# Special Issue

# i-RTgreenhouse, Green Walls, Urban Agriculture, Vetical Farm and Hi-Tech City Landscape for Sustainability

### Message from the Guest Editors

Due to current events such as the movement of populations to cities, the effect of extreme weather on open-field agricultural production, and the consumption of critical resources such as water and energy, technological concepts have been developed to reduce the impact of such events. Some of these concepts have achieved implementation, resulting in technologies that enable efficient resource use in crop production, plant growth, and our living environment. Various techniques can form urban agriculture, including cultivation systems in cities and efficient use of space, water, energy, and O2 in plant growth, reducing pollutants. The adaptation of green plants to walls, ceilings, floating/hanging gardens, vertical crops (indoors/outdoors), and rooftop greenhouses are now viable for technological development, creating sustainable alternatives for low-growing crops and urban development. Advances in water, mineral/gas fertilization, climate control, modeling, artificial light, structural design, bioclimatics, and natural resource use are under research to develop alternative plant production, urban comfort, and pollution reduction.

#### **Guest Editors**

Dr. Jorge Flores-Velázquez

Dr. Cruz Ernesto Aguilar-Rodríguez

Dr. Edwin Andres Villagran Munar

### Deadline for manuscript submissions

closed (15 November 2025)



## Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



mdpi.com/si/233654

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

mdpi.com/journal/ horticulturae





## Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



### 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, 73100 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)

