

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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Project report on

**"Identification and Characterization of Endophytes producing
Lapachol from *Tabebuia argentea*"**

Submitted in the partial fulfillment of the requirement for the award of Degree

BACHELOR OF ENGINEERING

IN

BIOTECHNOLOGY

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ABSTRACT

Lapachol is an anticancer drug widely used in the treatment of cancer. Endophytic fungus *Aspergillus Niger*, *Alternaria sp.* and *Fusarium sp.* were isolated from different parts of *Tabebuia argenticia*. Fungi were identified based on their morphological and reproductive characters using standard identification manuals. Lapachol was extracted using organic extract (Chloroform, Acetone, Ethyl acetate, Ethanol). Phytochemical screening and antimicrobial test was conducted. Finally lapachol identification test was conducted in these endophytes to confirm the presence of Lapachol. Lapachol was found in *Alternaria sp.* and *Aspergillus niger*. These endophytes are the alternative agents for the production of anticancer agents.