Special Issue

Effects of Secondary Plant Metabolites on Human Health

Message from the Guest Editors

Plant species must synthesize many chemical compounds-phytochemicals-to ensure survival. Most of these compounds are classified as secondary plant metabolites. The synthesis of phytochemicals is highly dependent on the growth conditions of plant species. Consequently, nature provides us with an enormous number of chemical compounds with significant structural variety. Since its beginnings, humanity has used medicinal plants whose positive effects are due to the presence of some secondary metabolites. There is a tradition of obtaining antitumor compounds from plant species, such as taxol from Taxus brevifolia or vinca alkaloids from Catharanthus roseus, or antiinflammatory and antioxidative compounds such as flavones from Heterotheca inuloides. As it is known that anti-inflammatory processes are intricately linked to the onset of tumor processes, studying plant-derived compounds to better understand their functions and mechanisms of action is essential, representing an exciting area of research with a wide range of applications.

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The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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