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Bio-manufacturing of gout medicine

Colchicine is one of the most important alkaloid-based antigout drugs with anticancer potential which is unique to *Colchicaceae*. *Gloriosa superba* L is a very successful commercial source of plant-based pharmaceutical colchicine. However, high colchicine production is challenging and the cultivation is labor-intensive, time consuming, and expensive. Indeed, there is no bio-manufacturing technology for the production of plant-based colchicine. A new biotechnological bio-rhizome engineering platform is emerging from *G. superba*. Author will discuss recent advances in bio-rhizome to bio-manufacture therapeutic colchicine.

Biography

Ganapathy Sivakumar is currently an Assistant Professor in Department of Engineering and Technology at University of Houston, USA. He completed his PhD and Post-doctoral degree in the areas of Biotechnology, Molecular Chemistry, Bio-process Engineering. He has experience in Industrial Biotechnology. He has over 40 publications. He is also Editorial Board Member of several journals. He serves as an expert of grant proposals as well as numerous scientific journals. His laboratory focuses on metabolic and bioprocess engineering of colchicine pathway and developing potential anticancer medicine.

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