

P3-103: “Regulation, Production and Purification of Bioactive Stilbenoids from Hairy Root Cultures of Peanut”

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Abstract:

Stilbenoids are polyphenolic compounds produced by selected plants upon biotic and abiotic stress. Among the stilbenoids, resveratrol has been associated with several biological activities including anticancer and anti-aging properties. In this project, we are utilizing a peanut root culture as a bioproduction system of stilbenoids (Medina-Bolivar et al., 2007a; 2007b). The genes involved in the biosynthesis of these compounds are being identified (Condori et al., 2009) and their regulation studied in small- and large-scale cultures. In order to elucidate their biological activity, the stilbenoids are being purified using novel techniques in chromatography and further tested for antioxidant and other biological activities.