

## Dr. Ershad Tavakol

Publications in refereed journals and refereed conference proceedings

### 2018

**Tavakol, E.**; Jákli, B.; Cakmak, I.; Dittert, K.; Karlovsky, P.; Pfohl, K. & Senbayram, M. (2018) Optimized potassium nutrition improves plant-water-relations of barley under PEG-induced osmotic stress. *Plant Soil* 430, 23-35.

Tränkner, M.; **Tavakol, E.** & Jákli, B. (2018): Functioning of potassium and magnesium in photosynthesis, photosynthate translocation and photoprotection. *Physiol. Plantarum*, 163, 414-431.

### 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

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.

## Conference talks

Jákli, B.; **Tavakol, E.**; Tränkner, M. & Dittert, K. (2017) Restricted CO<sub>2</sub> diffusion through the leaf mesophyll and not stomatal regulation limits photosynthesis in K deficient sunflower. International Plant Nutrition Colloquium (IPNC), August 21<sup>st</sup> – 24<sup>th</sup>, Copenhagen, Denmark.

Jákli, B.; Tränkner, M.; **Tavakol, E.** & Dittert, K. (2017) Restricted CO<sub>2</sub> diffusion through the leaf mesophyll and not stomatal regulation limits photosynthesis in K deficient crop plants. *Frontiers of Potassium*, January 25<sup>th</sup> – 27<sup>th</sup>, Rome, Italy.

Tränkner, M.; **Tavakol, E.**; Jákli, B. & Dittert, K. (2017) Photoprotective responses and PSII functionality under Mg deficiency. XVIII. International Plant Nutrition Colloquium (IPNC), August 21<sup>st</sup> – 24<sup>th</sup>, Copenhagen, Denmark.

Jákli, B.; Senbayram, M.; Tränkner, M.; **Tavakol, E.** & Dittert, K. (2015) Der Einfluss von Kalium auf die Wassernutzungseffizienz von Weizen – vom einzelnen Blatt zur gesamten Pflanze. International Conference of the German Society of Plant Nutrition (DGP), September 17<sup>th</sup> – 18<sup>th</sup>, Göttingen, Germany.

Jákli, B.; Senbayram, M.; Tränkner, M.; **Tavakol, E.** & Dittert, K. (2015) The role of potassium in optimizing water-use efficiency and drought adaptation - from single leaves to whole plants. 45<sup>th</sup> Annual Meeting of the Ecological Society of Germany, Austria and Switzerland (GfÖ), August 31<sup>st</sup> – September 04<sup>th</sup>, Göttingen, Germany.

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. 2<sup>nd</sup> Magnesium Symposium, November 4<sup>th</sup> – 6<sup>th</sup>, São Paulo, Brazil.

## Conference poster

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 17<sup>th</sup> – 18<sup>th</sup>, Göttingen, 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 10<sup>th</sup> – 12<sup>th</sup>, 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 10<sup>th</sup> – 12<sup>th</sup>, Halle (Saale), Germany.

## Further publications

**Tavakol, E.** (2017) Physiological and molecular responses of contrasting barley cultivars to limitations of potassium and water availability. Cuvillier Verlag, Göttingen. ISBN 978-3-7369-9682-3. eISBN 978-3-7369-8682-4.