Special Issue

Application of Nanomaterials for Diseases and Pest Control in Agriculture

Message from the Guest Editors

Since nanomaterials have different physical and chemical properties than macroscopic materials, the development of nanomaterials and related technologies represents a new avenue for creating smart nanopesticides. Fertilizers and pesticides are the agrochemicals most commonly used in agricultural production systems; thus, the incursion of nanotechnology in agriculture was applied to these agrochemicals. In particular, pesticides play a crucial role in the defense of plants against pest and disease threats, enhancing crop productivity. In this Special Issue, reviews and original articles are expected to delve deeper into the topic nanopesticides to increase penetration, coverage, and absorption of the active ingredient at the application site, including all nanomaterials with nanotechnological applications in agriculture.

- Nanomaterials with antibacterial, antifungal, or insecticidal activity;
- Controlled-release nanomaterials;
- Nanomaterials to improve the stability of active ingredients;
- Nanomaterials with pheromone application;
- Nanomaterial-mediated nucleic acid pesticides;
- Risks associated with nanomaterials as nanopesticides.

Guest Editors

Dr. Soledad García-Morales

Biotecnología Vegetal, CONAHCYT-Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco A.C., Camino Arenero 1227, El Bajío, Zapopan 45019, Mexico

Dr. Rebeca G. Betancourt-Galindo

Centro de Investigacion en Quimica Aplicada, Saltillo, Saltillo, Mexico

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Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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