



Date: 24th April 2025

VISIT REPORT ENTREPRENEURSHIP DEVELOPMENT CELL (EDC)

and

Department of Dravyaguna Vigyan

**Dr. Deepak Patil Ayurvedic Medical College and Research Centre, Borpadale, Panhala,
Kolhapur**

Educational Visit to:

Department of Botany, Chhatrapati Shivaji Maharaj University, Kolhapur

Date of Visit: Thursday, 24th April 2025

Special Focus: Tissue Culture and Horticulture Laboratory.

1. Introduction:

An academic-industrial visit was conducted by the Entrepreneurship Development Cell (EDC) and Department of Dravyaguna Vigyan of Dr. Deepak Patil Ayurvedic Medical College and Research Centre, Borpadale, Kolhapur. The visit was hosted at the Department of Botany, Chhatrapati Shivaji Maharaj University, Kolhapur, on 24th April 2025. The objective of the visit was to provide Ayurvedic students with first-hand experience in tissue culture and horticulture techniques and their applications in the cultivation, propagation, and commercialization of Ayurvedic medicinal plants.

2. Aims and Objectives of the Visit:

- To observe and understand advanced tissue culture and horticulture techniques used in the propagation of medicinal plants.
- To establish a correlation between modern plant biotechnology and classical Ayurvedic pharmacognosy (Dravyaguna Vigyan).
- To explore entrepreneurship opportunities in the field of Ayurvedic herbal plant cultivation and commercial propagation.
- To motivate students for research and innovation using modern tools for the development of Ayurveda.
- To understand the role of tissue culture in ensuring the standardization and authentication of medicinal herbs.
- To introduce students to the global demand and scope of Ayurvedic plant-based products.
- To inspire vision and leadership among students for becoming Ayurvedic entrepreneurs.

3. Need and Relevance of the Visit:

With increasing global attention toward natural and traditional systems of medicine, the standardization and commercial scalability of Ayurvedic herbal products have become paramount. Cultivation of endangered and rare medicinal plants using tissue culture and advanced horticulture ensures sustainable supply chains. Such visits help bridge the knowledge gap between traditional Ayurvedic education and modern biotechnological advancements. The visit was designed to cultivate entrepreneurial thinking among students while reinforcing the scientific foundation of Dravyaguna Vigyan.

4. Proceedings of the Visit:

a. Welcome and Orientation Session

The visit commenced with a formal welcome by faculty members of the Department of Botany, Chhatrapati Shivaji Maharaja University, Kolhapur.

A brief overview of the lab's objectives, facilities, and contributions in plant biotechnology was presented by experts.

b. Guided Tour of Tissue Culture Laboratory

Students observed the culture initiation, media preparation, inoculation, and multiplication phases.

Importance of sterile conditions, plant growth regulators, and nutrient media composition was explained in detail.

Real-time examples of Ashwagandha, Shatavari, Guduchi, and Brahmi tissue culture propagation were demonstrated.

c. Visit to Horticulture Units and Greenhouses

Demonstration of controlled climate systems used for optimal growth of herbal plants.

Insights into grafting, budding, layering, and micropropagation techniques.

Integration of organic farming principles and sustainable cultivation practices was discussed.

d. Interaction with Experts and Faculty

Students interacted with senior botanists, researchers, and entrepreneurs involved in medicinal plant research.

Sessions on market potential, export opportunities, government schemes, and financial aid for agribusiness were held.

5. Learning Outcomes of the Visit:

-Students gained practical exposure to tissue culture protocols and understood their critical role in preserving Ayurvedic medicinal plant biodiversity.

-Recognized the entrepreneurial avenues in Ayurvedic nursery development, contract farming, and herbal raw material supply chains.

-Understood the global scenario and export potential of standardized Ayurvedic plant products.

-Enhanced understanding of the integration of modern technology with classical Ayurveda for research and innovation.

-Developed a vision to initiate startups and pilot projects in the field of Ayurvedic plant biotechnology.

6. Future Vision and Action Plan:

-EDC and Dravyaguna Department aim to establish a mini tissue culture lab on campus as a pilot project.

-Proposals will be made to integrate entrepreneurship training modules in the undergraduate and postgraduate curricula.

-Plans to initiate herbal plant cultivation projects in collaboration with local farmers and cooperatives.

- Workshops and short-term training sessions on Ayurvedic agripreneurship will be conducted.
- Student research projects will be encouraged on medicinal plant propagation, conservation, and commercialization.

7. Conclusion:

The educational visit proved to be a significant initiative toward bridging traditional Ayurvedic wisdom with contemporary biotechnological innovations. It inspired students and faculty to think beyond academics and delve into real-world applications of Dravyaguna Vigyan. The exposure to practical tissue culture and horticultural practices opened up avenues for future entrepreneurial ventures, ensuring a scientific and sustainable approach to Ayurveda's global evolution.

8. Faculty Members Involved:

1. Dr. Vithal Patil – Associate Professor and Head, Dravyaguna Vigyan
2. Dr. Sevagra Sharma – Assistant Professor, Dravyaguna Vigyan
3. Dr. Sayali Sankapal – Assistant Professor, Swasthavritta Evum Yoga
4. Dr. Parag Kulkarni – EDC Coordinator, Associate Professor and Head, Rognidan

Visit Photographs



