Special Issue

The Chemical Defenses of Crops against Insect Pests

Message from the Guest Editor

Plants have many endogenous defenses to combat attacking insects, and several of these involve defensive chemicals. They can function in direct defense, e.g., toxic or deterrent chemicals and in indirect defense as chemicals that recruit parasites or predators to infested plants. Unfortunately, domestication, the use of monocultures, and the development of resistance in insect pests has depleted the chemical arsenal of many modern crops. A current challenge for agriculture, therefore, is to understand and enhance the chemical arsenal of crop plants to enable them to better fight their own battles. We have created a Special Issue focused on the chemical defenses of crops against insect pests in all their forms and invite you to submit your research and insight on this subject. Submissions on (but not limited to) the following topics are invited: (1) biosynthesis of chemical defenses against insects in crop plants; (2) identification or use of novel anti-insect compounds in crops; (3) the effectiveness of chemical defenses against different insect pests; (4) chemical defenses in multitrophic interactions; and (5) the ability of insects to detoxify or co-opt crop chemical defenses.

Guest Editor

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Deadline for manuscript submissions

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Editor-in-Chief

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