forests

an Open Access Journal by MDPI

IMPACT FACTOR 2.5

CITESCORE 4.6

Effects of Abiotic Stress on Tree Physiology and Ecology

Guest Editors:

Dr. Dilek Killi
Plant Production and Technologies Department, Agriculture and Natural Sciences Faculty, Konya Food and Agriculture University, 42080 Konya, Turkey

Dr. Yasutomo Hoshika
Institute of Research on Terrestrial Ecosystems (IRET), Consiglio Nazionale delle Ricerche (CNR), 00185 Rome, Italy

Deadline for manuscript submissions:
closed (20 March 2023)

Message from the Guest Editors

Climate change, anthropogenic pollution and unsustainable management practices induce abiotic stresses that directly impact tree physiology in natural, urban and agricultural settings. Climate change will result in increased drought, thermal stress, and fire frequency, as well as higher atmospheric carbon dioxide. Native forests increasingly show signs of abiotic stress, while the production of fruit crops such as olive or nuts is imperiled by increased drought and temperature changes during flowering. Phenotyping through the examination of tree physiological responses to these stresses can provide a tool to identify varieties adapted to future growth conditions. An understanding of tree physiological response is vital to the mitigation of climate change and population growth effects on forests and tree crops.

This Special Issue examines the impact of abiotic stresses on tree physiology by focusing on gas exchange; chlorophyll fluorescence; remote sensing; hyperspectral monitoring; and metabolomic, antioxidant, epigenetic, genetic and anatomical responses to drought, heat stress, rising [CO2], atmospheric pollutants, salinity, and other abiotic stressors.

forests

IMPACT FACTOR 2.5

CITESCORE 4.6

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa
Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access.

Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.
Journal Rank: JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

Contact Us

Forests Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/forests
forests@mdpi.com
𝕏@Forests_MDPI