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Crops and Environmental Stresses: Phenomes to Genomes

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Message from the Guest Editors

Abiotic stresses are major yield-limiting factors in crop plants. Over 90% of the arable land is exposed to more than one stress during the growing season. Combined stresses during critical growth and developmental stages (vegetative, reproductive, and grain filling) can affect the genetic potential of crops by alerting a series of morpho-physiological, yield, and quality traits. Quantifying traits responses and connecting phenome to the genome are cornerstones for crop improvement. Therefore, accumulation of knowledge on stress physiology, trait responses, and identifying breeder-friendly markers would facilitate the development of climate-smart crops. The special issue entitled "*Crops and Environmental Stresses: Phenomes to Genomes*" welcomes research articles addressing knowledge gaps related to stress physiology, trait discovery, remote sensing, crop modeling, phenomics, genomics, and generating breeder-friendly phenotypic/biomarker information under individual (CO₂, drought, heat, salinity, nutrient, disease) and combined stress in monocots and dicots.



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Message from the Editor-in-Chief

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