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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Summary of phenotypes of adenylyl cyclase mutants in other plant fungal pathogens** | | | | | | | | |
| **Organism** | **Pathogenicity** | **Appressoria formation** | **Hyphal growth** | **Asexual sporulation** | **Conidial germination** | **Sexual reproduction** | **Secondary metabolism** | **cAMP level** | **reference** |
| *F. graminearum* | nonpathogenic on wheat, fully pathogenic on maize | absent | reduced | reduced in submersed culture, enhanced on agar plates and wheat floral leafs | not affected | like wild type on carrot agar, absent on wheat straw | DON biosynthesis strongly reduced | reduced on wheat and maize | this study |
| *F. proliferatum* | reduced | not tested | reduced | increased | delayed | reduced | increased bikaverin production | not tested | [3] |
| *F. fujikuroi* | not affected a) | not tested | reduced a); b) | reduced a) | not tested | not tested | inappropiate fusarubin biosynthesis, reduced bikaverin and GA production b) | not tested | a) [4]  b) [44] |
| *C. neoformans* | nonpathogenic a) | N/A | wild-type like a) | not tested | not tested | mating defective a) |  | not detectable b) | [1] |
| *M. oryzae* | nonpathogenic | absent | reduced | reduced | reduced | sterile | not tested | not tested | [18] |
| *B. cinerea* | attenuated a) | N/A | Reduced a) | reduced during infection a) | reduced b) | Absent b) | reduced b) | reduced in mycelia, increased in germlings b) | a) [16]  b) [17] |
| *S. sclerotiorum* | attenuated (on wounded leaves) | absent | altered branching pattern | N/A | N/A | aberrant | not tested | reduced | [2] |
| *U. maydis* | reduced | not tested | constitutively filamentous | N/A | N/A | absent | not tested | not tested | [5] |
| *C. lagenarium* | nonpathogenic | nonfunctional appressoria | reduced | reduced | reduced | not tested | not tested | not tested | [6] |

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