



## Impact of the UPR on the virulence of the plant fungal pathogen *A. brassicicola*

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### Résumé en anglais

The fungal genus *Alternaria* contains many destructive plant pathogens, including *Alternaria brassicicola*, which causes black spot disease on a wide range of Brassicaceae plants and which is routinely used as a model necrotrophic pathogen in studies with *Arabidopsis thaliana*. During host infection, many fungal proteins that are critical for disease progression are processed in the endoplasmic reticulum (ER)/Golgi system and secreted in planta. The unfolded protein response (UPR) is an essential part of ER protein quality control that ensures efficient maturation of secreted and membrane-bound proteins in eukaryotes. This review highlights the importance of the UPR signaling pathway with respect to the ability of *A. brassicicola* to efficiently accomplish key steps of its pathogenic life cycle. Understanding the pathogenicity mechanisms that fungi uses during infection is crucial for the development of new antifungal therapies. Therefore the UPR pathway has emerged as a promising drug target for plant disease control.

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### Liens

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