A combined genetic and multi medium approach revels new secondary metabolites in Aspergillus nidulans

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Secondary metabolites are a diverse group of metabolites which serve as important natural sources of drugs for treating diseases. The availability of full genome sequences of several filamentous fungi has revealed a large genetic potential for production of secondary metabolites that are not observed under standard laboratory conditions. Genetic approaches have proven a fruitful strategy towards the production and identification of these unknown metabolites. Examples include deletion of the *cclA* and *laeA* genes in *A. nidulans* which affects the expression of secondary metabolites including monodictyphenone and terrequinone A respectively. We have deleted the *cclA* gene in *A. nidulans* and grown the mutants on several complex media to provoke the production of secondary metabolites. This resulted in the production of several metabolites not previously reported from *A. nidulans*. Some of these have been reported from other *Emericella* spp or *Aspergillus terreus*.