



## Effect of Nutrient Deficiencies on Stress Tolerance of Plants and Its Mechanism

Guest Editor:

**Dr. Carlos Lucena**

Departamento de Agronomía,  
Universidad de Córdoba,  
Córdoba, Spain

Deadline for manuscript  
submissions:

**closed (25 May 2024)**

### Message from the Guest Editor

Dear Colleagues,

To cope with nutrient scarcity, plants generally follow two main complementary strategies. On the one hand, they can slow down growth. It is known that the TOR (Target of Rapamycin) system is a central regulator of growth in response to nutrients in eukaryotic cells. On the other hand, plants can develop different physiological and morphological responses. It is known that the plant hormone ethylene participates in the activation of many nutrient deficiency responses.

Both strategies are compatible and can function simultaneously, but the interconnection between them is not yet well known.

We particularly welcome manuscripts dealing with the following topics:

- New advances and methods for the determination of both the “stop growing” and “searching for nutrients” strategies aimed at achieving greater stress tolerance of plants.
- New research shedding light on the relationship of ethylene with the TOR system related to the control of plant growth and development of nutrient deficiency responses.

All forms of submissions are welcome.

Dr. Carlos Lucena

*Guest Editor*



[mdpi.com/si/165873](https://mdpi.com/si/165873)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture,  
Water and Environment  
Research, Charles Sturt  
University, Wagga Wagga, NSW  
2678, Australia

## Message from the Editor-in-Chief

*Agronomy* draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. *Agronomy* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), GEOBASE, PubAg, AGRIS, and other databases.

**Journal Rank:** JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

## Contact Us

---

*Agronomy* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/agronomy  
agronomy@mdpi.com  
X@Agronomy\_Mdpi