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Transcriptional and Post-transcriptional Gene Regulation in Plants

Guest Editor:

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Message from the Guest Editor

The dissection of the genetic and molecular basis of traits of agronomic importance, in the last few years, has revealed a web of regulatory mechanisms which fine-tune trait expression and integrate both environmental and developmental signals. This regulation can occur at different levels, from regulation of steady-state amount and exon/intron or domain composition of transcripts and proteins, respectively, to control of covalent modifications and sub-cellular localization of proteins. Cross-talk across these regulation layers can ensure a temporally- and spatially-coordinated plant response, through proper tuning of the expression of down-stream genes. Moreover, dynamics of co-evolution have been observed for large families of regulators of gene expression and of regulated genes.

This Special Issue aims to explore the novelty information or viewpoints of mechanisms regulating gene expression for traits of interest in crops and model species, at all levels, from transcripts to proteins. Studies focusing on the natural genetic diversity that exists among genotypes in a particular species for key components of the regulatory networks will also be appreciated.









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Editor-in-Chief

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Message from the Editor-in-Chief

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