Special Issue

Recent Developments for Integrating Multi-Omics Data into Prediction Models for Plant Breeding Applications

Message from the Guest Editor

Dear colleagues, Recent developments of technologies that produce molecular and multi-omics data enabled us to collect information on living organisms that were not available before. With this set of information (e.g. high-throughput phenotyping and genotyping, weather information, soil characterization, biotic and abiotic factors, management, etc.), we have the potential to better understand the agronomically important traits and use them for prediction purposes. The ultimate goal of plant breeding is to increase the genetic gain, and the integration of these technologies can enable us to achieve this by improving the precision of selection. However, the integration of these multi-omics data is not trivial and can cause a bottleneck in leveraging the availability of these sources of information for selection purposes. In this special issue, we invite original research studies, review articles and other types of articles related to the integration of multi-omics data to improve existing methods for accelerating the breeding cycles and enhance selection procedures.

Guest Editor

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