



Applications of Genomics or Transcriptomics Approaches in Phytopathology

Guest Editor:

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Message from the Guest Editor

As plants are constantly plagued by a wide variety of pathogens, ongoing pathogens genomics revolution has highly contributed to disease management applications in phytopathology. The advent of such genomics-based resources coupled with next-generation sequencing (NGS) technologies has improved disease resistance in various crops. Coping with this challenge, these applications are effective and can be routinely adopted for crop protection by unraveling the molecular mechanisms underpinning pathogenesis and resistance, gaining insights into the genetics of pathogen populations on a large scale. Furthermore, transcriptome profiling plays a pivotal role for unraveling the molecular mechanisms during compatible or incompatible plant–pathogen interactions. Thus, RNA-seq technology can effectively decipher the differential expression patterns and the transcriptional immune responses when it comes to resistant and sensitive plant hosts challenged by pathogens. In this respect, we are soliciting the submission of any type of research article covering the applications of specific genomics or transcriptomics approaches.





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