Special Issue

Genetics and Physiology of Tuber and Root Crops

Message from the Guest Editors

Tuber and root crops encompass a diverse array of species, such as Solanum tuberosum, Ipomoea batatas, Manihot esculenta, Dioscorea spp., and Colocasia esculenta. These crops are of global significance, serving dual functions as principal staple food sources and critical economic commodities. Moreover, certain species within this group exhibit the distinctive property of having both medicinal and edible applications. The yield, quality, disease resistance, and stress tolerance, among other crucial traits, of tuber and root crops have long been the central foci of attention for plant geneticists and breeders. In-depth investigations into the genetic and physiological aspects of these crops, along with comprehensive dissections of the genetic and molecular regulatory networks that govern their growth, development, yield establishment, and quality formation, are essential to establish a theoretical framework conducive to creating high-yield, high-quality, stress-resilient new cultivars.

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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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