



The Rhizobium-Legume Symbiosis

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Message from the Guest Editors

Evolution of the rhizobium–legume symbiosis appears to be due to a single predisposition event. This fascinating symbiosis allows for the plants to thrive in nitrogen-deficient soils, and the rhizobia receive carbon in return for the fixed nitrogen. Genetic, genomic, and biochemical studies have provided significant, but fragmented insights into the nature of chemical signals, how they are perceived, components of the signal transduction pathway, hormone action associated with organogenesis, biochemical components and reactions associated with nitrogen fixation, and nitrogen transport. Significant knowledge gaps exist on the components of these processes and their precise regulation.

This Special Issue welcomes articles (original research papers, perspectives, reviews, and modeling approaches and methods) on “The Rhizobium–Legume Symbiosis” in four major sub-topics, namely: (i) Nod factor signaling, (ii) nodule organogenesis, (iii) nitrogen fixation, and (iv) agronomical and environmental impacts.





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Message from the Editor-in-Chief

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