

## **Academic Summary**

2013	Dr. rer. hort. – Biosystems Engineering, Leibniz Universität Hannover
2009	M.Sc. Horticulture – Institute of Plant Nutrition, Leibniz Universität Hannover
2007	B.Sc. Horticulture – Institute of Plant Nutrition, Leibniz Universität Hannover

## **Professional Experience**

2016 – now	Technical Manager – Bayer AG, Digital Farming
2013 – 2016	Postdoctoral researcher – INRES, University of Bonn
2009 – 2013	Research Associate – Biosystems Engineering, Leibniz Universität Hannover
2008 – 2009	Student assistant – Biosystems Engineering, Leibniz Universität Hannover
2006	Internship – LUFA (Agricultural Investigation and Research Institute)
2006	Internship – LVG Ahlem (Institute for Horticultural Education and Research)
2005	Internship – Berggarten Hannover (Botanical Garden Hannover)
2000	Employee – Technical cooperation Germany - Paraguay

## **Teaching**

2012 – 2013	Teaching assignment – Leibniz Universität Hannover
2010 – 2013	Supervision M.Sc.-student – Leibniz Universität Hannover

## **Awards**

2011	Grow Award – Landgard; 5,000 EUR
2010	1 <sup>st</sup> Place Green Challenge – German Horticultural Society; 1,000 EUR

### **Journal articles, peer reviewed**

- Coucheney E, Eckersten H, **Hoffmann H** et al. 2017. Spatial aggregation for crop modeling at regional scales: Key functional soil types explain data aggregation effects on simulated yield, [...] at a regional scale. *Geoderma* (accepted).
- Tao F, Rötter RP, Palosuo T, ..., **Hoffmann H** et al. 2017. Contribution of crop model structure, parameters and climate projections to uncertainties in climate change impact assessments. *Glob Change Biol*, doi: 10.1111/gcb.14019.
- Fronzek S, Pirttioja N, Carter TR, Bindi M, **Hoffmann H** et al. 2017. Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. *Agr Syst*, doi:10.1016/j.agsy.2017.08.004.
- Grosz B, Dechow R, Gebbert S, **Hoffmann H**, Zhao G, Constantin J, Raynal H, Wallach D, Coucheney E et al. 2017. The implication of input data aggregation on up-scaling soil organic carbon changes. *Environ Modell Softw* 96, 361-377.
- Kuhnert M, Yeluripati J, Smith P, **Hoffmann H**, Van Oijen M, Constantin J et al. 2017. Impact of spatial climate data aggregation on simulated Net Primary Productivity for croplands. *Eur J Agronom* 88, 41-52.
- Krzyszczak JR, Baranowski P, Zubik M, **Hoffmann H**. 2017. Temporal scale influence on multifractal properties of agro-meteorological time series. *Agr Forest Meteorol* 239, 223-235.
- Yin X, Kersebaum KC, Kollas C, Manevski K, Baby S, Beaudoin N, Öztürk I, Gaiser T, Wu L, ..., **Hoffmann H** et al. 2017. Performance of process-based models for simulation of grain N in crop rotations across Europe. *Agr Syst* 154, 63-77.
- Ruiz-Ramos M, Ferrise R, Rodríguez A, ..., **Hoffmann H** et al. 2017. Adaptation response surfaces for managing wheat under perturbed climate and CO<sub>2</sub> in a mediterranean environment. *Agr Syst*, doi:10.1016/j.agsy.2017.01.009.
- Hoffmann H**, Baranowski P, Krzyszczak J, Zubik M, Slawinski C, Gaiser T, Ewert F. 2017. Temporal properties of spatially aggregated meteorological time series. *Agr Forest Meteorol* 234-235, 247-257.
- Yin X, Kersebaum K-C, Kollas C, Baby S, Beaudoin N, Manevski K, Palosuo T, Nendel C, Wu L, ..., **Hoffmann H** et al. 2017. Multi-model uncertainty analysis in predicting grain N for crop rotations in Europe. *Eur J Agronom* 84, 152-165.
- Tao F, Rotter R, Palosuo T, Díaz-Ambrona CGH, Mínguez-Tudela MI, Semenov M, Kersebaum K-C, ..., **Hoffmann H** et al. 2017. Designing future barley ideotypes using a crop model ensemble. *Eur J Agronom* 82, 144-162.
- Hoffmann H**, Zhao G, Asseng S, Bindi M, Biernath C, Constantin J et al. 2016. Impact of spatial soil and climate input data aggregation on regional yield simulations. *PLoS ONE* 11(4): e0151782. doi:10.1371/journal.pone.0151782.
- Zhao G, **Hoffmann H**, Yeluripati J, Xenia S et al. 2016. Evaluating the precision of eight spatial sampling schemes in estimating regional means of simulated yield for two crops. *Environ Modell Softw* 80, 100-112.
- Murat M, Malinowska I, **Hoffmann H**, Baranowski P. 2016. Statistical modelling of agrometeorological time series by exponential smoothing. *Int Agrophys* 30, 57-65.
- Van Bussel LGJ, Ewert F, Zhao G, **Hoffmann H**, Enders A, Wallach D, Constantin J, Raynal H et al. 2016. Spatial sampling of weather data for regional crop yield simulations. *Agr Forest Meteorol* 220, 101-115.
- Webber H, Zhao G, Wolf J, Britz W, De Vries W, Gaiser T, **Hoffmann H**, Ewert F. 2015. Understanding likely scenarios of European crop yields under climate change: do we need to consider nitrogen limitation? *Eur J Agronom* 71, 123-134.
- Hoffmann H**, Zhao G, van Bussel LGJ, Enders A, Specka X, Sosa C, Yeluripati J, Tao F, Constantin J et al. 2015. Variability of aggregation effects of climate data on regional yield simulation by crop models. *Clim Res* 65, 53-69.
- Pirttioja N, Carter TR, Fronzek S, Bindi M, **Hoffmann H** et al. 2015. Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. *Clim Res* 65, 87-105.
- Zhao G, Webber H, **Hoffmann H**, Wolf J, Siebert S, Ewert F, 2015. The implication of irrigation in climate change impact assessment: a European wide study. *Glob Change Biol* 21, 4031–4048.

Baranowski P, Krzyszczak J, Sławinski C, **Hoffmann H**, Kozyra J, Nieróbca A, Siwek K, Gluza A, 2015. Multifractal analysis of meteorological time series to assess climate impact on chosen regions of Europe. *Clim Res* 65, 39-52.

Zhao G, **Hoffmann H**, van Bussel LGJ, Enders A, Specka X et al. 2015. Effect of weather data aggregation on regional crop simulation for different crops, production conditions, and response variables. *Clim Res* 65, 141-157.

Kollas C, Kersebaum KC, Nendel C, Manevski K, ..., **Hoffmann H** et al. 2015. Crop rotation modelling - a European model intercomparison. *Eur J Agronom* 70, 98 - 111.

**Hoffmann H**, Rath T, 2013. Future bloom and blossom frost risk for *Malus domestica* considering climate model and impact model uncertainties. *PLoS ONE* 8 (10): e75033. doi:10.1371/journal.pone.0075033.

**Hoffmann H**, Rath T, 2012. Meteorologically consistent bias correction of climate time series for agricultural models. *Theor Appl Climatol* 110, 129-141.

**Hoffmann H**, Rath T, 2012. High resolved simulation of climate change impact on greenhouse energy consumption in Germany. *Eur J Hortic Sci* 77, 241-248.

**Hoffmann H**, Schenk MK, 2011. Arsenite toxicity and uptake rate of rice (*Oryza sativa* L.) in vivo. *Environ Pollut* 159, 2398-2404.