Special Issue

Advances in Phytochemical Profiling and Bioactive Compounds from Medicinal and Edible Plants and Their Cell and Tissue Cultures

Message from the Guest Editors

Higher plants and their in vitro cultures are valuable sources of a diverse range of metabolites, many of which are used as pharmaceuticals, agrochemicals, flavors, colors, biopesticides, food additives, and food supplements. At present, there is a huge interest in obtaining biologically active compounds from plant sources, which is matched by the remarkable progress being made in combinatorial chemistry and different biological disciplines (genetic engineering, synthetic biology, etc.). Contributing to this attention are the low and even absent toxicity, biodegradability, and renewable sources of formulations based on natural products. This suggests the need for intensive research in the field of the phytochemical profiling of plants and their in vitro cultures, the structural analysis of newly discovered structures, and the definition of their biological activities. This Special Issue of Plants will highlight the medicinal and edible plants, and their in vitro cultures, that are sources of bioactive compounds and focus on the phytochemical profiling and bioactivity elucidation of plant secondary metabolities.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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