

Studies on Enzyme Activity of Endophytic fungi Associated with *Litsea glutinosa*, an ethno medicinal plant

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Abstract

Endophytic fungi are those which inhabit inside plant tissues without causing apparent symptoms of infection. Fungal endophytes enhance the ecophysiology of host plants and enable them to counter abiotic stresses such as drought and metal contamination. Endophytes may also benefit host plants by preventing pathogenic, predatory organisms from colonizing them. These endophytic fungi were now extensively studied as source of new bioactive compounds and they can be a new source to produce hydrolytic enzymes with different prospects. Endophytes from medicinal plants therefore, represent a chemical reservoir for new compounds such as anti cancer, anti oxidant, anti viral, anti parasitic etc for use in the pharmaceutical and agrochemical industries. *Litsea glutinosa* is an important medicinal plant widely used for the treatment of diarrhea, dysentery, fractured limbs, aurosing sexual power; it is capable of relieving pain (gouty joints) and cures some other diseases. In this study endophytic fungi were isolated from *Litsea glutinosa* to assess their production of enzymes such as amylase, cellulase, protease and laccase. A total number of 23 endophytic fungi isolated from the parts of the *L. glutinosa*. Out of them eight fungal isolates were screened for the production of enzymes, of which 32% were positive for amylase, 29% for cellulase and 21% for protease activity. None of the endophytic isolates shown laccase activity. In the light of these facts the paper will be presented.