



Controlled Environment Horticulture: Latest Advances and Future Prospects

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Message from the Guest Editors

Rapid urbanization, increasing population, decreasing resources, and decreasing nutrition security are current global challenges. Controlled environment horticulture (CEH) has the potential to revolutionize our food systems by enhancing nutrition security, increasing local crop production, reducing food mileage, and minimizing resource use. CEH systems, including greenhouses, vertical farms and high tunnels, enable environmental parameters, including temperature, air, light, and CO₂, to be controlled, eliciting desired yield and quality responses in a predictable manner. These systems enable year-round production of fresh food, ornamental, and high-value crops. However, due to rising production costs, the following important areas for production improvement remain: high energy demand, labor, improving climate control, phytonutrient improvement and sustainability.

The goal of this Special Issue is to highlight cutting-edge innovative research, climate-smart advanced technology, and cultural practices and concepts that could address these challenges and enhance the efficiency and sustainability of controlled environment horticulture.





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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.

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