





Special Issue Reprint

Greenhouse Management for Better Vegetable Quality, Higher Nutrient Use Efficiency and Healthier Soil

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ISBN 978-3-0365-6301-5 (Hardback) ISBN 978-3-0365-6302-2 (PDF)



Greenhouse cultivation provides an artificially controlled environment for the year-round production of vegetables, and has played an increasingly important role in agriculture production systems in recent decades. Recent works have shown that improving greenhouse conditions can promote the growth of vegetables and enhance the uptake of nutrients, leading to better vegetable quality. Meanwhile, greenhouse conditions not only directly influence soil nutrient cycling processes and properties, but also indirectly affect them by regulating vegetable root growth and plant-soil interactions. This Special Issue features twelve original research articles that deal with the effects of novel greenhouse practices and strategies on the yield and quality of horticulture crops, as well as greenhouse soil properties. Among these publications, three studied the effects of fertilizers, including organic and macro- and micro-nutrient fertilizers, on the growth and nutrient uptake of vegetables. Two articles described the effects of water and nutrient supply using irrigation or hydroponic supplying systems on the yield and quality of vegetables. Four articles investigated the effects of environmental conditions (mainly light and temperature) on the growth and quality of vegetables. In terms of degenerated greenhouse soil, three articles showed how reductive soil disinfestation decreased soil salinity, improved soil quality, and inactivated soil-borne pathogens.



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