



## DEPARTMENT OF BOTANY & ECOCLUB

**Name Of the Event:-**“KCP Sugar And Industries Corp. Ltd, vuyyuru”

**Date** :- 06-02-2026

### **Brief report** :

The Department of Botany and Eco Club organized an educational field trip to the Sugar Industry at Vuyyuru. The main objective of this visit was to understand the various stages involved in sugar production from sugarcane and to observe the by-product utilization units such as compost unit, biofertilizer unit, calcium lactate unit, and mycorrhiza unit. The industry officials explained and demonstrated different stages of sugar production from sugarcane. The important stages observed were:

- 1. Weighing and Washing:** Sugarcane brought from fields is weighed and washed properly.
- 2. Crushing :** The sugarcane is crushed in heavy rollers to extract juice.
- 3. Clarification :** The extracted juice is filtered and treated with chemicals to remove impurities.
- 4. Evaporation :** The clarified juice is heated to remove excess water and convert it into thick syrup.
- 5. Crystallization :** The syrup is further processed to form sugar crystals.
- 6. Centrifugation :** Sugar crystals are separated from molasses.
- 7. Drying and Packing :** The sugar is dried, graded, and packed for marketing

## COMPOST UNIT

**We visited the compost unit where press mud (a by-product of sugar industry) is converted into organic manure.**

**Uses:** Improves soil fertility, Increases organic matter content ,Enhances microbial activity in soil, Eco-friendly waste management

## BIOFERTILIZER UNIT

The biofertilizer unit produces beneficial microbial fertilizers such as:

Azotobacter , Azospirillum , Phosphate Solubilizing Bacteria (PSB)

### USES:

**Enhances nitrogen fixation, Improves phosphorus availability, Reduces chemical fertilizer usage , Promotes sustainable agriculture**

## CALCIUM LACTATE UNIT

Calcium lactate is produced as a value-added product.

### USES:

**Used in food industry as calcium supplement, Used in pharmaceutical preparations, Helps in bone development**

## MYCORRHIZA UNIT

**Mycorrhiza is a symbiotic association between fungi and plant roots.**

**USES : Increases nutrient absorption (especially phosphorus), Improves plant growth, Enhances drought resistance, Improves soil health**



*The Botany Department Students and Staff Visited Sugar Industry at Vuyyuru*



During the sugar industry field trip Dr.Y.V Ratna Prasad sir along with the industrial officials explained the students about the process of sugar production from sugarcane.



During sugar preparation, the sugarcane waste was collected and carried by lorry in the industry.



*The Industrial Officials Explained the Students regarding the Process of Preparing compost From Sugarcane Waste and Discussed its Various Uses..*





Dr.K. Venkateswara Rao sir explained the students about the preparation, cultivation, and uses of Mycorrhiza in plants.



*The Industrial Officials Explained the Students about the Process of Preparing compost From Sugarcane Waste and Discussed its Various Uses.*