

RESEARCH LABORATORIES



DAYANAND ANGLO-VEDIC (PG) COLLEGE, KANPUR



Research Laboratories

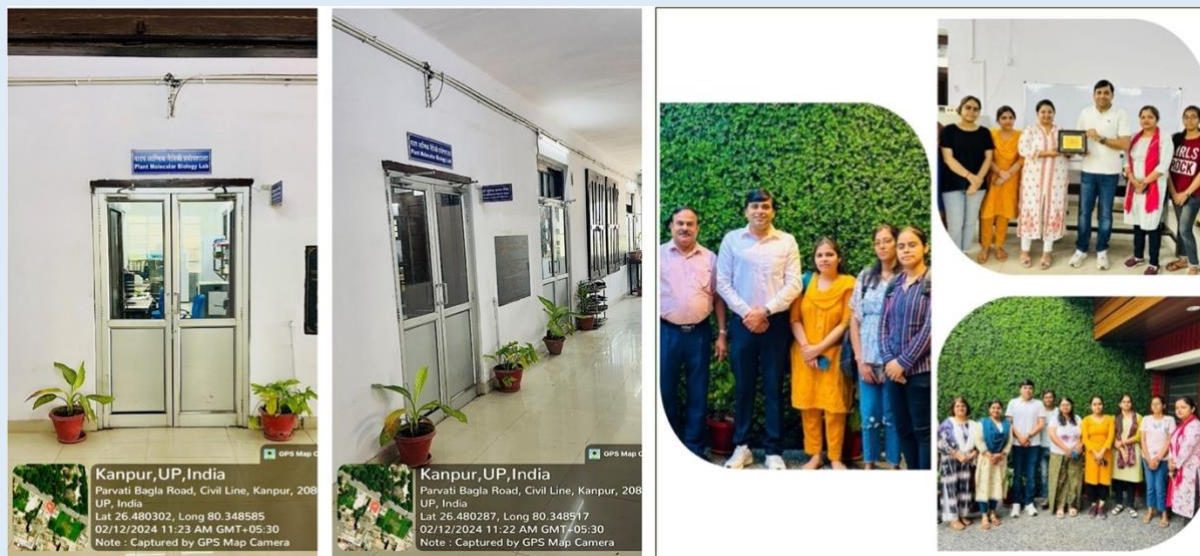
Dayanand Anglo-Vedic (PG) College, Kanpur

Plant Molecular Biology Laboratory

Department of Botany

Lab Head: Dr Surendra Pratap Singh

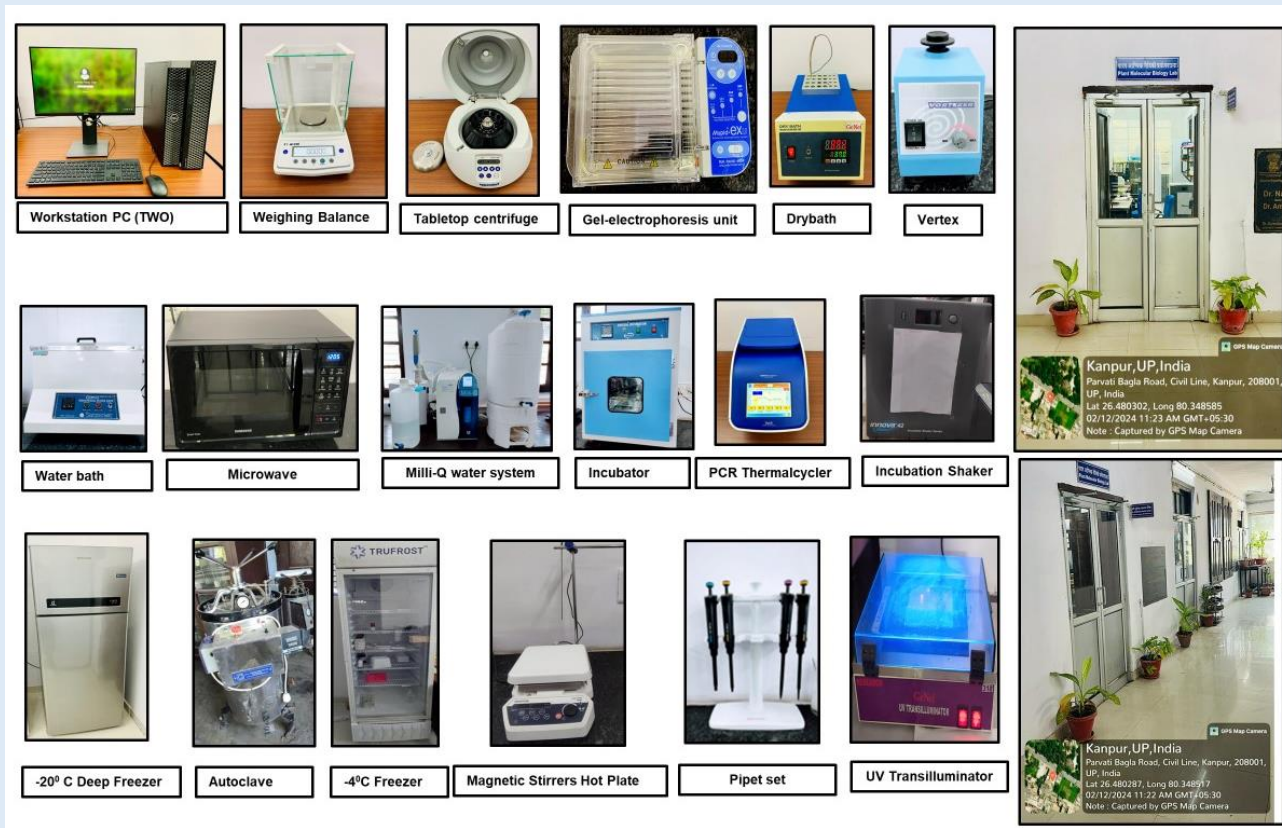
Thrust Area: Cotton functional genomics



The plant molecular biology laboratory established in 2019 by independent funding from the DST- SERB- Startup Research Grant headed by **Dr Surendra Pratap Singh**. The laboratory is equipped with state of art facility and working in the cotton functional genomics. The laboratory also receive fundings from SERB (SRG, TARE, CRG, Accelerate Vritika), DHE Govt. of UP, CV Raman grant from CSJM University.

Instruments/Facility Available @PMB Lab :

Equipment available	Generic Name of Equipment	Model, Make & year of purchase
Equipment Available with PI (Dr Surendra Pratap Singh)	Laminar Airflow	VAMINSTTM, Horizontal Laminar Air Flow (3x2x2)
	Workstation PC (TWO) (FOR BIOINFORMATICS)	-Dell Precision 7820 Tower-Intel Xeon Silver 4208, 64GB RAM, 4TB, WIN 10 PROF. WS. Dell P2219H MONITOR -HP Z8 G4-Intel-Xeon Bronze (2 processor), 32 GB RAM, 256GB SSB, 1TB HDD, P1000GC, WIN 10 PROF. Monitor
	PCR Thermalcycler	Applied Biosystems (ABI), Veriti 96 Well Thermal Cycler-4375786
	Gel-electrophoresis unit	TAKARA, Mupid-ExU-AD140
	UV Transilluminator	GeNei-312
	-20° C Deep Freezer	TRUEFROST
	-4°C Freezer	TRUEFROST
	Normal Freez	Whirlpool, DF305 NEO PRM 3S ARCTIC STEEL, 2074101
	Drybath	GeNei, SLM-DB-120
	Microwave	SAMSUNG, MC28H5033CK/TL
	Pipet set	TWO SET (04 Each): Thermo Fisher Scientific, FINNPIPEPETTE F2 GLP-Kit (0.2-1000uL)- Cat.4700880
	Tabletop centrifuge	Eppendorf, MiniSpin-microcentrifuge-5452000018
	Weighing Balance	ACZET, CY 204C
	Centrifuge (temp. controlled)	Eppendorf, Centrifuge-5424 R
Milli-Q water system	Milli-Q Direct-8	
Incubation Shaker	INNOVA-42	
Incubator	ChemLab, DIGITAL INCUBATOR, AI-7781	
Water bath	LABOTECH- Waterbath Model No.BDI-57	
Other Institute(s) in collaboration	Dr. Samir V Sawant, Chief Scientist, CSIR-NBRI, Lucknow Plant molecular biology laboratory allow me to work. The laboratory equipped with all molecular, cell biology and bioinformatics facilities. The cotton germplasm and greenhouse are also available here.	



Funding Acknowledgement



DST-SERB- Startup Research Grant (SRG)
DST-SERB- TARE Award
DST-SERB- Vritika
DST-SERB- Core Research Grant (CRG)
DST-SERB- International Travel Award



CSJM University Kanpur
(CV RAMAN Research Project)

Directorate of Higher Education



उच्च शिक्षा विभाग
उत्तर प्रदेश सरकार

Paryavaran Sodh Ekai

Department of Botany

Lab Head: **Dr Jitendra Mohan & Dr. Narendra Babu Shakya**

Thrust Area: **Phytoremediation, Algal biology**

The laboratory, "Paryavaran Shodh Ekai" was established in 1986 by Dr Narendra Mohan Saxena by UGC grant. Further Dr Jitendra Mohan & Dr Narendra Babu Shakya upgraded the laboratory through independent funding from UGC in 2016. The laboratory equipped with instruments and protocols for the phytoremediation and algal biodiversity studies. It mainly works to estimates the algal biodiversity of Kanpur region and possible phytoremediation approaches from waste water effluents discharged from the industries.



Coordination Chemistry Laboratory

Department of Chemistry

Lab Head: Dr Devendra Pratap Rao

Thrust Area: Coordination-chemistry

Our coordination chemistry laboratory focuses on a variety of research areas, among them studies of macrocyclic complex systems with metal ions. There is a growing use of coordination chemistry in such systems, and macrocyclic metal ion complexes are well-known for their importance in biological systems. The studied reactions are also increasingly being catalyzed homogeneously by using coordination systems. Currently, three projects are running in this laboratory. The projects are sponsored by the DHEUP, Prayagraj, India, and the CSTUP, Lucknow, India. There are several equipments available like an Infrared spectrophotometer (ATR), UV spectrophotometer, centrifugal machine, rotatory evaporator, heating mantle, magnetic stirrer, binocular microscope, soil analyzer kit, etc.



Plant Stress Biology Laboratory

Department of Botany

Lab Head: Dr Gyan Prakash Gupta

Thrust Area: Plant stress biology

The Plant Stress Biology Laboratory is interested to study/analyses of role/stress of Heavy metals (HMs) and Nanoparticles (NPs) in plant growth, development and their productivity through physio-biochemical changes and their phytoremediation and develop resistant varieties of.

