



International Journal of Advanced Research in Biology, Engineering, Science and Technology
(IJARBEST)

Vol. 2, Special Issue 8, February 2016 in association with
KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, VIRUDHUNAGAR
DEPARTMENT OF BIOTECHNOLOGY

ORGANIZES

DBT, NEW DELHI SPONSORED NATIONAL LEVEL CONFERENCE ON CONTEMPORARY TRENDS IN
BIOENERGY AND GREEN TECHNOLOGY: CHALLENGES AND OPPORTUNITIES [ORA-2016]
(25-26TH FEBRUARY 2016)

Production of lovastatin from endophytic fungi using different medicinal plants

M.Senthamarai*, V.Cathrin Sagai, N.Deepa, G.Dhamodharan
Department of Biotechnology,

Bannari Amman Institute of Technology, Sathyamangalam-638401, Erode.

*Corresponding author – senthamaraim@bitsathy.ac.in

Abstract

India with its knowledge of rich ancient traditional systems of medicine provides a strong base for the utilization of a large number of plants in general healthcare. Of the large number of herbal drugs existing in India, very few has been studied systematically so far. Plant endophytic fungi are an important and novel resource of natural bioactive compounds with their potential applications in agriculture, medicine and food industry.

The aim of this study was to identify the diversity of endophytic fungi from various medicinal plants and to investigate lovastatin producing property. Lovastatin has shown great promise towards the suppression of a variety of leukemic cell lines and a wide array of solid tumour cells in vivo, by inhibiting the synthesis of non-sterile isoprenoid compounds.

Microscope was used to visualize hyphae morphology and estimate the hyphal load. All the strains were identified based on the morphology of the fungal culture and the characteristics of the spores. Various Fungal species were successfully isolated and are screened for lovastatin production. The conclusion is that the endophytic fungus are isolated and they identified using the compound microscope. The property of endophytic fungi to produce the anti cancer compound lovastatin are investigated by using reference.

Keywords: Endophytic fungi, microscope, anticancer compound, morphology

Research at its Best III