Special Issue

Sustainability Issues in Plant Growth and Development: Environmentally Friendly Alternatives for Pest Management

Message from the Guest Editor

The search for environmentally friendly alternatives in pest management has intensified because of the need to reduce the negative impacts of organosynthetic pesticides. Biological control, pheromones, and bioinsecticides are promising alternatives to conventional management.

Biological control, a technique that uses living organisms to control pest populations, has emerged as an effective and sustainable option. Moreover, the use of pheromones in pest management can be an effective and sustainable strategy. These substances can be employed to monitor the presence of pests, confuse their reproduction, attract them to traps, or disorient them in their search for food, thus reducing the need for pesticides. Another approach is the use of bioinsecticides, which are products based on living organisms or their derivatives, with insecticidal action. The combination of these approaches, along with integrated pest management practices, can significantly reduce dependence on organosynthetic pesticides and promote the sustainability of agricultural systems.

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