

ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce

Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University,
Approved by Government of Karnataka, Approved by AICTE, New Delhi,
Recognized by UGC under 2f & 12B of UGC act 1956

(National Institutional Ranking Framework, Ministry of Education, Govt of India)

(National Institutional Ranking Framework, Ministry of Education, Govt of India Ranked 55th in NIRF India Ranking by MHRD, New Delhi DBT Star College Scheme

## Department of Biotechnology and Genetics A report on additional experiment conducted for B.Sc. III year student (Biotechnology) Under DBT Star College Scheme "Preparation of Wine"

A one-day hands-on experiment on the preparation of wine and its estimation of alcohol by specific gravity method was conducted on August 22, 2022 for B.Sc. III year students (Biotechnology) under the DBT star scheme program. A total 148 students successfully participated in this additional experiment.

The objective of the experiment was to prepare the wine by using a red grape and to gain knowledge about the mechanisms of fermentation by microorganisms involved in the wine processing. Further, students also learnt how to estimate the amount of alcohol produced during the wine fermentation process, which has a duration of 21 days. The specific gravity method was introduced to the students, and they learnt to compare the results with the AOAC chart to represent the percentage of wine in the given wine sample. The students compared the results obtained with the controlled wine sample bought from the shop.











The learning outcome of this experiment was to understand the significance of wine preparation and microbiological control throughout the entire process and during wine aging.

All the participants have submitted their observations and results in the form of handouts.

The in-charge faculties for the conduction of the experiments were **Dr. Geetika Pant and Dr. R. Prashanthi** from the Department of Biotechnology and Genetics.