

Special Issue

Plant Secondary Metabolism as a Response to Single or Multiple Stresses

Message from the Guest Editors

Secondary metabolites (e.g., flavonoids, anthocyanins, polyphenols) are an innate defense against stress, as all plants can synthesize them. In some species, stress response is enhanced by previous mild or short-term stresses, during which the plant channels its energy towards the synthesis of secondary molecules, to the detriment of growth or other metabolic activities. Furthermore, plants are subjected not only to single biotic or abiotic stresses, but also to multiple stresses. Genetic variability cannot quickly create plant organisms capable of surviving such stresses. The choice of eco-sustainable agricultural practices that can both reduce the impact on natural resources (e.g., soil, air, water) and increase the plant defense response is a valuable solution for modern agriculture. On the other hand, at present, consumers' interest is directed towards functional foods which are rich in secondary metabolites. This Special Issue aims to understand the agronomic, metabolic, and physiological factors which contribute to activate the secondary metabolism in response to single or multiple abiotic and/or biotic stresses.

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Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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