Licensing and Technology Transfer Opportunity: Manipal University

Title of Technology Available:
A method of producing colchicine from an endophytic Phomopsis using epigenetic modifiers

Brief Description of Invention:
Repeated sub-culturing of fungi leads to a process called attenuation and one of the reasons could be silencing of the genes. Epigenetics being one of the prime mechanism in silencing of functional genes, its role in attenuation of metabolite synthesis was analyzed.

Brief Background of Invention:
Attenuation is one of the phenomenon which leads to a partial loss of a property of a given isolate. Attenuation plays a very important role in those fungi which are capable of producing host specific phyto-chemicals. The present proposed invention states a way in overcoming the attenuated stage of the fungal endophyte.

Describe the final product:
The method employed will prevent attenuation of the metabolite production and induce production of the metabolite in axenic cultures.

Technological Domain (Keywords):
Attenuation, metabolite production, epigenetics

Proof of Concept:
We have established this with our fungal culture which showed attenuation of metabolite production. The method employed has resulted in production of attenuated metabolite in the axenic culture system.

Stage of Development:
Ideation/~~Prototype/Advanced Prototype/Market Ready product~~:

Provide Information on Competitors who manufacture and/or sell similar products: NA

What are the unique advantages your innovation has compared to the competition: NA

Have you approached any company/industry to manufacture/license/and sell your invention?:
If yes, Provide details of the company/organization and the contact person; No

Any other information that might be useful: NA

Intellectual Property Status: Patent Filed (pending review)