

Special Issue

Research Progress on the Application of Biotechnology in Fruit Crop Breeding

Message from the Guest Editors

Emergencies of climate changes and of new plant pests and diseases are requiring the development of new more resilient cultivars, maintaining high yield and quality. Standard breeding programs in perennial fruit crops are time consuming and frequently limited by a lack of genetic resources. Integrative biotechnology approaches are mandatory for inducing new genetic variability in elite cultivars to increase their resilience and quality. In vitro morphogenesis (somatic embryogenesis, organogenesis) remains a key tool to apply to biotechnological approaches, starting from in vitro mutagenesis to the more recent new breeding techniques (NBTs) (Cisgenesis/Intragenesis, Genome editing, RNAi). This Special Issue of *Plants* aims to address the problems inherent in the development of efficient morphogenesis protocols and their use for the application of biotechnological techniques (Cisgenesis/Intragenesis, Genome editing, RNAi) in fruit plants. Furthermore, we are also seeking papers that investigate the opportunities that these technologies can offer in enhancing their productive and qualitative traits and solving the increasing sanitary emergencies that are affecting these crops.

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About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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