

**Georg-August-Universität Göttingen**  
**Department für Nutzpflanzenwissenschaften**  
**Abt. Pflanzenernährung und Ertragsphysiologie**

**Verzeichnis der Veröffentlichungen**  
**(List of publications)**

**2020 - 2024**

**2024**

**Chandrasekara, C., Rajapaksha, I., Dissanayake, S., Kadupitiya, H., Sirisena, D., Chandrajith, R., Dittert, K., Suriyagoda, L.** (2024). Effects of climate, soil and water source on the distribution of bioavailable iron in low-land paddy soils of Sri Lanka. *Applied Geochemistry*, 160. <https://doi.org/10.1016/j.apgeochem.2023.105875>

**2023**

**Herrmann, A., Verma, S., Techow, A., Kluss, C., Dittert, K., Quakernack, R., Pacholski, A., Kage, H., Taube, F.** (2023). Assessing nitrous oxide emissions and productivity of cropping systems for biogas production using digestate and mineral fertilisation in a coastal marsh site. *Frontiers in Environmental Science*, 11. <https://doi.org/10.3389/fenvs.2023.1231767>

**Jordan-Meille, L., Denoroy, P., Dittert, K., Cugnon, T., Quemada, M., Wall, D., Bechini, L., Marx, S., Oenema, O., Reijneveld, A., Liebisch, F., Diedhiou, K., Degan, F., Higgins, S.** (2023). Comparison of nitrogen fertilisation recommendations of West European Countries. *European Journal of Soil Science*, 74(6). <https://doi.org/10.1111/ejss.13436>

**Liu T, Kreszies T** (2023), The exodermis: A forgotten but promising apoplastic barrier. *Journal of Plant Physiology*, 290,154177, <https://doi.org/10.1016/j.jplph.2023.154118>

**Mock, A., Ingold, M., Vazhacharickal, P. J., Sourav, S. K., Dittert, K., Buerkert, A.** (2023). Nitrogen fixation of lablab and finger millet in South-India. *Journal of Plant Nutrition and Soil Science*. <https://doi.org/10.1002/jpln.202300319>

**Najdenko, E., Lorenz, F., Olf, H. W., Dittert, K.** (2023). Development of an express method for measuring soil nitrate, phosphate, potassium, and pH for future in-field application. *Journal of Plant Nutrition and Soil Science*. <https://doi.org/10.1002/jpln.202300166>

**Naumann M, Pawelzik E** (2023) Chapter 6 - Nutrient management in potato. In: Çalışkan ME, Bakhsh A, Jabran K (eds) *Potato Production Worldwide*. Academic Press, pp 101-120. <https://doi.org/10.1016/B978-0-12-822925-5.00018-9>

**Piepel, M. F., Dittert, K., Olf, H. W.** (2023). Ion-selective electrodes for quick on-farm determination of ammonium and potassium concentrations in pig slurry. *Journal of Plant Nutrition and Soil Science*, 186(3), 266-275. <https://doi.org/10.1002/jpln.202200088>

**Suriyagoda, L., Dittert, K.** (2023). Phosphorus and Silicon Fertilization with Improved Water Management as Potential Remedies for Growing Rice Seedlings in Heavy Metal and Metalloid Contaminated Soil. *Communications in Soil Science and Plant Analysis*, 54(19), 2699-2715. <https://doi.org/10.1080/00103624.2023.2240373>

**Suriyagoda, L., Sirisena, D., Rathnayake, U., Dittert, K., Gamage, D., Chandrajith, R.** (2023). Variation in essential mineral element and toxic trace element concentrations in the seeds of Sri Lankan rice varieties as affected by milling and soil fertility. *Journal of Plant Nutrition*, 46(18), 4401-4419. <https://doi.org/10.1080/01904167.2023.2240361>

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**Dittert, K., Buerkert, A.** (2022). Special problems of plant nutrition - tropical and subtropical climates (in German). In M. Wachendorf, A. Buerkert, & R. Graß (Eds.), *Organic agriculture (Ökologische Landwirtschaft)* (2 ed., pp. 299-310). Stuttgart: Eugen Ulmer.

Erika C, Ulrich D, **Naumann M**, Smit I, Horneburg B, Pawelzik E (2022) Flavor and Other Quality Traits of Tomato Cultivars Bred for Diverse Production Systems as Revealed in Organic Low-Input Management. *Frontiers in Nutrition* 9. <https://doi.org/10.3389/fnut.2022.916642>

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- Hagenguth J, Kanski L, Kahle H, **Naumann M**, Pawelzik E, Becker HC, Horneburg B (2022) Breeders' Sensory Test: A new tool for early selection in breeding for tomato (*Solanum lycopersicum*) flavour. *Plant Breeding* 141 (1):96-107. <https://doi.org/10.1111/pbr.12994>
- Koebke, S., He, H. X., Boeldt, M., Wang, H. T., Senbayram, M., Dittert, K.** (2022). Climate overrides effects of fertilizer and straw management as controls of nitrous oxide emissions after oilseed rape harvest. *Frontiers in Environmental Science*, 9. <https://doi.org/10.3389/fenvs.2021.773901>
- Piepel, M. F., Dittert, K., Olf, H. W.** (2022). Evaluation of physicochemical on-farm quick tests for estimating nutrient concentrations in pig slurry and development of an application for mobile devices. *Agronomy-Basel*, 12(11). <https://doi.org/10.3390/agronomy12112809>
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- Suriyagoda, L., Tränkner, M., Dittert, K.** (2022). Growth and nutrition of rice seedlings when phosphorus or silicon was applied to a soil heavily contaminated with both arsenic and cadmium. *Journal of Plant Nutrition*. <https://doi.org/10.1080/01904167.2022.2027977>
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- Viebrock J, Chea L, Pawelzik E, **Naumann M** (2022) Phosphat-Effizienz durch Mikroorganismen verbessern? *Kartoffelbau* 73 (7):12-15
- Wang, H. T., Oertelt, L., Dittert, K.** (2022). The addition of magnesium sulfate and borax to urea reduced soil NH<sub>3</sub> emissions but increased N<sub>2</sub>O emissions from soil with grass. *Science of the Total Environment*, 803 <https://doi.org/https://doi.org/10.1016/j.scitotenv.2021.149902>
- Wilmer L, Pawelzik E, **Naumann M** (2022) Comparison of the Effects of Potassium Sulphate and Potassium Chloride Fertilisation on Quality Parameters, Including Volatile Compounds, of Potato Tubers After Harvest and Storage. *Frontiers in Plant Science* 13. <https://doi.org/10.3389/fpls.2022.920212>
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## 2021

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- Chea L, Pfeiffer B, Schneider D, Daniel R, Pawelzik E, **Naumann M** (2021) Morphological and metabolite responses of potatoes under various phosphorus levels and their amelioration by plant growth-promoting rhizobacteria. *International Journal of Molecular Sciences* 22 (10):5162. <https://doi.org/10.3390/ijms22105162>
- Daoud B, **Naumann M**, Ulrich D, Pawelzik E, Smit I (2021) Assessment of sensory profile and instrumental analyzed attributes influenced by different potassium fertilization levels in three tomato cultivars. *Journal of Applied Botany and Food Quality*. <https://doi.org/10.5073/JABFQ.2021.094.022>
- Grünhofer P., Schreiber L., Kreszies T.\*** (2021). Suberin in Monocotyledonous Crop Plants: Structure and Function in Response to Abiotic Stresses. In: Mukherjee S., Baluška F. (eds) *Rhizobiology: Molecular Physiology of Plant Roots. Signaling and Communication in Plants*. Springer, Cham. [https://doi.org/10.1007/978-3-030-84985-6\\_19](https://doi.org/10.1007/978-3-030-84985-6_19)
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- Kesenheimer, K., Augustin, J., Hegewald, H., Köbke, S., Dittert, K., Rabiger, T., Quinones, T. S., Prochnow, A., Hartung, J., Fuss, R., Stichnothe, H., Flessa, H., Ruser, R.** (2021). Nitrification inhibitors reduce N<sub>2</sub>O emissions induced by application of biogas digestate to oilseed rape. *Nutrient Cycling in Agroecosystems*, 120(1), 119-120. <https://doi.org/10.1016/j.agee.2021.107552>
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- Mugo, J. N., Karanja, N. N., Gachene, C. K., Dittert, K., Gitari, H. I., Schulte-Geldermann, E.** (2021). Response of potato crop to selected nutrients in central and eastern highlands of Kenya. *Cogent Food & Agriculture*, 7(1). <https://doi.org/10.1080/23311932.2021.1898762>
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- Wang, H. T., Ma, S. T., Shao, G. D., Dittert, K.** (2021). Use of urease and nitrification inhibitors to decrease yield-scaled N<sub>2</sub>O emissions from winter wheat and oilseed rape fields: A two-year field experiment. *Agriculture, Ecosystems & Environment*, 319. <https://doi.org/10.1016/j.agee.2021.107552>
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- Mugo J.N., Karanja N.N., Gachene C.K., Dittert K., Nyawade S.O., Schulte-Geldermann E.** (2020) Assessment of soil fertility and potato crop nutrient status in central and eastern highlands of Kenya. *Scientific Reports* 10. <https://doi.org/10.1038/s41598-020-64036-x>.
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