Special Issue

Plant Regeneration and Organ Formation

Message from the Guest Editors

One of the distinguishing features of plants is their remarkable ability to modify their body plan in response to the environment. This ability requires a high level of developmental plasticity in tissues and cells, which often exhibit pluri- or even totipotentcy. The control of this plasticity is crucial for plant propagation and for widespread application of tissue culture techniques, but key questions remain unanswered. What molecular mechanisms allow this plasticity? How can differentiated cells be recruited to generate a new organ? What is the role of phytohormone distribution, mechanical stimuli, and epigenetic regulation in the process? How can we use our basic knowledge to develop biotechnological innovations in a wide variety of species, where the regeneration from tissue culture often forms a bottleneck? This Special Issue of *Plants* is poised to address these questions. The issue focuses on regeneration and organ formation and seeks to compile novel results in this field of research as well as literature reviews of subjects related to this field.

Guest Editors

Dr. Bastiaan Bargmann

School of Plant and Environmental Sciences, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Dr. Idan Efroni

The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture, Hebrew University of Jerusalem, Jerusalem, Israel

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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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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.

Editor-in-Chief

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

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