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Forest Tree Genetics and Breeding in Response to Different Threats

Guest Editors:

Dr. Jingli Yang

Dr. Haizhen Zhang

Dr. Shicheng Zhao

Dr. Hanzeng Wang

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Message from the Guest Editors

Dear Colleagues,

Different threats such as drought, low temperature, heat, heavy metal, salt damage, pests and diseases are important factors restricting the growth of forest trees. Trees have a long growth cycle, and their resilience mechanisms are extremely complex; therefore, improving the resistance of trees to stress has always been a difficult problem for breeders. However, people can modify trees' resistance traits at the genetic level by using genetic engineering technology. This has given rise to a new era in the century of in-depth developments in tree breeding by molecular design. Finding some key regulatory genes of tree resistance to effectively improve the stress traits of trees would directly contribute to genetic improvement for stronger stress resistance and ultimately benefit tree breeding.

This Special Issue of *Forests* guides the genetics breeding of forest trees in response to different environmental stresses and explores the fields of genetics and molecular mechanisms of tree stress–resistance traits, seeking new breeding strategies that can improve trees' resistance against environmental stress.











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Editors-in-Chief

Prof. Dr. Cate Macinnis-Ng

Department of Biological Sciences, Faculty of Science, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

Message from the Editorial Board

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