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Volatile Organic Compounds Regulating Multitrophic (Plant-Pest-Antagonist) and Multilevel (Belowground-Aboveground) Interactions

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Message from the Guest Editors

Dear Colleagues,

Chemical compounds regulating multitrophic and multilevel interactions are considered innovative tools to be exploited for the sustainable protection of agricultural and forest systems.

These compounds include those induced aboveground by a herbivore's attack and that guide herbivores' natural antagonists (insect predators and parasitoids) to their prey and host targets, but also those induced by root symbionts.

In recent years, it has been demonstrated that root colonization by symbionts belonging to the genus Trichoderma or by arbuscular mycorrhizal fungi (AMF) alters the profile of VOCs released by either healthy or herbivore-infested plants, affecting, in turn, the behavioural response of herbivores' antagonists.

This Special Issue will collect papers dealing with all aspects relative to VOC-mediated communication, aboveground and belowground, that could be exploited to improve the sustainable protection of agricultural and forest systems.

