# **Special Issue**

# Phytochemicals Under Pressure: Antioxidant Production in Plants as a Response to Environmental Stress

# Message from the Guest Editors

Being sessile organisms, during their evolution, plants have developed a sophisticated chemical defense system to cope with environmental biotic and abiotic stressors. Reactive oxygen species (ROS) production is a common feature of plant responses to environmental stresses, arising both from their role as stress signaling molecules and from their release as by-products of disrupted metabolic pathways. Antioxidant molecules, both enzymatic and non-enzymatic, are either produced constitutively or induced to counteract the negative effects of ROS. Plant antioxidants, produced as a defense mechanism, also have a great range of applications for their beneficial effects on human health. This Special Issue aims to provide a collection of research articles or reviews exploring the production of plant metabolites with antioxidant properties in response to environmental stresses, from classical (drought, salinity, cold/frost, heat, pathogens) to emerging stress factors (air pollutants, micro-/nanoplastics, climate extremes, invasive pests). Studies proposing agronomic and molecular strategies to alleviate oxidative stress for enhanced crop yield and nutraceutical value are also welcome.

#### **Guest Editors**

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# Deadline for manuscript submissions

20 July 2026



Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



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#### Editor-in-Chief

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