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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\(\Delta\), dewA\(\Delta\) and the double deletion strain rodA\(\Delta\)dewA\(\Delta\) 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\(\Delta\) displayed green conidia. However, rodA\(\Delta\) and rodA\(\Delta\)dewA\(\Delta\) showed a dark green/brown conidial pigmentation, while rodA-C57G and rodA-C57G dewA\(\Delta\) displayed lighter brown conidia. rodA\(\Delta\) and rodA\(\Delta\)dewA\(\Delta\) displayed a higher degree of hülle cells compared to the moderate amount observed for NID1 and dewA\(\Delta\), while rodA-C57G and rodA-C57G dewA\(\Delta\) displayed a low number of hülle cells. NID1 and dewA\(\Delta\) conidia were dispersed as spore chains. rodA\(\Delta\), rodA\(\Delta\)dewA\(\Delta\), rodA-C57G and rodA-C57G dewA\(\Delta\) 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\(\Delta\) and rodA-C57G dewA\(\Delta\).