

# Topical Collection

## Recent Advances in Hydroponic and Aquaponic Research

### Message from the Collection Editor

Aquaponics provides the opportunity to produce food in the most sustainable manner possible. It is possible to engineer an aquaponics system that captures all the nutrients contained in the fish feed by sizing the coupled hydroponic system with sufficient plants to assimilate all the nutrients that the fish have not assimilated in their growing process. Although hydroponics and aquaponics have been practiced for centuries, we are still discovering how plants function in an aquatic environment and how we can optimize their performance, particularly from an environment sustainability perspective—hence the need for this Special Edition. In this Topical Collection, we will collect current research papers on how to move the aquaponics (and hydroponics) industries into the future to provide nutritious diets to feed the additional 2 billion humans being added to our current population of 7.7 billion by 2050. We also need to understand how our current aquaponics systems are working.

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### Collection Editor

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# Horticulturae

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## 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.

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### Editor-in-Chief

Prof. Dr. Luigi De Bellis  
Department of Biological and Environmental Sciences and  
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