Special Issue

Evaluation of Genomics for Detection of Plant Pathogens of Regulatory Concern

Message from the Guest Editors

With the introduction of whole genome shotgun sequencing techniques, new powerful tools have become available in diagnostic laboratories for regulatory plant health. No longer do diagnosticians have to rely on a single genetic locus, but now they have the power of an entire (meta)genome at their disposal. Genome sequencing with high throughput sequencing (HTS) technologies are capable of processing large numbers of samples and producing even larger volumes of genomics data. In this Special Issue, the following topics can be presented: the development and validation of generic and specific bioinformatic pipelines for regulated plant pests; the use of comparative genomics for novel assay design; genome-wide phylogenomic analyses to distinguish regulated from non-regulated organisms; and population-level studies for track-and-trace purposes. In addition, we invite authors to reflect on possible implications for the use of HTS in regulatory plant health for phytosanitary policies.

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