Climate Change in Agriculture;
- Agricultural Systems and Management;
- Zero-Pollution Solutions in Crop Protection;
- Agriculture Water Management;
- Smart Farming: From Sensor to Artificial Intelligence;
- Agricultural Soil;
- Crop Production;
- Farm Animal Production;
- From Field to Consumers: Challenges and Approaches to High- Quality Agricultural Products;
- Crop Genetics, Genomics and Breeding.

The IOCAG2025 conference will bring together researchers from all over the world without concerns over travel or other related expenditures. The conference will feature live-streamed webinars and include both invited speakers and contributed speakers selected from the submissions received.

The conference invites submissions of abstracts, which will be reviewed by the Conference Committee. All accepted abstracts will be published on the conference's website. In addition, all participants will be encouraged to submit a full paper to one dedicated Special Issue in Agriculture, with a 20% discount on the article processing charge (APC).

Welcome from the Chair

I hope that you will join this e-conference to exchange ideas, begin fruitful collaborations, and make the IOCAG2025 a great success.

Best regards,



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agriculture

an Open Access Journal by MDPI

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture. There is no restriction on the maximum length of the papers. The aim of *Agriculture* is to publish research on the science and technology of crop and animal production, biosecurity, and postharvest handling of produce, agricultural technology, management of the natural resource base for agricultural production (land, soil and water), rural management and agricultural development, and agriculture in changing environments. Accordingly, the scope of the journal for the consideration of submissions is set out in more detail below.

Journal Webpage: <https://www.mdpi.com/journal/agriculture>

Session 3. Agricultural Systems and Management

sciforum-136454: Effect of cannon sprayer configuration and adjustment on spray deposit and ground drift in high-tunnel strawberry cultivation

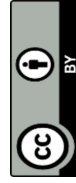
Daniel Bondesan*, Paolo Miorelli and Claudio Rizzi

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Efficient spraying is essential for modern agricultural production to ensure biological efficacy and high-quality and abundant harvests. At the same time, it is crucial to minimise the negative impact of plant protection products on the environment. Hence, it is necessary to implement the appropriate technical and technological factors for the treatment and consider the conditions under which the spray application is carried out (Cieniawska et al., 2024). The aim of this study was to evaluate the use of alternative application techniques, i.e., the reduction in application volume, the use of an electrostatic charger and air injection nozzles, in comparison to a standard cannon sprayer application in high-tunnel cultivation in Trentino (Northern Italy). To do this, paper collectors were placed along strawberry rows at different distances from the front openings of the tunnels, and the tunnels were sprayed with a tracer dye (tartrazine) using the mentioned application techniques to evaluate spray deposition. Moreover, some Petri dishes were placed at different distances outside the tunnel to estimate the ground deposit due to spray drift.

Deposits were similar for all the application techniques for the external part of the canopy. Inside the canopy, slight significant differences were found only for the deposits retrieved in the central part of the tunnel (Kruskal-Wallis test, p0.05). In this case, the electrostatic charged spray showed the highest average value of deposit, and the air injection nozzles marked the lowest. However, the ground deposit retrieved outside the tunnel for the electrostatic configuration was not different from most of the other equipment arrangements. The sprayer equipped with air injection nozzles showed significantly higher losses close to the tunnel and significantly lower losses starting from 3.5 m from the tunnel opening in comparison to the other sprayer configurations.

In general, these spray techniques, singularly or combined with one another, could be considered as alternatives to the reference spray practise in strawberries, and when put together, they may ensure better efficiency of applications and a reduction in negative environmental impacts.



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