

Publications

Ehinger F, Niehs S, Dose B, Dell M, Krabbe J, Pidot SJ, Stinear TP, Scherlach K, Ross C, Lackner G, Hertweck C (2023) Analysis of rhizonin biosynthesis reveals origin of pharmacophoric furylalanine moieties in diverse cyclopeptides. *Angew Chem Int Ed Engl* 62(42), e202308540.

Mlotek MD, Dose B, Hertweck C (2023) Bacterial isothiocyanate biosynthesis by Rhodanese-catalyzed sulfur transfer onto Isonitriles. *Chembiochem* 25(3), e202300732.

Niehs S, Scherlach K, Dose B, Uzum Z, Stinear T, Pidot S, Hertweck C (2022) A highly conserved gene locus in endofungal bacteria codes for the biosynthesis of symbiosis-specific cyclopeptides. *PNAS nexus* 1(4), 152.

Büttner H*, Niehs SP*, Vandelannoote K, Cseresnyés Z, Dose B, Richter I, Gerst R, Figge MT, Stinear TP, Pidot SJ, Hertweck C[#] (2021) Bacterial endosymbionts protect beneficial soil fungus from nematode attack. *Proc Natl Acad Sci U S A* 118(37), e2110669118.

Dose B, Niehs SP, Scherlach K*, Shahda S, Flórez LV[#], Kaltenpoth M, Hertweck C (2021) Biosynthesis of sinapigladioside, an antifungal isothiocyanate from *Burkholderia* symbionts. *Chembiochem* 22(11), 1920-1924.

Dose B, Thongkongkaew T, Zopf D, Kim HJ, Bratovanov EV, García-Altare M, Scherlach K, Kumpfmüller J, Ross C, Hermenau R, Niehs S, Silge A, Hnioppek J, Schmitt M, Popp J, Hertweck C (2021) Multimodal molecular imaging and identification of bacterial toxins causing mushroom soft rot and cavity disease. *Chembiochem* 22(19), 2901-2907.

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Niehs SP, Kumpfmüller J, Dose B, Little RF, Ishida K, Florez LV, Kaltenpoth M, Hertweck C (2020) Insect-associated bacteria assemble the antifungal butenolide gladiofungin by non-canonical polyketide chain termination. *Angew Chem Int Ed* 59(51), 23122-23126.

Hermenau R, Mehl JL, Ishida K, Dose B, Ishida-Ito M, Pidot SJ, Stinear TP, Hertweck C (2019) Genomics-driven discovery of NO-donating diazeniumdiolate siderophores in diverse plant-associated bacteria. *Angew Chem Int Ed* 58(37), 13024-13029.

Niehs SP, Dose B, Scherlach K, Pidot SJ, Stinear TP, Hertweck C (2019) Genome mining reveals endopyrroles from a nonribosomal peptide assembly line triggered in fungal-bacterial symbiosis. *ACS Chem Biol* 14(8), 1811-1818.

Dose B, Niehs SP, Scherlach K, Flórez LV, Kaltenpoth M, Hertweck C (2018) Unexpected bacterial origin of the antibiotic icosalide: Two-tailed depsipeptide assembly in multifarious *Burkholderia* symbionts. *ACS Chem Biol* 13(9), 2414-2420.

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symbiont-specific cyclopeptide from bacteria residing in the rice seedling blight fungus.
ChemBioChem 19(20), 2167-2172.

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