

Special Issue

Breeding and Production Practices for Root Vegetables and Tubers

Message from the Guest Editors

Root vegetables and tubers, including potatoes, carrots, sweet potatoes, cassava, and yams, are vital components of global food systems, providing essential nutrients and calories to millions worldwide. Despite their agricultural and economic significance, these crops face challenges such as climate change, soil degradation, pest pressures, and evolving consumer demands. This Special Issue aims to explore innovative strategies in breeding and production practices to enhance the resilience, yield, and sustainability of root and tuber crops. We invite contributions that address advancements in genetic improvement (e.g., marker-assisted selection, CRISPR/Cas9, and hybridization), agronomic practices (e.g., precision agriculture, water-use efficiency, and integrated nutrient management), and post-harvest technologies to reduce losses. Submissions may also focus on climate-smart breeding for drought, heat, or salinity tolerance, as well as biofortification to address micronutrient deficiencies.

Guest Editors

Dr. Yichen Kang

College of Horticulture, Gansu Agricultural University, Lanzhou 730070, China

Prof. Dr. Liwang Liu

College of Horticulture, Nanjing Agricultural University, Nanjing 210095, China

Deadline for manuscript submissions

20 January 2026



Horticulturae

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.1



mdpi.com/si/244951

Horticulturae
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
horticulturae@mdpi.com

[mdpi.com/journal/
horticulturae](https://mdpi.com/journal/horticulturae)





Horticulturae

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.1



[mdpi.com/journal/
horticulturae](https://mdpi.com/journal/horticulturae)



About the Journal

Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis
Department of Biological and Environmental Sciences and
Technologies (DiSTeBA), Salento University, Lecce, Italy

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), PubAg, AGRIS, FSTA, and other databases.

Journal Rank:

JCR - Q1 (Horticulture) / CiteScore - Q1 (Horticulture)