

Special Issue

Effects of Rootstocks to Improve Fruit Yield, Quality, and Resilience to Climatic Changes

Message from the Guest Editors

The use of rootstocks is a well-established practice in fruit production, significantly influencing various aspects of plant growth, including vigor, vegetative development, yield, and fruit quality. Rootstocks play a crucial role in enhancing the resilience of fruit crops by providing tolerance or resistance to both biotic and abiotic stresses. They help mitigate the impacts of soil-borne pests and diseases that affect the root system, such as nematodes, fungi, and bacteria, thus improving plant health and longevity. Additionally, rootstocks contribute to overcoming abiotic stress factors, including drought, waterlogging, salinity, extreme temperatures, and soil nutrient imbalances, ensuring stable crop production under changing environmental conditions. In light of climate change, rootstocks have become an essential tool for enhancing the adaptability of fruit crops, ensuring sustainable production, and maintaining high fruit quality. By selecting appropriate rootstock–scion combinations, growers can optimize productivity while reducing the need for chemical inputs, such as fertilizers and pesticides.

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