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Genetics, Genomics and Bioengineering of Improved Legume Crops

Guest Editor:

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Deadline for manuscript submissions: closed (10 March 2023)

Message from the Guest Editor

Dear Colleagues,

Legumes are hardy plants that can grow in nitrogen-poor soils under harsh environmental conditions, where they provide good sources of food, fiber, and biomass. This Special Issue will address current progress and genetic approaches to:

- Surveying the fitness, geographic distribution, and genomic and phenotypic diversity of wild and domesticated legumes.
- Identifying adaptive phenotypes and genotypes that facilitated the spread of wild species into harsh environments.
- Evaluating the interactions of legumes with nonlegume plants, directly and through the soil microbiome.
- Improving responses to biotic stresses caused by common pathogens and pests.
- Enhancing tolerance to abiotic stresses, such as drought, heat, soil salinity, and cold.
- Improving the quantity, nutritional quality, and post-harvest properties of legumes cultivated for forage and seed.
- Improving plant nutrition via biofortification and the genetic engineering of root symbioses with rhizobia and arbuscular mycorrhizal fungi.
- Developing new tools for the genomic analysis and bioengineering of common and less-traditional legume crops.

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Editor-in-Chief

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Message from the Editor-in-Chief

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