

Special Issue on

Effects of Plant-Based Compounds on the Cellular and Molecular Mechanisms of Oxidative Stress 2024

CALL FOR PAPERS

Plants predate animals and they have adapted to colonize almost all ecosystems on the planet. Thus, the interaction between plants and humans is inevitable, and humans today use plants in many ways, including as food, creams, lotions, drugs, aromas, and clothes.

Both within and beyond the scientific community, terms such as ‘antioxidant,’ ‘prooxidant,’ ‘oxidative stress,’ ‘reactive oxygen species (ROS),’ and ‘reactive nitrogen species (RNS)’ are well known and well studied. Underlying these are complicated mechanisms that are triggered and inhibited at a molecular or cellular level, and these are not as well understood. Therefore, further studies should be carried out to develop our understanding of these inner workings of oxidative stress and how pathways are formed and influenced by outside phenomena.

The aim of this Special Issue is to present original research and review articles that focus on understanding the different mechanisms by which plant compounds, such as curcumin, resveratrol, green tea extracts, or polyphenolic extracts, interact with human cells and the way they influence oxidative stress, ROS, oxidative pathways, inflammation, and other reactions.

Potential topics include but are not limited to the following:

- ▶ Effect of plants, plant extracts, and plant-derived substances on oxidative stress
- ▶ Correlation between cellular and molecular oxidative pathways with plant compounds
- ▶ Effect of plant-based molecules on known radicals and similar oxidative species
- ▶ Studies on redox signaling
- ▶ Effect of plant-based compounds on different radical-producing cell organelles, such as mitochondria, endoplasmic reticulum, peroxisomes, Golgi apparatus, nucleus, and plasma membrane
- ▶ Dichotomy between plant-based antioxidants and prooxidants

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=179316>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Editor

Marcio Carocho, Polytechnic Institute of Bragança, Bragança, Portugal
mcarocho@ipb.pt

Guest Editors

Patricia Morales, Universidad Complutense de Madrid, Madrid, Spain
patmoral@ucm.es

Patrícia Rijo, Universidade Lusófona, Lisbon, Portugal
patricia.rijo@ulusofona.pt

Ricardo Calhelha, Polytechnic Institute of Bragança, Bragança, Portugal
calhelha@ipb.pt

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