



The Role of Mycorrhizal Fungi in Regulating Crops Growth and Improving Soil Fertility

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Message from the Guest Editors

Mycorrhizal fungi are a group of beneficial soil fungi, widely distributed in various ecosystems, which can colonize the roots of 72% of terrestrial plants and establish a reciprocal symbiosis, thus creating an organism between plants and mycorrhizal fungi. With the deepening of research regarding mycorrhizal fungi, their plant-related functions have been uncovered, such as improving plant growth, fruit quality, stress tolerance, and so on. However, when compared with the mycorrhizal roles in plant physiological studies, mycorrhizal research concerning soil fertility is relatively undeveloped, being more centered on potting conditions, making its application to field crops seem slow. In spite of this, mycorrhizal fungi, as an important way of sustainable agricultural production, remain a promising friendly fungal biostimulant. This has also attracted research in the field of crops, especially corn, rice, soybean, and horticultural plants.

Therefore, this Special Issue aims to illuminate the intrinsic mechanisms of mycorrhizal fungi in regulating crop growth and to predict and clarify the mechanisms by which mycorrhizal fungi improve soil fertility in crops.





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