

Dr. Melanie Hauer-Jákli

Publications in refereed journals and refereed conference proceedings

2019

Hauer-Jákli, M. & Tränkner, M. (2019): Critical leaf magnesium thresholds and the impact of magnesium on plant growth and photo-oxidative defense: A systematic review and meta-analysis from 70 years of research. *Frontiers in Plant Science*, doi: 10.3389/fpls.2019.00766.

2018

Jákli, B.; **Hauer-Jákli, M.**; Böttcher, F.; Meyer zur Müdehorst, J.; Senbayram, M. & Dittert, K. (2018): Leaf, canopy and agronomic water-use efficiency of field-grown sugar beet in response to potassium fertilization. *Journal of Agronomy and Crop Science* 204, 99-110.

Wirtz, I.P.; **Hauer-Jákli, M.**; Schenke, D.; Ladewig, E.; Märländer, B.; Heimbach, U. & Pistorius, J. (2018): Investigations on neonicotinoids in guttation fluid of seed treated sugar beet: Frequency, residue levels and discussion of the potential risk to honey bees. *Crop Protection* 105, 28-34.

2017

Hauer, M.; Hansen, A.-L.; Manderyck, B.; Olsson, A.; Raaijmakers, E.; Hanse, B.; Stockfisch, N. & Märländer, B. (2017): Neonicotinoids in sugar beet cultivation in Central and Northern Europe: Efficacy and environmental impact of neonicotinoid seed treatments and alternative measures. *Crop Protection* 93, 132-142.

Hauer-Jákli, M.; Nause, N.; Trimpler, K.; Stockfisch, N. & Märländer, B. (2017): CONVISOR® ONE - Approach to a system analysis of the herbicide strategy. *Sugar Industry* 142, 704-712.

Koch, H.-J.; Windt, A.; Mittler, S. & **Hauer, M.** (2017): Effect of weather variables on biomass production and N uptake of catch crops, and their influence on soil water and Nmin content in Northern Germany. *Journal für Kulturpflanzen* 69, 361-372.

2016

Hauer, M.; Koch, H.-J.; Krüssel, S.; Mittler, S. & Märländer, B. (2016): Integrated control of *Heterodera schachtii* Schmidt in Central Europe by trap crop cultivation, sugar beet variety choice (*Beta vulgaris* L.) and nematicide application. *Applied Soil Ecology* 99, 62-69.

Hauer, M.; Koch, H.-J.; Mittler, S.; Windt, A.; Krüssel, S.; Schlinker, G.; Wollenweber, D.; Rustemeyer, C. & Märländer, B. (2016): Zwischenfruchtanbau, Sortenwahl, N-Düngung: Wirkung auf N-Versorgung und Ertrag von Zuckerrüben sowie auf die Nematodendichte. *Sugar Industry* 141, 44-52.

2015

Hauer, M.; Koch, H.-J. & Märländer, B. (2015): Water use efficiency of sugar beet cultivars (*Beta vulgaris* L.) susceptible, tolerant or resistant to *Heterodera schachtii* (Schmidt) in environments with contrasting infestation levels. *Field Crops Research* 183, 356-364.

2014

Jung, E.-Y.; Otieno, D.; Kwon, H.; Berger, S.; **Hauer, M.** & Tenhunen, J. (2014): Influence of elevation on canopy transpiration of temperate deciduous forests in a complex mountainous terrain of South Korea, *Plant and Soil* 378: 153-172.

Conference talks

Hauer, M. (2016): Water use efficiency of sugar beet varieties susceptible, tolerant and resistant to beet cyst nematodes. 75th Congress of the International Institute for Beet Research (IIRB), February 16th - 17th, Brussels, Belgium.

Hauer, M. (2015): Tolerance to *Heterodera schachtii* in sugar beet due to enhanced use of water and nitrogen? 58. Tagung der Gesellschaft für Pflanzenbauwissenschaften, September 22th - 24th, Braunschweig, Germany.

Hauer, M. (2015): Zwischenfruchtanbau vor Zuckerrüben: Wasserverbrauch, N-Auswaschung, Nematodenkontrolle. 12. Göttinger Zuckerrüben Tagung, September 03rd, Göttingen, Germany.

Koch, H.-J. & **Hauer, M.** (2015): Einfluss des Rübenzystennematoden auf Ertrag und Evapotranspiration toleranter, anfälliger und resistenter Zuckerrüben. Jahrestagung der Deutschen Bodenkundlichen Gesellschaft, September 05th- 10th, Munich, Germany.

Hauer, M. (2014): Zwischenfruchtanbau zur integrierten Nematodenkontrolle in Norddeutschland. Jahrestagung der Gesellschaft für Pflanzenbauwissenschaften, September 16th - 18th, Vienna, Austria.

Conference poster

Hauer-Jákli, M. & Tränkner, M. (2018): A Meta-analysis Study on the Effects of Mg on Photosynthesis and Plant Growth. The 3rd International Symposium on Magnesium, November 25th -28th, Guangzhou, China.

Windt, A.; **Hauer, M.**; Mittler, S.; Geburt, K. & Koch, H.-J. (2016): Integrated control of beet cyst nematodes by catch crop cultivation and sugar beet variety choice. 75th Congress of the International Institute for Beet Research (IIRB), February 16th - 17th, Brussels, Belgium.

Hauer, M.; Mittler, S., Windt, A. & Koch, H.-J. (2015): Einfluss von *Heterodera schachtii* auf die Stickstoffversorgung anfälliger, toleranter und resistenter Zuckerrübensortentypen. VDLUFA-Tagung, September 15th - 18th, Göttingen, Germany.

Hauer, M.; Mittler, S.; Windt, A. & Koch, H.-J. (2014): Integrated control of the sugar beet cyst nematode *Heterodera schachtii* – Catch crops, Sugar beet genotypes, Nematicide. Deutsche Pflanzenschutztagung, September 23rd - 26th, Freiburg, Germany.

Hauer, M.; Mittler, S.; Windt, A. & Koch, H.-J. (2014): Water use efficiency of three sugar beet genotypes in relation to cyst nematode infestation. 74th IIRB Congress, July 1st - 3rd, Dresden, Germany.

Hauer, M. & Koch, H.-J. (2013): Water use efficiency of three sugar beet types at sites with and without nematode infestation – concept and first results. Jahrestagung der Deutschen Bodenkundlichen Gesellschaft, September 7th - 12th, Rostock, Germany.

Further publications

Hauer, M. & Märländer, B. (2016): Ertrag und Wasserverbrauch nematodentoleranter und – resistenter Zuckerrübensorten. Zuckerrübe 65 (1), 37-39.

Koch, H.-J.; Geburt, K. & **Hauer, M.** (2016): Zwischenfrüchte in Zuckerrüben Fruchtfolgen – Nematodenbekämpfung und Zuckerertrag. Zuckerrübe 65 (3), 42-44.

Hauer, M. (2015): Catch crops and sugar beet variety types at *Heterodera schachtii* infested fields – nematode-host interactions and options for nematode control. Dissertation Universität Göttingen, Cuvillier Verlag Göttingen, ISBN 978-3-7369-9147-7.