



# HOLY CROSS COLLEGE

Accredited by NAAC with 'A' Grade

## REPORT

*On*

### **Participation in 6th Student Project Programme- 2022-2023; Organized by Tripura State Council for Science & Technology on 14-15<sup>th</sup> December, 2022**

Theme of the 6th Student Project Programme was  
**“Science, Technology and Innovation for Sustainable Development”**

Siyari Jamatia and Naimur Nahar Munnice from the 5th Semester B.Sc. General Department, Holy Cross College, Agartala participated in the 6th Student Project Programme-2022-2023; Organized by Tripura State Council for Science & Technology on 14-15<sup>th</sup> December, 2022 and awarded **Second Prize** in the Competition. The title of the paper was "**Production Of Bio-Plastic By Using Different Plant Materials: One Step Towards A Better Future**". They have performed the experiment under the supervision of Dr. Debasree Lodh, Head, Dept. of B.Sc. General; Assistant Professor, Department of Botany.

The Abstract of their work which was presented in the competition by the students has been given below-

Plastics has become the most imperative part of our daily life. But the use of undegradable plastic products causes environmental pollution and ecological imbalance. This major global issue demands proper management and permanent solution by introducing some innovative and creative ideas. In this challenging scenario, production of eco-friendly biodegradable plastics can shed a light of hope for pollution free, non-hazardous environment. In the present experiment, we have focused on the production of low-cost, degradable bio-plastics by using natural plant materials like agar powder, marigold, *Clitoria* sp., beet-root, turmeric, green tea, glycerine, water etc., which can be easily preparable within short period of time. It has been observed that the quality and elasticity of the plastics prepared by the plant materials are very good and easily degradable. As satisfactory result came out for the production of biodegradable plastics with our present laboratory experiment, it can be a good eco-friendly option for future and can be easily introduced in the market.



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Agartala, Tripura, India

V74H+48H, Gorkhabasti, 79 Tilla, Agartala, Tripura 799010, India

Lat 23.855405°

Long 91.278724°

15/12/22 01:31 PM

GPS Map Camera



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## TRIPURA STATE COUNCIL FOR SCIENCE & TECHNOLOGY

(A Constituent Organization of the Department of Science, Technology & Environment,  
Government of Tripura)

F. No.9(101)/TSCST/ 3459-61

Dated, Agartala, December 12,2022

**Sub.: Invitation for presentation of Project in the 6<sup>th</sup> Student Project Programme scheduled to be held on December 14-15, 2022.**

Sir/Madam,

Following 2(one) projects submitted from Holy Cross College has been considered for presentation in the Technical Session of the 6<sup>th</sup> Student Project Programme scheduled to be held on December 14-15, 2022 at Pragna Bhawan (Hall No: III), Agartala, Tripura.

Sl. No.	Name of the project	Name of Student	Name of Guide Teacher
1	Production of bio-plastic by using different plant materials: One step towards a better future	Siyari Jamatia & Naimur Nahar Munnie	Dr. Debasree Lodh
2	Assessment of impact of monoculture practice on insect and arachnid faunal diversity- A case study in Salbgan, West Tripura (India)	Mohini Debbarma & Sayantika Bhattacharjee	Dr. Animesh Dey

Group leaders along with other student members of the concerned projects are requested to present the project through power point presentation in the technical session of the 6<sup>th</sup> Student Project Programme which will start just after the short inaugural session on 14<sup>th</sup> December, 2022. Total allotted time for the oral presentation is 7 (Seven) minutes for each project.

Registration of the project team will start from 10 A.M. on 14<sup>th</sup> December, 2022. Kindly bring the softcopy of the presentation in pendrive and submit the presentation (Softcopy) in the registration desk.

You are requested to attend the 2 days programme along with the students.

Yours faithfully

(B. Chakrabarti)

Member Deputy Secretary

To:

1. Dr. Debasree Lodh, Assistant Professor, Holy Cross College, Jabatara, Lembucherra, Tripura.
2. Dr. Animesh Dey, Assistant Professor, Holy Cross College, Jabatara, Lembucherra, Tripura.

Copy to:

The Principal, Holy Cross College, Jabatara, Lembucherra, Tripura.

(B. Chakrabarti)

Member Deputy Secretary



"Science, Technology and Innovation for Sustainable Development"

## Production Of Bio-Plastic By Using Different Plant Materials: One Step Towards A Better Future

*Siyari Janatia & Naimur Nahar Munnie*

*Guide Teacher: Dr. Debasree Lodh, Assistant Professor,*

*Department of Botany, HoD, Department of B.Sc. General, Holy Cross College, Agartala*

### ABSTRACT

Plastics has become the most imperative part of our daily life. But the use of undegradable plastic products causes environmental pollution and ecological imbalance. This major global issue demands proper management and permanent solution by introducing some innovative and creative ideas. In this challenging scenario, production of eco-friendly biodegradable plastics can shed a light of hope for pollution free, non-hazardous environment. In the present experiment, we have focused on the production of low-cost, degradable bio-plastics by using natural plant materials like agar powder, marigold, *Clitoriasp.*, beet-root, turmeric, green tea, glycerine, water etc., which can be easily preparable within short period of time. It has been observed that the quality and elasticity of the plastics prepared by the plant materials are very good and easily degradable. As satisfactory result came out for the production of biodegradable plastics with our present laboratory experiment, it can be a good eco-friendly option for future and can be easily introduced in the market.

**Keywords:** *Bio-plastics, eco-friendly, bio-degradable, plant materials.*

*Dr. Debasree Lodh*  
06/01/2023

Dr. Debasree Lodh  
Assistant Professor  
Holy Cross College, Agartala