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Phytoalexins: Fundamental Aspects and Applications

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Message from the Collection Editors

Phytoalexins are low molecular weight antimicrobial compounds that are produced by plants as a response to biotic and abiotic stresses. In addition to displaying antifungal activity in numerous plant-pathogen interactions, phytoalexins have been implicated in human health and disease as antioxidant, anticancer and cardioprotective agents, as well as being supposed to act positively in neurodegenerative illnesses. Phytoalexins display an enormous diversity belonging to various chemical families such as isoflavones, isoflavanones, isoflavans. pterocarpans. flavanones. coumestans. furanoacetylenes, phenylpropanoids, steroid norsesquiterpenoids/sesquiterpenoids, glycoalkaloids. coumarins. Origin or review papers dealing with all aspects of phytoalexins, including structure elucidation; chemical synthesis; methods for phytoalexin analysis in plant extracts or biological fluids; biosynthesis studies including modulation of phytoalexin synthesis; engineering of phytoalexin biochemical pathways in plants and microbes; biological roles in health and disease; structure/activity relationships, etc., are welcome for inclusion in this Topical Collection of Molecules.









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Message from the Editor-in-Chief

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