Special Issue

Advances in Plant Disease Modelling for Sustainable Crop Protection

Message from the Guest Editors

At least 10% of crop losses globally are due to plant diseases, which threat the stability of agricultural systems, price volatility of agricultural products, food security and safety. Furthermore, increasing demands for sustainability from legislative frameworks, food chain stakeholders, and citizens has placed agricultural systems on a path towards reducing inputs, including the use of plant protection products. This Special Issue focuses on botanical epidemiology for the development of plant disease models supporting tactical decisions in crop protection, with the aim of depicting the current landscape of diverse modelling techniques' potential in driving agricultural transition towards sustainable, precision crop protection. All relevant modelling approaches will therefore be considered, from classic to novel methods of empirical modelling (including big data techniques and artificial intelligence) and to advances in process-based modelling, model emulation, and ensemble modelling. This Special Issue welcomes both generic plant disease frameworks and models for specific pathosystems.

Guest Editors

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Dr. Irene Salotti

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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