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Publication date:
2011

Document Version
Early version, also known as pre-print

Citation (APA):
Characterization of *Emericella nidulans* RodA and DewA hydrophobin mutants

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Hydrophobins are small amphiphilic proteins containing an eight cysteine pattern only found in filamentous fungi. They are involved in the attachment of hyphae to hydrophobic structures and the formation of aerial structures. Five *Emericella nidulans* mutant strains were examined to study the two hydrophobins RodA and DewA. Individual knock-out mutants *rodA*Δ, *dewA*Δ and the double deletion strain *rodA*Δ*dewA*Δ were constructed. Furthermore, two strains containing a point mutation in the first of the cysteines of RodA (*rodA*-C57G), where one was coupled to the *dewA* deletion, were included. The reference strain (NID1) and *dewA*Δ displayed green conidia. However, *rodA*Δ and *rodA*Δ*dewA*Δ showed a dark green/brown conidial pigmentation, while *rodA*-C57G and *rodA*-C57G *dewA*Δ displayed lighter brown conidia. *rodA*Δ and *rodA*Δ*dewA*Δ displayed a higher degree of hülle cells compared to the moderate amount observed for NID1 and *dewA*Δ, while *rodA*-C57G and *rodA*-C57G *dewA*Δ displayed a low number of hülle cells. NID1 and *dewA*Δ conidia were dispersed as spore chains. *rodA*Δ, *rodA*Δ*dewA*Δ, *rodA*-C57G and *rodA*-C57G *dewA*Δ spores were associated in large clumps, where the conidia seemed to adhere to one another. The largest degree of spore clustering was observed for *rodA*Δ and *rodA*-C57G *dewA*Δ.