Special Issue

Decoding Secondary Metabolism in Horticultural Crops: Insight from Evolution and Domestication

Message from the Guest Editor

Horticultural crops are essential components of human diets and serve as the primary source of food nutrients and spices. One of the key players that determines the quality of horticultural crops are the structurally and functionally diverse secondary metabolites (SM) made by plants to mediate environmental interactions. The origin and diversification of specialized metabolism can be traced to primary metabolic pathways—mainly driven by gene duplications followed by the subfunctionalization or neofunctionalization. It makes deciphering the plant metabolic pathways incredibly challenging due to the existence of massive horticultural crop varieties and the lack of integrated genomic and metabolomic datasets. Thanks to recent technological advances in genomics and metabolomics, a growing number of studies emerge that integrate plant metabolic diversity with genetic variation to uncover the evolution of plant SM. Therefore, this proposed Special Issue will highlight studies on the identification, biosynthesis, diversification, and functions of SM in horticultural crops. The studies conducted in the context of crop evolution and domestication are especially welcome.

Guest Editor

Dr. Pengxiang Fan
College of Agriculture and Biotechnology, Zhejiang University, Hangzhou 310058, China

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Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/plants

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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.

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

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