

Ashokrao Mane Ayurvedic Medical College & Hospital
Vathar tarf, Vadgaon, Dist.Kolhapur

II B.A.M.S. (2023-24 Batch)-Semister II

Department of Dravyagun Vigyan

Report on Educational Visit to Seema Biotech Tissue Culture Laboratory

Date of Visit: 20 December 2025

Place of Visit: Seema Biotech Tissue Culture Laboratory

Participants: II B.A.M.S. (2023-24 Batch)-Semister II.

Faculty In-charge: Prof. & HOD dr. Abhaykumar Kulkarni

Ass. Prof. Dr. Aishwarya Joshi

Introduction

The Department of Dravyagun Vigyan organized an **educational visit to Seema Biotech Tissue Culture Laboratory on 20/12/2025** with the aim of providing practical exposure to modern plant propagation techniques. The visit was planned to bridge the gap between traditional Ayurvedic knowledge of medicinal plants and contemporary biotechnological advancements.

Objectives of the Visit

1. To understand the principles and procedures of plant tissue culture
2. To learn large-scale propagation techniques of medicinal plants
3. To observe laboratory infrastructure and sterile working conditions
4. To understand the role of biotechnology in conservation of medicinal plants

Details of the Visit

During the visit, experts from Seema Biotech explained the **entire tissue culture process**, including:

- Selection of explant
- Media preparation
- Sterilization techniques
- Inoculation under laminar airflow
- Multiplication, rooting, and hardening of plantlets

Students were shown **culture rooms, inoculation chambers, autoclaves, growth rooms, and hardening units**. Special emphasis was given to the production of disease-free, genetically uniform plant material.

Educational Relevance to Ayurveda

The faculty highlighted how tissue culture techniques can be applied for:

- Conservation of rare and endangered medicinal plants
- Mass propagation of high-demand Ayurvedic dravyas
- Ensuring quality and sustainability of raw materials for Ayurvedic formulations

This visit helped students correlate **classical Dravyagun Vigyan concepts** with modern scientific practices.

Learning Outcomes

- Improved understanding of plant tissue culture techniques
- Awareness about commercial and research applications of biotechnology
- Enhanced interest in medicinal plant conservation
- Practical insight into sustainable production of herbal raw materials

Conclusion

The visit to Seema Biotech Tissue Culture Laboratory was **highly informative and beneficial** for students. It provided valuable exposure to advanced plant propagation methods and reinforced the importance of integrating Ayurveda with modern science. The visit successfully achieved its educational objectives.

