

DEPARTMENT OF AGRICULTURAL METEOROLOGY
College of Agriculture, Pune

INFORMATION FOR UPDATION OF UNIVERSITY WEBSITE

1. Departmental Information:

Department: Department of Agricultural Meteorology

College: College of Agriculture, Pune

University: Mahatma Phule Krishi Vidyapeeth, Rahuri

The Department of Agricultural Meteorology is involved in teaching, research, extension activities and dissemination of agrometeorological information related to agriculture and allied sectors.

2. Ph.D. Semester-wise Distribution of Syllabus:

Ph.D. Semester wise Distribution of Syllabus

I semester

Sr. No.	Course Number	Name of the course	Credits
Major Courses			
1	AGM. 601	Climate Change and Sustainable Development	2+1=3
2	AGM. 608	Computer Programmes and Software for Agrometeorological Data Management	1+1=2
Minor Courses			
3	AGM. 602	Meteorology of Air Pollution	2+2=4
Supporting Courses			
5	AGM. 605	Analytical Tools and Methods for Agrometeorology	1+1=2
6	AGM 699	Research	0+4 = 4

II semester

Sr. No.	Course Number	Name of the course	Credits
Major Courses			
1	AGM. 604	Hydrometeorology	2+1=3
2	AGM. 607	Environmental Physics for Agricultural Meteorology	3+0=3
		Sub Total	5+1 =6
Minor Courses			
3	AGM. 603	Livestock and Fisheries Meteorology	2 + 2 = 4
4		Sub Total	2+2=4
Supporting Courses			
5	STAT 605	Modeling Techniques for Forecasting 2+1 = 3	2+1=3
	STAT 563	Design of Experiments	2+1=3
	AGM 699	Research	0+7

III semester

Sr. No.	Course Number	Name of the course	Credits
Major Courses			

1	AGM. 606	Research and Publication Ethics	2 + 0 = 2
2	AGM. 691	Doctoral Seminar I	1+0=1
	AGM 699	Research	0+10

IV semester

Sr. No.	Course Number	Name of the course	Credits
	Major Courses		
1	AGM. 692	Doctoral Seminar II	1+0=1
2	AGM 699	Research	0+19

V Semester

Sr. No.	Course Number	Name of the course	Credits
2	AGM 699	Research	0+17

VI Semester

Sr. No.	Course Number	Name of the course	Credits
2	AGM 699	Research	0+18

M. Sc. Semester wise Distribution of Syllabus

I Semester

Sr. No.	Course Number	Name of the course	Credits
	Major Courses		
1	*AGM. 501	Fundamentals of Meteorology	2+1=3
2	*AGM. 502	Fundamentals of Agricultural Meteorology	2+1=3
	AGM. 503	Crop- weather relationships	2+0=2
	Minor Courses		
3	AGRON 501	Modern concepts in crop production	3+0 = 3
4	SOIL 501	Soil Physics	2+1 = 3
	Supporting Courses		
5	STAT 502	Statistical Methods for Applied Sciences	3+1 = 4
	NON-CREDIT COMPULSORY COURSES (NCCC)		
	PGS 501	Library and information services	0+1=1
	PGS 504	Basic concepts in laboratory techniques	0+1=1

II Semester

Sr. No.	Course Number	Name of the course	Credits
	Major Courses		
1	*AGM. 504	Agrometeorolo-gical measurements and Instrumentation	1+2=3
2	AGM. 505	Crop Micrometeorology	2+1=3
	AGM 508	Applied Agricultural Climatology	1+2 = 3
	Minor Courses		
3	AGRON. 505	Conservation Agriculture	1+1=2
	Supporting Courses		
4	STAT.511	Experimental design	2+1 = 3

		NON-CREDIT COMPULSORY COURSES (NCCC)	
	PGS 502	Technical writing and communication skills	0+1=1
	PGS 503	Intellectual property and its management in agriculture	1+0=1
		Research	
6	AGM 599	Research	0+2=2

III Semester

Sr. No.	Course Number	Name of the course	Credits
	Major Courses		
1	AGM.507	Crop weather Models	1+2=3
2.	AGM. 591	Seminar	0+1=1
		NON-CREDIT COMPULSORY COURSES (NCCC)	
	PGS 505	Agricultural research ethics and rural development programmes	1+0=1
6	AGM 599	Research	0+10=10

VI Semester

Sr. No.	Course Number	Name of the course	Credits
	AGM 599	Research	0+18=18

B. Sc. Semester wise Distribution of Syllabus

Sr. No.	Semester	Course No.	Credits	Course title
		B. Sc. (Hons.) Agriculture		
1	II	VAC-121	2+1=3	Environmental studies and disaster management
2	V	AGM-351	1+1=2	Introduction to Agro-meteorology
3	VI	ELE-AGM-361	2+1=3	System simulation and agroadvisory
		Total Credits	5+3 =8	
		B. Sc. (Hons.) Horticulture		
1	II	VAC-121	2+1=3	Environmental studies and disaster management
2	IV	AGM-241	1+1=2	Introductory Agrometeorology and Climate Change
		Total Credits	3+2 =5	

3. Staff Position:

Sr. No.	Name of Faculty	Designation	Qualification	Mobile No.	Email ID
1	Dr. V. M. Londhe	Head of the Department	Ph.D. Agronomy	09850211476	vikaslondhe603@gmail.com
2	Dr. S. V. Bagade	Asst. Prof. of Agril. Meteorology,	Ph.D. Agricultural Meteorology	09673805353	pranjalibagade@gmail.com
3	Dr. S. T. Yadav	Senior Research Assistant	Ph.D. Agricultural Meteorology	94047 43320	styadav1975@gmail.com

4	Dr. P. V. Shamraj	Asst. Prof. of Agril. Meteorology,	Ph.D. Agricultural Meteorology	7083535045	pvsamraj@gmail.com
5	Dr. S. G. Mundhe	Asst. Prof. of Agril. Meteorology,	Ph.D. Agricultural Meteorology	9960196250	mundhe.sachin5@gmail.com

4. Achievements

A. Academic Achievements

- The department has awarded **M.Sc. degrees to around 173 students** in Agricultural Meteorology and **Ph.D. degrees to about 20 scholars** till 2026, contributing skilled human resources in agrometeorology.
- It offers postgraduate and doctoral education under Mahatma Phule Krishi Vidyapeeth and is recognized as a leading teaching center in India.
- It has developed strong academic training through **CAFT (Centre of Advanced Faculty Training)** programmes for national-level capacity building.

B. Research Achievements

- The department has generated about **29 important research recommendations** on crop-weather relationships, pest and disease forecasting, and climate change impacts.

C. Training (CAFT / CASAM) Achievements

- The department conducted **33 national-level training programmes (1998–2026)**.
- More than **666 faculty members from SAUs and ICAR institutes** were trained in agricultural meteorology.
- The center, earlier known as **CASAM (1987)**, was upgraded to **CAFT in 2010**, making it a premier national training hub.
- It regularly conducts **ICAR-sponsored 21-day training programmes** for teachers and scientists across India.

5. Extension Activity and Operational Achievements

- **Gramin Krishi Mousam Seva (GKMS):** The department actively supports **Gramin Krishi Mausam Seva (GKMS)**, providing weather-based advisories twice a week for farmers.

Under the Gramin Krishi Mousam Seva (GKMS) project, agrometeorological advisories related to plant protection, crop management, animal husbandry and allied agricultural activities are disseminated every Tuesday and Friday. The scheme is funded by the Ministry of Earth Sciences, Government of India, New Delhi.

6. Institutional and National Recognition

- Established in connection with the pioneering work of **Dr. L. A. Ramdas**, who founded agricultural meteorology in India at IMD Pune.

- Recognized as one of the **leading agrometeorology training and research centre in India.**
- The department regularly hosts national-level scientific events and contributes to policy-relevant climate-smart agriculture research.

7. Recent Developments (up to 2026)

- For year academic year 2026-27, 08 students for M.Sc. Agriculture Meteorology are admitted in this department.
- Following is the table of Students research topics for M.Sc. and Ph.D. thesis are going on in this department.

S.N.	Regn.No.	Name of student	Research topic
M.Sc. -II Year			
1	2024/386	Anjana K.P.	Determination of agrometeorological indices for different genotypes of barnyard millet in western Maharashtra plain zone under <i>kharif</i> condition.
2	2024/387	Khaire Vaishnavi Balasaheb	Study of heat indices of different genotypes of Foxtail Millet in Western Maharashtra Plain Zone under <i>Kharif</i> season
3	2024/388	Gaikwad Prajakta Vilas	Weather-Based Forecasting Model for Area and Production of Pigeonpea and Safflower in Solapur district of Maharashtra State.
4	2024/390	Kolhe Umesh Sanjay	Effect of Sweet Corn - Rajma intercropping system on Microclimate
5	2024/391	Sawant Pooja Balasaheb	Evaluation of Foxtail Millet under Different Sowing Windows during Rabi Season.
6	2024/392	Aiwale Aiashwarya Chidanand	Assessment of Machine Learning Algorithms for Weather-Based Prediction of Area and Production for Groundnut and Soybean in Jalgaon district of Maharashtra state.
7	2024/393	Pawar Aditya Kisan	Effect of Okra- Green Gram Intercropping System on Microclimate
M.Sc. I year			
1	ACP2025/69	Mr. Kartik Nanasahab Gosavi	Performance of Wheat (<i>Triticum aestivum</i> L.) varieties under different sowing windows with special reference to late sown conditions.
2	ACP 2025/70	Miss. Jadhav Shital keshav	Weather based predictive modelling for paddy onion wheat in Nashik district
3	ACP 2025/71	Padme Himanshu Subhash	Decadal changes in area production and productive of major crops on pune district due to climate change.
4	ACP 2025/72	Miss. Pawara Harshali Ramesh	Weather-Driven Crop Yield Prediction of Major Kharif Crops in Pune.
5	ACP2025/73	Miss. Shinde Saloni Haridas	Seasonal incidence and bio-efficacy of insecticides against major insect pests of chilli (<i>Capsicum annum</i> L.)
6	ACP 2025/74	Miss. Thombare Shivani Sonaji	Evaluation of Cropping Pattern Based on Groundwater Availability.
7	ACP 2025/75	Keerthi V.	Spatio Temporal Assessment of Drought for Semi-Arid Solapur District of Maharashtra Using Remote Sensing Technique
8	ACP 2025/76	Waghmare Pratik Sanjay	Evaluation of Climate-Yield Relationships and Development of Agrometeorological Calendar for Soybean (<i>Glycine max</i> L.) in Sangli District.

Ph.D, 1st year			
1	PhD 2025/67	Mr. Golhar D. J.	Development of a weather water integrated framework for dynamic agriculture planning in scarcity zone of MPKV jurisdiction.
2	PhD 2025/68	Miss. Sakshi Ajay Katait	Validation of DSSAT model for optimizing ideal sowing window for <i>Kharif</i> Rajma under western Maharashtra plain zone condition.
Ph.D. 2nd year			
1	Ph.D./2025/069	Mr. Karnaraj Chakrapani Dhavan	Remote Sensing-Based Quantification of Crop Biophysical Parameters Using METRIC Model
2	Ph.D./2025/070	Miss. Pooja Yuvraj Durgawale	Performance evaluation and comparison of DSSAT and InfoCrop model for different Soybean cultivars under Western Maharashtra Plain Zone conditions
Ph.D. 3rd year			
1	2023/063	Miss Sapana Rahase	Astro Meteorological insights for rainfall forecasting and its distribution in different Agro-Climatic zones of Maharashtra
2	2023/064	Miss Asha Deshmane	Effect of weather parameters on growth, flower yield and shelf life of flower on ornamental safflower (<i>Carthamus tinctorius</i> L.) under different sowing windows

- List of Gold medalist students in M.Sc. and Ph.D. students

Sr. No.	Details of Award / Honour
1.	Mr. Sujit Satish Deshmukh , Ph.D. Student - Prof. Dr. M. C. Varshneya Gold Medal to a Ph.D student for best thesis passing from the Department of Agricultural Meteorology (CAFT) College of Agriculture, Pune
2.	Ms. Pooja Yuvraj Durgawale , (2024-25) M.Sc. Student - Shrimati Tilak M. Varshneya Gold Medal to a student standing first at M.Sc. (Agricultural Meteorology) Student passing from the Department of Agricultural Meteorology (CAFT) College of Agriculture, Pune
3.	Ms. Shrutiya Veer (2025-26) Shrimati Tilak M. Varshneya Gold Medal to a student standing first in M.Sc. (Agricultural Meteorology)

- Miss Keerthi Venkatesan & Miss.Harshali R. Pawara Selected for “Development of an image-based disease detection leveraging AI/ML techniques for crops” (Project): TIH-IoT CHANAKYA Fellowship Program 2026.

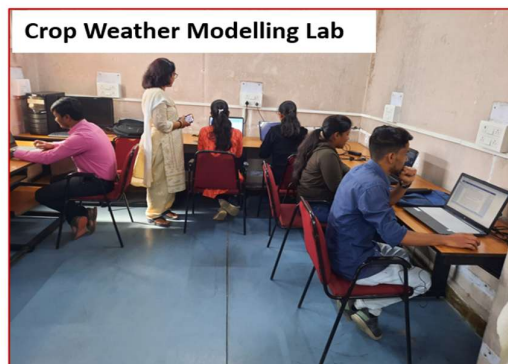
Photographs

FACILITIES

Classroom



Crop Weather Modelling Lab



Liabrary



Instruments Lab.



On farm research Activities for conduct of PG research : 1.00 ha PG Instructional farm with activities and Agromet. Observatory



RICULTURE, PUNE

National Level 10 days CAFT Training Programme held during 4th to 13th February 2026



National Training Programme on Applications of Remote Sensing and GIS in Agril. Meteorology
Organized by
CAFT, Agricultural Meteorology, Department of Agricultural Meteorology, Govt. College of Agricultural, Pune (MPKV, Rahuri)
4th - 13th February 2026

AGRICULTURE, PUNE

World Meteorological Day : 23rd March 2026



FAP Programme Conducted at Naygaon, Tal Purandar on 26/03/2026

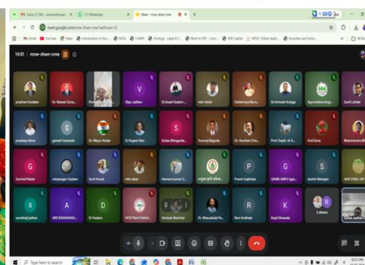


Departmental Activities

Farmers Awareness Programme under GKMS



Palkhi Programme on 10th July 2026



**Important Visitors / Dignitaries visited to the Department of Agril. Meteorology,
College of Agriculture, Pune**



Dr.V.K.Kharche, Hon. Vice-Chancellor,
MPKV, Rahuri with
Dr.S.G.Bhalekar, Associate Dean and
staff, College of Agriculture, Pune

Respected Dr. P.S.Bodke,
Director of Research, MPKV,
Rahuri &
Dr. D.B.Lad, Associate
Director of Research,
Ganeshkhind, Pune

