

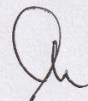
**Lal Bahadur Shastri College of Arts, Science and Commerce, Satara.**

**DEPARTMENT OF MICROBIOLOGY**

**Wall paper exhibition**

**2021-2022**

A wall paper on "Epidemics & Pandemics of microbial disease before & after 1947" under the scheme of Azadi ka Amrit Mahotsav was prepared by BSc.III Students Ms. Siddhi Sable & Shruti Gaikwad under the guidance of Mrs.P.Y.Londhe was inaugurated by the auspicious hands of Prin.Smt.Y.V.Jugale in presence of Prin.Dr.R.V.Shejwal on 10/2/2022. Dr.V.S.Patil introduced the theme & Mr.N.A.Kadam delivered vote of thanks.



**Head**  
Department of Microbiology,  
L B. S. College of Arts, Sci. & Comm., Satara





Wall paper inauguration by Prin.Smt.Y.V.Jugale.



Felicitation of students



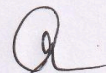
# Avishkar Research Competition

Avishkar 2021-22

## ECOFRIENDLY TREATMENT OF POTATO WASTE AND ONION WASTE BY BIOMETHANATION TECHNOLOGY

### SUMMARY:

Potato and onion waste comprises largest share of agricultural wastes. Potato and onion markets generate huge quantities of wastes per day due to inadequate transportation, storage and marketing practices. Present inappropriate disposal methods results in environment pollution and hazards to human health. Biomethanation is the anaerobic digestion of biodegradable organic waste under controlled conditions of temperature, moisture and pH in an enclosed space to generate biogas comprising mainly methane and carbon dioxide. Biomethanation appears to be an attractive option for the treatment of potato-onion waste since it converts waste into renewable source of energy and natural fertilizer. The objectives of the present study was to investigate biomethanation potential of potato and onion waste in co-digestion manner in terms of biogas yield and the volatile solids removal efficiency by conducting a lab scale study under ambient temperature conditions. The average daily biogas yield obtained in co-digestion ranged from 0.439 L/gm VS added to 0.481 L/gm VS added. The highest average daily biogas yield was exhibited by digester fed with 100% potato waste. The lowest average daily biogas yield was exhibited by digester fed with the admixture of 25% potato waste and 75% onion waste. Maximum total solids, volatile solids, biochemical oxygen demand and chemical oxygen demand reduction was exhibited by digester fed with 100% potato waste.



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UG or PG: UG

Title of project: Ecofriendly treatment of potato waste and onion waste by  
Biomethanation technology

Summary: PDF



# Industrial Visit


**Lal Bahadur Shastri College of Arts, Science And Commerce**

**Department of Microbiology**

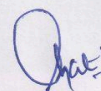
**Study Tour Report**

**2021-22**

The study tour was organized for B.Sc II & III students by Department of Microbiology of Lal Bahadur Shastri college, Satara to Ajinkyatara Sahkari saklhar karkhana, Distillery unit and ETP plant, Shendre dated on 21 March 2022. Main purpose of the tour was usually to enhance their research aptitude and practical handwork. And also introduce them to various departments in industry like production, quality control and quality assurance. We also visited ETP plant and distillery unit. The main purpose was to show treatment of liquid waste. All these objectives were fulfilled after visit to this industry.



Tour in-charge



HOD

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**Visit to Ajinkyatara Co – operative sugar factory**