

**KTSP MANDAL'S
HUTATMA RAJGURU MAHAVIDYALAYA, RAJGURUNAGAR
DEPARTMENT OF BOTANY
A.Y. 2021-22**

One Day Hands on Training on “Techniques of Molecular Biology” at DOGR, Rajgurunagar

REPORT

Sr. No	Item	Particulars
1	Date	26/03/2022
2	Name of Event	Hands – on - Training
3	Venue	DOGR, Rajgurunagar
5	Duration of the programme	One day
6	Number of participants	4 students + 4 Teaching staff
7	Activity belongs to which Criteria of NAAC	Criteria-2 (Advanced learner and participative learning) Criteria-3 (Collaborations-linkages)

Four students of T.Y.B.Sc. Botany and four teaching staff of Department of Botany, Hutatma Rajguru Mahavidyalaya, Rajgurunagar attended one day Hands-on training on “Techniques of Molecular Biology” at the Directorate of Onion and Garlic Research centre, Rajgurunagar. The training was conducted on Saturday, 26th March 2022. The training was under the aegis of Scientific Social Responsibility (SSR) of DST funded project on “Development of male sterile lines in Onion (*Allium cepa* L.) through targeted mutagenesis of AcMSHI gene”.

The program started in the seminar hall with the registration process at 9.30 am. An introduction to the course was later given by the Principal Investigator, Dr. S. Anandhan. It was followed by lectures combined with power point presentations. The first lecture was on ‘Molecular insights into basics of life’ delivered by Dr. Tushar Manape. It was followed by a lecture on ‘Introduction to PCR and Gel electrophoresis’ given by Mr. Dhananjay Shirsat. Later, Dr. Soumia P.S., Scientist of Entomology department delivered lecture on ‘Molecular dimensions of Insect Taxonomy’. The last lecture of the morning session was by Dr. Pawan Mainkar on the topic ‘Introduction to Bioinformatic tools’. All the lectures were found to be very much informative.

The lecture series was followed by the hands-on-training. In the first wet-lab session, DNA isolation was conducted from Onion following CTAB method. All the students were given opportunity to individually extract the DNA.

After a short lunch break from 1.00 to 1.30 pm, the training continued. The next stage of training was on PCR and Gel electrophoresis. The students got opportunity to handle different equipments like PCR machine, Microcentrifuge, Vortex machine, Electrophoretic apparatus, Gel Doc etc. Each and every steps in the DNA extraction, amplification and Gel electrophoresis were explained in detail by the faculty of the lab.

The group also got an opportunity to visit the plant tissue culture lab of the institute. The group visited media preparation room, inoculation room and culture room. The students got familiarized with equipments like Autoclave, Laminar air flow chamber etc. and also could observe tissue cultured plantlets at various stages of development.

The training session concluded with the valedictory ceremony where students and teachers gave their valuable feedback. All the participants were presented with certificates by the hands of Director of DOGR, Dr. Major Singh. Prospects of future collaborative works between Department of Botany and DOGR were discussed. Later, there was a group photo session and the program concluded. By 5.30pm, the group returned back to college. The training program was found to be greatly enriching which provided lots of new experiences.





Dr. K.M.Nitnaware
Head

Dr. V.D. Kulkarni
Principal

Dr. K.M. Nitnaware
Head,
Department of Botany
Hutatma Rajguru,
Mahavidyalaya

Date: 24/03/22

To,
The Principal
Hutatma Rajguru Mahavidyalaya,
Rajgurunagar,
Pune

Sub: Regarding Permission to attend Hands-on-Training

Respected Sir

The National Research centre for Onion and Garlic, Rajgurunagar is conducting “One day Hands on Applications of Biotechnology in Agriculture” on Saturday, 26/03/2022. Five students of T.Y.B.Sc. Botany and three teaching staff want to attend the training. Kindly give us permission for the same.

The list of the participants is attached for your kind reference.

Thanking you.

Yours truly,

Dr. K.M. Nitnaware

KTSP Mandal's
HUTATMA RAJGURU MAHAVIDYALAYA, RAJGURUNAGAR
DEPARTMENT OF BOTANY

**One day Hands on Training on Applications of Biotechnology in Agriculture at DOGR,
Rajgurunagar**

List of Participants

Date: 24/03/2022

Sr. No.	Name of the Students	Roll No.
1.	Bagate Shubham Khandu	50
2.	Borhade Komal Sanjay	48
3.	Kolekar Rajashri Sanjay	49
4.	Rakshe Rutuja Sahebrao	47
5.	Thorat Ganesh Balasaheb	53
	Name of Teachers	
1.	Dr. K.M. Nitnaware	
2.	Dr. Sangeetha J.S.	
3.	Prof. P.D. Kad	

Dr. K.M. Nitnaware
Head