

Prof. Dr. Merle Tränkner

Publikationen in begutachteten Zeitschriften und begutachtete Tagungsbände

2018

Tränkner, M.; Jákli, B. & Tavakol, E. (2018): Functioning of potassium and magnesium in photosynthesis, photosynthate translocation and photoprotection. *Physiol. Plantarum*, available online <https://doi.org/10.1111/ppl.12747>.

2017

Jákli, B.; Tavakol, E.; **Tränkner, M.**; Senbayram, M. & Dittert, K. (2017) Quantitative limitations to photosynthesis in K deficient sunflower and their implications on water-use efficiency. *Journal of Plant Physiology* 209, 20-30.

2016

Jákli, B.; **Tränkner, M.**; Senbayram, M. & Dittert, K. (2016) Adequate supply of potassium improves plant water-use efficiency but not leaf water-use efficiency of spring wheat. *J. Plant Nutr. Soil Sci.* 179, 733-745.

Tränkner, M.; Jákli, B.; Tavakol, E.; Geilfus, C.M.; Cakmak, I.; Dittert, K. & Senbayram, M. (2016) Magnesium deficiency decreases biomass water-use efficiency and increases leaf water-use efficiency and oxidative stress in barley plants. *Plant Soil* 406, 409-423.

2015

Senbayram, M.; **Tränkner, M.**; Dittert, K. & Brück, H. (2015): Daytime leaf water use efficiency does not explain the relationship between plant N status and biomass water-use efficiency of tobacco under non-limiting water supply. *J. Plant Nutr. Soil Sci.* 178 (4): 682-692, doi: 10.1002/jpln.201400608.

2014

Cabeza, R.A.; Lingner, A.; Liese, R.; Sulieman, S.; Senbayram, M.; **Tränkner, M.**; Dittert, K. & Schulze, J. (2014) The activity of nodules of the supernodulating mutant Mt(sunn) is not limited by photosynthesis under optimal growth conditions, 5. *International Journal of Molecular Sciences* 15, 6031-6045.

Redebeiträge bei Konferenzen

- Tränkner, M.;** Tavakol, E.; Jákli, B. & Dittert K. (2017) Photoprotective responses and PSII functionality under Mg deficiency. XVIII. International Plant Nutrition Colloquium (IPNC), August 21st – 24th, Copenhagen, Denmark.
- Tränkner, M.;** Jákli, B.; Tavakol, E.; Dittert, K. & Senbayram, M. (2014) Magnesium deficient barley plants have lower biomass water-use efficiency and increased sensitivity to excess light energy. 2nd Magnesium Symposium, November 4th – 6th, São Paulo, Brazil.

Poster bei Konferenzen

- Albers, J. & **Tränkner, M.** (2017) Is *Beta vulgaris* able to fully recover from Mg deficiency in young growth stages after resupply? XVIII. International Plant Nutrition Colloquium (IPNC), August 21st – 24th, Copenhagen, Denmark.
- Tränkner, M.;** Senbayram, M.; Jákli, B.; Halicki, S.; Dittert, K. & Zörb, C. (2017) Comparative Study on Proteome Changes in Response to Potassium Deficiency and Drought in *Triticum aestivum* Roots. Frontiers of Potassium Science Conference, January 25th -27th, Rome, Italy.
- Tränkner, M.;** Tavakol, E.; Dittert, K. & Senbayram, M. (2015) Photoprotective reactions of Mg deficient barley plants. International Conference of the German Society of Plant Nutrition (DGP), September 17th – 18th, Göttingen, Germany.
- Jákli, B.; **Tränkner, M.** & Senbayram, M. (2014) Effects of potassium deficiency on water use efficiency of *Triticum aestivum*. International Conference of the German Society of Plant Nutrition (DGP), September 10th – 12th, Halle (Saale), Germany.
- Tavakol, E.; **Tränkner, M.;** Jákli, B.; Dittert, K. & Senbayram, M. (2014) Adequate K supply enhances tolerance to drought situations via optimized NPQ and antioxidant activity in spring wheat. International Conference of the German Society of Plant Nutrition (DGP), September 10th – 12th, Halle (Saale), Germany.
- Tränkner, M.;** Tavakol, E.; Dittert, K. & Senbayram, M. (2014) Adequate magnesium supply increases biomass water-use efficiency and mitigates effects of excess light energy in barley. International Conference of the German Society of Plant Nutrition (DGP), September 10th – 12th, Halle (Saale), Germany.
- Senbayram, M.; **Tränkner, M.;** Dittert, K. & Brueck, H. (2013) Nitrogen supply enhances intrinsic but not biomass water use efficiency. XVII. International Plant Nutrition Colloquium (IPNC), August 19th – 22nd, Istanbul, Turkey.

Weitere Publikationen

Tränkner, M. (2017) Magnesium, potassium and nitrogen deficiency-induced responses of crops and their impact on water-use efficiency. 1st ed. Cuvillier Verlag, Göttingen. ISBN 978-3-7369-9536-9. eISBN 978-3-7369-8536-0.