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+++ News Ticker Science #21 +++ Mycorrhiza +++



Commentary

**Elevated CO₂-induced
improvement of mycorrhization –
which players lie in-between?**

Commentary on recent mycorrhiza study in *New Phytologist*.

Prof. Hause recently lent her expertise in the field of arbuscular mycorrhiza (AM) for a commentary in *New Phytologist*. In her article, she highlights a study by Zhou *et al.* 2019 on a signalling pathway involved in AM symbiosis. The Chinese researchers investigated which molecular players are involved in the improved interaction of the symbiosis partners under increased CO₂ concentrations. Prof. Hause puts these interesting insights in an overall context and explains their importance, particularly for the uptake of phosphates, but also for plant adaptation to climate change.

AM is a symbiosis between fungi and land plants in which the plant is supplied by the fungus with limited nutrients, such as phosphate, and the fungus, in turn, benefits from the plant providing sugars. Researchers continually seek to develop strategies to ensure high yields in the future, utilizing the role of AM symbioses for plant adaptability. Detailed knowledge of the relevant plant signalling pathways is crucial for this.

Commentary on Zhou *et al.* 2019:

Bettina Hause. Elevated CO₂ -induced improvement of mycorrhization - which players lie in-between? *New Phytologist* 2019, **224**: 5-7

Reference:

Y. Zhou, S. Ge, L. Jin, K. Yao, Y. Wang, X. Wu, J. Zhou, X. Xia, K. Shi, C. H. Foyer, J. Yu. A novel CO₂ responsive systemic signaling pathway controlling plant mycorrhizal symbiosis. *New Phytologist* 2019. **224**:106-116