#### K.T.S.P. MANDAL'S

# HUTUTMA RAJGURU MAHAVIDYALAYA, RAJGURUNAGAR TAL-KHED, DIST-PUNE 410 505

### **DEPARTMENT OF MATHEMATICS AND STATISTICS**

#### BRIEF REPORT OF FIELD VISIT

Sr. No.	Particulars	Details	
1	Date	12/10/2023	
2	Name of the event	Field Visit	
3	Duration of the programme	1 Day	
4	Venue	Onion and Garlic Research Centre	
5	Name of coordinator	Prof. R. M. Wayal Prof. S. R. Thorat	
6	Number of Participants	27	
7	Activity belongs to which criteria	Criteria II	
8	Curricular/Co-Curricular/Extra- Curricular	Co-Curricular	

Department of Mathematics and Statistics organized a field visit to the Onion and Garlic Research Center on October 12, 2023. The visit included a lecture on the applications of statistics in the field of agriculture delivered by Mr. Sagar Wayal, followed by a tour of the research center. Dr. Khade gave information about establishment and research activities in Onion and Garlic Research Center.

Mr. Sagar Wayal, an esteemed expert in the field, delivered an insightful lecture on the applications of statistics in agriculture. He emphasized the pivotal role statistics play in optimizing agricultural practices, improving yield, and minimizing risks. Key points discussed in the lecture included:

- 1. **Experimental Design:** Mr. Wayal Wayal highlighted the significance of proper experimental design in agricultural research. He explained various experimental designs such as randomized controlled trials and Latin square designs and their applications in agricultural experimentation.
- 2. Data Analysis Techniques: The lecture delved into statistical techniques used for analyzing agricultural data. Mr. Wayal discussed regression analysis, analysis of variance (ANOVA), and time series analysis, illustrating how these methods aid in understanding crop behavior, identifying trends, and making informed decisions.
- 3. **Risk Assessment:** Understanding and managing risks are crucial in agriculture. Mr. Wayal elucidated how statistical methods like probability distributions and risk analysis models help in assessing and mitigating risks associated with crop production, pest infestation, and market fluctuations.
- 4. **Precision Agriculture:** The concept of precision agriculture, which involves using data-driven approaches to optimize inputs and maximize yield, was also discussed. Mr. Wayal highlighted the role of statistics in precision agriculture, including techniques such as geographic information systems (GIS) and remote sensing for spatial analysis and decision-making.
  - Following the lecture, the participants were given a guided tour of the Onion and Garlic Research Center. Located amidst vast farmland, the center serves as a hub for research and development in onion and garlic cultivation. Key highlights of the visit included:
- 1. **Research Facilities:** The center boasts state-of-the-art research facilities equipped with modern equipment for soil analysis, seed testing, and crop experimentation. Participants were given demonstrations of various research methodologies employed at the center.
- 2. Crop Varieties: The tour showcased different varieties of onions and garlic developed through selective breeding and genetic modification. Participants learned about the characteristics, disease resistance, and yield potential of these varieties.
- Technology Adoption: The center emphasizes the adoption of technology in agriculture.
  Participants witnessed the use of drones for crop monitoring, automated irrigation
  systems, and precision farming techniques aimed at optimizing resource utilization and
  improving productivity.
- 4. Extension Services: The center actively engages with local farmers through extension services, providing them with access to research findings, training programs, and advisory services to enhance their farming practices.

## **List of Students**

Sr. No.	Name	Class
1	Bhambure Rasika Rajendra	F.Y.B.Sc.
2	Bomble Yash Ganpat	F.Y.B.Sc.
3	Darawade Apurva Ganesh	F.Y.B.Sc.
4	Dhaybar Avadhut Appasaheb	F.Y.B.Sc.
5	Ghevade Gauravi Goraksh	F.Y.B.Sc.
6	Kale Payal Lahu	F.Y.B.Sc.
7	Kamble Rohit Mahadev	F.Y.B.Sc.
8	Kantikar Shreya Gurudev	F.Y.B.Sc.
9	Khese Sharvari Shantaram	F.Y.B.Sc.
10	Patil Chetan Vilas	F.Y.B.Sc.
11	Pawar Samiksha Prakash	F.Y.B.Sc.
12	Raundhal Yash Kundalik	F.Y.B.Sc.
13	Yelwande Sakshi Machindra	F.Y.B.Sc.
14	Vishwakarma Sumeet Banarasi	F.Y.B.Sc.
15	Sable Vaishnavi Sunil	F.Y.B.Sc.
16	Thigale Neha Prakash	F.Y.B.Sc.
17	Gadhave Harshada Mahendra	S.Y.B.Sc.
18	Gangawane Isha Santosh	S.Y.B.Sc.
19	Kale Rushali Dipak	S.Y.B.Sc.
20	Mohan Asmita Sandip	S.Y.B.Sc.
21	Phadke Pradnya Santosh	S.Y.B.Sc.
22	Retwade ASMITA Machindra	S.Y.B.Sc.
23	Sable Rutuja Bhagawan	S.Y.B.Sc.
24	Sen Vishakha Rajkumar	S.Y.B.Sc.
25	Shaikh Sonam Imtiyaj	S.Y.B.Sc.
26	Shinde Jayshree Manohar	S.Y.B.Sc.
27	Waghole Dnyanesh Sahebrao	S.Y.B.Sc.















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