

12th Euro Biotechnology Congress

November 07-09, 2016 Alicante, Spain

Germplasm conservation of *Andrographis paniculata* through somatic embryogenesis and encapsulation

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Andrographis paniculata Nees of the family Acanthaceae, one of the most potential medicinal herbs is used in many pharmacological properties. The main constituent of the herb is Andrographolide; in addition to this Andrographolide esters and lactones have been found to be cancerolytic, hepatoprotective, anti HIV etc., (under testing *in vitro*). The main objective is to conserve germplasm through somatic embryogenesis and encapsulation. The present investigations have revealed hypocotyls, cotyledons and embryo cultures of *Andrographis paniculata* were induced to produce somatic embryos on MS media supplemented with 2,4-D (4.56 μ m). Somatic embryos at different stages of development were transferred on to maturation and germination media. Somatic embryos were encapsulated and transferred to the recovery media and plantlets were developed. *In vitro* conservation through somatic embryogenesis and encapsulation may offer a better approach compared to organogenesis for developing scale-up technology by employing bioreactors.

Biography

P Anitha is currently working as an Associate Professor in the Department of Botany at MES College, Bangalore (Deputed from BMS College for Women, Bangalore). She has published 10 research papers, presented research papers in various international and national journals/conferences and completed 2 research projects funded by UGC and VGST. She was conferred with "Talented Scientist Award" for her outstanding contribution to the medicinal plant research during the 4th international conference on medicinal plants and herbal products held at John Hopkins University, USA, 2012.

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