Special Issue

Activation of Plant Immune System in Sustainable Plant Protection

Message from the Guest Editor

No durable crop protection strategy will be effective in the long term if the health of the soil and the quality of the irrigation water of the monitored cropping systems are not carefully taken into consideration in any integrated pest management. The scientific community has long ago acknowledged that such multiple defense reactions are organized by a specific plant immune system, which, like the human immune system, can be activated or depressed. The activation of the immune system of plants should be pursued by enriching the soil of the fields, particularly those intensively cropped, with beneficial microorganisms. Some natural plant metabolites, such as phytohormones and polyphenols, can also be considered as plant activators against diseases and parasites. Therefore, this Special Issue will collect papers focusing on a holistic approach to durable crop protection strategies that consider the very complex relationships occurring between plants, with or without a genetic background of pest tolerance and resistance, soils, beneficial micro-organisms, environment, beneficial insects, chemical activators, VOCs, etc.

Guest Editor

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