Special Issue

Adaption of Herbivorous Insects to Plant Chemical Defense

Message from the Guest Editor

Insect herbivores, confronted with a variety of noxious chemicals in their food, have evolved various counter-defense mechanisms to cope with their harmful effects. The evolution of novel adaptation mechanisms to plant defensive compounds in insects has enabled them to utilize new host plants and retain their ecological position. Therefore, studies on the underlying mechanisms of insects' adaptations to plant defense are crucial to understand how insect herbivores have diversified on plants. These mechanisms include simply avoiding continuous contact, excreting unwanted compounds rapidly, modifying them enzymatically into less or nontoxic molecules, sequestering them for further utilization, or developing target-site insensitivity. In this Special Issue, we will collect basic and applied research papers, as well as minireviews, focusing on the ways that herbivorous insects have adapted to plant defensive compounds, seeking submissions from experts working on topics related to molecular, biochemical, and physiological mechanisms of insects' adaptations to plant chemical defenses.

Guest Editor

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Message from the Editor-in-Chief

Arthropods are a diverse and abundant group of animals that are important to a variety of research dictates. For example, hexapods act as bio-indicators of ecosystem function and pest status and serve as model systems for questions concerning physiology, embryology, genetics, and social interaction. The editorial board and staff at Insects is committed to providing contributors an open access forum to showcase objective and innovative research as well as succinct review articles. Our journal is dedicated to providing timely and thorough review of qualified submissions and we welcome you to submit a contribution.

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