

Special Issue

Genetic Diversity of Plant Tolerance to Environmental Restraints

Message from the Guest Editors

Land plants evolved from aquatic organisms about 475 million years ago, the conquest of land mass representing a major achievement made possible over time by genomic evolution. Through this process, plants evolved complex networks of interacting genes to adapt to environmental conditions, and researchers have only just begun to unravel and understand these networks. In the 21st century, however, plants are facing a new challenge, where they have to adapt to a quickly changing environment. Global warming and extremes in temperature and water availability associated with climate change may require plants to adapt faster than their natural plasticity and/or mutation rate currently allow them to. This may cause the extinction of plant species, including staple food crops for human nutrition. The pressure is thus on for scientists to accelerate the identification of available genetic variation in plants linked to the capacity to adapt to environmental stressors and to unravel the underlying molecular and physiological basis. This Special Issue of *Genes* aims to provide a collection of papers that illustrate our current efforts in improving plant tolerance to environmental restraints.

Guest Editors

Dr. Rudy Dolferus

Commonwealth Scientific & Industrial Research Organisation (CSIRO)
Agr & Food, GPO Box 1700, Canberra, ACT 2601, Australia

Dr. Olive Onyemaobi

CSIRO Agriculture and Food, Floreat, WA 6014, Australia

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

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Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan
Department of Pathology, The University of Alabama at Birmingham,
1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

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