Imaging mass spectrometry and genome mining reveal highly antifungal virulence factor of mushroom soft rot pathogen.

Graupner K, Scherlach K, Bretschneider T, Lackner G, Roth M, Gross H, Hertweck C (2012) Imaging mass spectrometry and genome mining reveal highly antifungal virulence factor of mushroom soft rot pathogen. *Angew Chem Int Ed Engl* 51(52), 13173-13177. PubMed

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Projects

Molecular basis of bacterial-mushroom interactions
Details

The genome of the endofungal bacterium *Burkholderia rhizoxinica*
Details

Abstract

Caught in the act: imaging mass spectrometry of a button mushroom infected with the soft rot pathogen *Janthinobacterium agaricidamnosum* in conjunction with genome mining revealed jagaricin as a highly antifungal virulence factor that is not produced under standard cultivation conditions. The structure of jagaricin was rigorously elucidated by a combination of physicochemical analyses, chemical derivatization, and bioinformatics.

Identifier

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