



## The Future of Weed Science—Novel Approaches to Weed Management

Guest Editors:

**Dr. Ilias Travlos**

Department of Crop Science,  
Agricultural University of Athens,  
75, Iera Odos str., GR11855  
Athens, Greece

**Dr. Aurelio Scavo**

Department of Veterinary  
Sciences, University of Messina,  
Polo Universitario  
dell'Annunziata, 98168 Messina,  
Italy

**Dr. Panagiotis Kanatas**

Department of Crop Science,  
University of Patras, P.D. 407/80,  
30200 Mesolonghi, Greece

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### Message from the Guest Editors

The European Community Directive 128/2009 on the sustainable use of pesticides pays special attention to crop health with the minimum disruption of agro-ecosystems and reduced risks for human health and the environment. Moreover, common agricultural policies like EU Green Deal will face the challenge of a significant reduction of chemical control at the lowest necessary levels. In such an era, there is a clear need for novel approaches to weed management and new technologies are expected to play a pivotal role.

1. Agroecological weed management
2. Cultural practices (cover crops, intercropping, crop rotation, false seedbed, etc.) and their role in future weed science
3. Remote sensing-based methods and frameworks to reduce pesticide inputs in agriculture.
4. Decision Support Systems (DSS) to enhance weed management in the long-term period
5. Improving novel weed management techniques through evaluation of robotics, UAV, deep learning, multispectral sensors etc.
6. Nanotechnology approaches and weed control
7. RNAi technology and herbicide tolerant crops
8. Optimization of herbicide use and integrated weed management approaches
9. The potential role of allelopathy





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### **Prof. Dr. Leslie A. Weston**

Graham Centre for Agricultural  
Innovation, Charles Sturt  
University, Wagga Wagga, NSW  
2678, Australia

## Message from the Editor-in-Chief

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*Agronomy* Editorial Office  
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