

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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A PROJECT REPORT ON
“OPTIMIZATION AND PRODUCTION OF ETHANOL FROM FRUIT WASTE”

(Sponsored by KSCST)

Submitted in partial requirement for the award of the degree of

BACHELOR OF ENGINEERING
IN
BIOTECHNOLOGY

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ABSTRACT

The treatment and disposal of wastes of all kinds has been the problem globally. Waste could be treated by reducing its bulk or by recovering and reprocessing it into useful substances. Waste materials from domestic and commercial establishments like fruit juice stalls, hotels are chief sources for the production of Ethanol. In the present study, waste from fruits was subjected for fermentative production of ethanol using *Saccharomyces cerevisiae*. Fermentation of fruit waste was carried out and determined for the reducing sugar concentration and the ethanol yield at every 72 hours interval. The results of the study showed that after 9 days of fermentation, the production of ethanol was 8.5%. The study was focused on the methods which are economically reliable and environmental friendly.