

# Restoration of gibberellin production in *Fusarium proliferatum* by functional complementation of enzymatic blocks

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Nine biological species, or mating populations (MPs), denoted by letters A to I, and at least 29 anamorphic *Fusarium* species have been identified within the *Gibberella fujikuroi* species complex. Members of this species complex are the only species of the genus *Fusarium* that contain the gibberellin (GA) biosynthetic gene cluster or at least parts of it. However, the ability of fusaria to produce GAs is so far restricted to *Fusarium fujikuroi*, although at least six other MPs contain all the genes of the GA biosynthetic gene cluster. Members of *Fusarium proliferatum*, the closest related species, have lost the ability to produce GAs as a result of the accumulation of several mutations in the coding and 5' noncoding regions of genes P450-4 and P450-1, both encoding cytochrome P450 monooxygenases, resulting in metabolic blocks at the early stages of GA biosynthesis. In this study, we have determined additional enzymatic blocks at the first specific steps in the GA biosynthesis pathway of *F.*