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Plant Chemistry and Insect Adaptation from Physiology to Ecology

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Message from the Guest Editors

Dear Colleagues,

Intraspecific differences in plant chemistry have different impacts on the growth, development and reproduction, and population occurrence and damage of their herbivorous insects. Plant chemistry (e.g., phenols, terpenoids, alkaloids, and glucosinolates), nutrients (including proteins, amino acids, sugars and fatty acid, etc.), and volatile organic compounds (VOCs) in plant tissues can be affected by biotic and/or abiotic factors, in turn affecting the physiological and ecological properties and population dynamics of herbivorous insect pests, causing their adaptation response to the quality and quantity of host plants. In this Special Issue, manuscripts on the plant chemistry of agricultural and horticultural crops, shrubs and trees (including tea plants), and pasture and lawn grasses, and the impacts of plant chemical changes on the growth, development and reproduction, and adaptation of herbivorous insects are welcomed. This issue's goal is to clarify the phenotypes and mechanisms behind the impacts of host plant chemistry on insect adaptation, especially in the current context of climate change.



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Special Issue



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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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