

## Publication List Lisa Thönen *March 2026*

1. Stengele K, Stauber L, Thoenen L, Janse van Rensburg H, D'Adda V, Schlaeppi K. 2026. **Benzoxazinoid-mediated microbiome feedbacks enhance Arabidopsis growth and defence.** *New Phytologist*. <https://doi.org/10.1111/nph.71098>
2. Thoenen L, Pestalozzi C, Zuest T, Kreuzer M, Mateo P, Karasawa M, Deslandes G, Robert C.A.M., Bruggmann R, Erb M, Schlaeppi K. 2025. **Synthetic communities of maize root bacteria interact and redirect benzoxazinoid metabolism.** *mSphere*. <https://doi.org/10.1128/msphere.00159-25>
3. Thoenen L, Hummerjohann J, Schwendimann L and Marti E. 2025. **Phenotypic and genotypic characterization of antibiotic-resistant bacteria from Swiss ready-to-eat meat products.** *Frontiers in Microbiology*. <https://doi.org/10.3389/fmicb.2025.1649307>
4. Wasimuddin, Chiaia-Hernandez A, Terrettaz C, Thoenen L, Caggia V, Mateo P, Coll-Crespi M, Notter M, Mukherjee M, Chavez-Capilla T, Ronchi F, Ganai-Vonarburg SC, Grosjean M, Bigalke M, Spielvogel S, Macpherson A, Mestrot A, Hapfelmeier S, Erb M, Schlaeppi K, Ramette A. 2025. **Component specific responses of the microbiomes to common chemical stressors in the human food chain.** *Environmental Microbiome*. <https://doi.org/10.1186/s40793-025-00700-x>
5. Thoenen L, Kreuzer M, Pestalozzi C, Florean M, Mateo P, Züst T, Wei A, Giroud C, Rouyer L, Gfeller V, Notter D. M, Knoch E, Hapfelmeier S, Becker C, Schandry N, Robert C. A. M., Köllner T. G, Bruggmann R, Erb M, Schlaeppi K. 2024. **The lactonase BxdA mediates metabolic specialisation of maize root bacteria to benzoxazinoids.** *Nature Communications*. <https://doi.org/10.1038/s41467-024-49643-w>
6. Gfeller V, Thoenen L, Erb M. 2023. **Root-exuded benzoxazinoids can alleviate negative plant–soil feedbacks.** *New Phytologist*. <https://doi.org/10.1111/nph.19401>
7. Gfeller V, Cadot S, Waelchli J, Gulliver S, Terrettaz C, Thoenen L, Mateo P, Robert C.A.M, Mascher F, Steinger T, Bigalke M, Erb M, Schlaeppi K. 2023. **Soil chemical and microbial gradients determine accumulation of root-exuded secondary metabolites and plant–soil feedbacks in the field.** *Journal of Sustainable Agriculture and Environment*. <https://doi.org/10.1002/sae2.12063>
8. Thoenen L, Giroud C, Kreuzer M, Waelchli J, Gfeller V, Deslandes-Hérolde G, Mateo P, Robert C.A.M, Ahrens C.H, Rubio-Somoza I, Bruggmann R, Erb M, Schlaeppi K. 2023. **Bacterial tolerance to host-exuded specialized metabolites structures the maize root microbiome.** *Proceedings of the National Academy of Sciences (PNAS)* <https://doi.org/10.1073/pnas.2310134120>
9. Machado R.A.R., Thoenen L, Arce C.C.M., Theepan V, Prada F, Wüthrich D, Robert C.A.M, Vogiatzaki E, Shi Y, Schaeren O.P., Notter M, Bruggmann R, Hapfelmeier S, Bode H. B., Erb M. 2020. **Engineering bacterial symbionts of nematodes improves their biocontrol potential to counter the western corn rootworm.** *Nature Biotechnology* <https://doi.org/10.1038/s41587-020-0419-1>
10. Machado R.A.R., Wüthrich D, Kuhnert P, Arce C.C.M., Thoenen L, Ruiz C, Zhang X, Robert C.A.M, Karimi J, Kamali S, Ma J, Bruggmann R and Erb M. 2018. **Whole-genome-based revisit of Photorhabdus phylogeny: proposal for the elevation of most Photorhabdus subspecies to the species level and description of one novel species Photorhabdus bodei sp. nov., and one novel subspecies Photorhabdus laumondii subsp. clarkei subsp. nov.** *International Journal of Systematic and Evolutionary Microbiology* <https://doi.org/10.1099/ijsem.0.002820>