



# Dr. Thomas D Alcock

Postdoctoral Researcher | Crop Physiology  
School of Life Sciences, Technical University of Munich



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Freising, Germany



English (native); German (B2)

## Publications (peer reviewed)

Verwaaijen B\*, **Alcock TD\***, Spitzer C, Liu Z, Fiebig A, Bienert MD, Bräutigam A, Bienert GP (2023). The *Brassica napus* boron deficient inflorescence transcriptome resembles a wounding and infection response. *Physiologia Plantarum* 175, e14088. (\*joint first author). DOI: [10.1111/ppl.14088](https://doi.org/10.1111/ppl.14088). Open access.

**Alcock TD†**, Salt DE, Wilson P, Ramsden SJ (2022). More sustainable vegetable oil: Balancing productivity with carbon storage opportunities. *Science of the Total Environment* 829, 154539. (†corresponding author). DOI: [10.1016/j.scitotenv.2022.154539](https://doi.org/10.1016/j.scitotenv.2022.154539). Open access.

**Alcock TD**, Thomas CL, Ó Lochlainn S, Pongrac P, Wilson M, Moore C, Reyt G, Vogel-Mikuš K, Kelemen M, Hayden R, Wilson L, Stephenson P, Østergaard L, Irwin JA, Hammond JP, King GJ, Salt DE, Graham NS, White PJ, Broadley MR (2021). Magnesium and calcium overaccumulate in the leaves of a schengen3 mutant of *Brassica rapa*. *Plant Physiology* 186, 1616-1631. DOI: [10.1093/plphys/kiab150](https://doi.org/10.1093/plphys/kiab150). Open access.

Silva VM, Nardeli AJ, Mendes NAC, **Alcock TD**, de Moura Rocha M, Putti FF, Wilson L, Young SD, Broadley MR, White PJ, Dos Reis AR (2021). Application of sodium selenate to cowpea (*Vigna unguiculata* L.) increases shoot and grain Se partitioning with strong genotypic interactions. *Journal of Trace Elements in Medicine and Biology* 67, 126781. DOI: [10.1016/j.jtemb.2021.126781](https://doi.org/10.1016/j.jtemb.2021.126781).

Silva VM, Tavanti RFR, Gratão PL, **Alcock TD**, Dos Reis AR (2020). Selenate and selenite affect photosynthetic pigments and ROS scavenging through distinct mechanisms in cowpea (*Vigna unguiculata* (L.) walp) plants. *Ecotoxicology and Environmental Safety* 201, 110777. DOI: [10.1016/j.ecoenv.2020.110777](https://doi.org/10.1016/j.ecoenv.2020.110777).

Silva VM, Boleta EHM, Martins JT, Dos Santos FL, da Rocha Silva AC, **Alcock TD**, Wilson L, de Sá ME, Young SD, Broadley MR, White PJ, Dos Reis AR (2019). Agronomic biofortification of cowpea with selenium: effects of selenate and selenite applications on selenium and phytate concentrations in seeds. *Journal of the Science of Food and Agriculture* 99, 5969-5983. DOI: [10.1002/jsfa.9872](https://doi.org/10.1002/jsfa.9872).

**Alcock TD**, Havlickova L, He Z, Wilson L, Bancroft I, White PJ, Broadley MR, Graham NS (2018). Species-wide variation in shoot nitrate concentration, and genetic loci controlling nitrate, phosphorus and potassium accumulation in *Brassica napus* L. *Frontiers in Plant Science* 9, 1487. DOI: [10.3389/fpls.2018.01487](https://doi.org/10.3389/fpls.2018.01487). Open access.

Wang X, Xu P, Yin L, Ren Y, Li S, Shi Y, **Alcock TD**, Xiong Q, Qian W, Chi X, Pandey MK, Varshney RK, Yuan M (2018). Genomic and transcriptomic analysis identified gene clusters and candidate genes for oil content in peanut (*Arachis hypogaea* L.). *Plant molecular biology reporter* 36, 518-529. DOI: [10.1007/s11105-018-1088-9](https://doi.org/10.1007/s11105-018-1088-9). Open access.

**Alcock TD**, Havlickova L, He Z, Bancroft I, White PJ, Broadley MR, Graham NS (2017). Identification of candidate genes for calcium and magnesium accumulation in *Brassica napus* L. by association genetics. *Frontiers in Plant Science* 8, 313347. DOI: [10.3389/fpls.2017.01968](https://doi.org/10.3389/fpls.2017.01968). Open access.

Thomas CL, **Alcock TD**, Graham NS, Hayden R, Matterson S, Wilson L, Young SD, Dupuy LX, White PJ, Hammond JP, Danku JMC, Salt DE, Sweeney A, Bancroft I, Broadley MR (2016). Root morphology and seed and leaf ionomic traits in a *Brassica napus* L. diversity panel show wide phenotypic variation and are characteristic of crop habit. *BMC Plant Biology* 16, 214. DOI: [10.1186/s12870-016-0902-5](https://doi.org/10.1186/s12870-016-0902-5). Open access.

## Selected other scientific outputs

**Alcock TD**, Bienert MD, Junker A, Tschiess H, Meyer RC, Kudamala S, von Wirén N, Altmann T, Bienert GP (2024). Natural variation in the *Arabidopsis thaliana* root and shoot response to boron deficiency reveals sensitive and responsive phenes and phylogenetic and geographic clustering of boron efficiency adaptations. *bioRxiv*. DOI: [10.1101/2024.07.08.602492](https://doi.org/10.1101/2024.07.08.602492).

**Alcock TD**, Verwaaijen B, Liu Z, Bräutigam A, Bienert GP, Melzer M (2022). Root and flower responses of boron-efficient and -inefficient *Brassica napus* accessions to boron deprivation. In: *Proceedings of the 19<sup>th</sup> International Plant Nutrition Colloquium*, 58. Iguassu Falls, Brazil. ISBN 978-65-851-1101-0.

Voß U, **Alcock TD**. 'Reach and Teach Science in Africa': Strengthening Research Capacity for Generating Future Foods. Blog post to UoN Food Systems Institute Blog. 8. May, 2019. Available at: [Reach and Teach Science in Africa](https://reachandteachscienceinafrica.com/reach-and-teach-science-in-africa-strengthening-research-capacity-for-generating-future-foods/).



+49 8161 71-5324



[thomas.alcock@tum.de](mailto:thomas.alcock@tum.de)



[0000-0003-3722-9485](https://orcid.org/0000-0003-3722-9485)



[Thomas D Alcock](https://scholar.google.com/citations?user=0000-0003-3722-9485)