

**PDEA's Waghire College,  
Department of Zoology  
Report on One day Workshop on Honey Bee handling and Practical's related  
to it conducted by Zoology Department  
under the DBT- STAR College Scheme  
2021-2022**

Under the funding of the DBT-STAR College Scheme, the Zoology department of Waghire College, Saswad organized One Day Online Workshop on Honey Bee handling and Practical's related to it like Extraction of honey, Beewax, Propolis, Pollen from honey bee combs and Extraction of bee venom from honey bees under the DBT-STAR College Scheme for the students of S.Y.B. Sc Zoology on 22<sup>nd</sup> January 2022.

The Workshop was organized under the guidance of Dr. B.U. Mane, Head of Zoology Department, Waghire College, Saswad and was inaugurated at the hands of Vice Principal of Waghire College, Dr. Subhash S. Wavhal. The Resource persons who guided the Students were Apiculture Experts Shri. Prashant Gavade and Shri. Sachin Kshirsagar, both from Krishi Vidhnyan Kendra (KVK), Baramati, Pune. 65 students were benefited from this workshop.



***Inauguration of One day Workshop and Felicitation of Resource persons***

After the Inaugural and Felicitation, Shri. Prashant Gavade explained to the Students in the first part of Workshop – Concept of Apiculture; Ecological and economical Importance of honeybees; Honey yielding different bee families; Types of honeybees and their habits, habitat and nesting behaviour; Life cycle of honeybees; the caste system and division of labour followed by honeybees; Role of different castes in maintaining the colony; Difference between the different species; Economically important and cultivable bee species in Indian environment. Shri. Gavade and Shri. Kshirsagar also showed and explained the rearing equipments like Langstroth Bee box, Honey extractor, smoker, overall, bee gloves, high boots and bee veil used in beekeeping to the students



***Shri. Prashant Gavade explaining the Economic importance of honeybees to Human beings***



***Shri. Gavade explaining the different equipments used in Apiculture or Beekeeping***

While dealing with the practical part of the Workshop related to Apiculture, he explained Honey production and storage process done by bee; Difference between ripe and unripe honey; Extraction of honey from sealed honey frames.

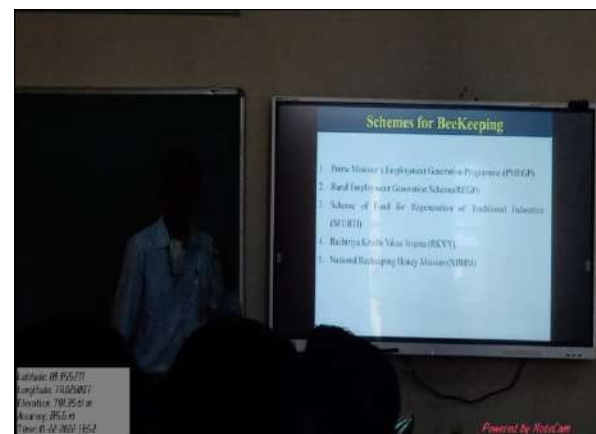
He also explained the beeswax extraction, bee venom extraction, royal jelly extraction and pollen extraction by showing the students the pollen trap used for extracting pollens loaded by honeybees and rearing cups used for artificial queen rearing process and collection of royal jelly.



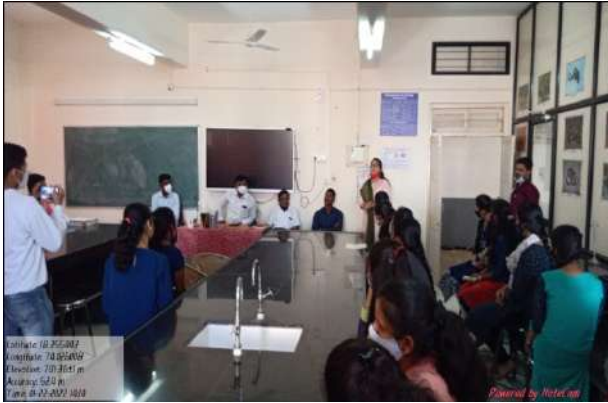
*Artificial Queen rearing and Royal jelly collection cups    Pollen traps used for pollen collection from honeybees*

Shri. Gavade and Kshirsagar also explained that depending upon the seasons and availability of nectar and pollens, the honeybees show certain behaviour which need to be identified by the beekeeper. In order to sustain the bee colony in an apiary, the beekeeper also needs to have knowledge of Seasonal and Scientific Management of bees,

Status of Beekeeping in the world and in India, Requirements for Apiculture setup and different Government schemes made available to entrepreneurs in Apiculture were also explained to students..



*Shri. Gavade explaining the Seasonal management, scope for beekeeping, its global status and the various schemes made available to entrepreneurs in Apiculture.*



**Feedback and Valedictory function of Workshop on Honey Bee handling and Practical's related to it**

Dept. Co-ordinator

Head of Department

DBT Co-ordinator

Principal



सासवड (ता. पुरंदर) : मधुमक्षिका पालन तंत्रज्ञान प्रशिक्षणाप्रसंगी उपस्थित विद्यार्थी. सकाळ : दत्ता भोंगळे

## वाधिरे महाविद्यालयात मधुमक्षिका पालन प्रशिक्षण

सासवड शहर, ता. २९ : सासवड (ता. पुरंदर) येथील पुणे जिल्हा शिक्षण मंडळाचे वाधिरे महाविद्यालय सासवड व ऑॅप्रिकल्चर डेव्हलपमेंट ट्रस्ट संचलित कृषी विज्ञान केंद्र, बारामती यांच्या संयुक्त विद्यमाने, डी. बी. टी. स्टार कॉलेज योजनेतर्गत एक दिवसीय शास्त्रीय मधुमक्षिका पालन तंत्रज्ञान प्राणिशास्त्र विभागाचा प्रशिक्षण कार्यक्रम प्राचार्य डॉ. सुषमा भोसले यांच्या मार्गदर्शनाखाली पार पडला.

कार्यक्रमाच्या उद्घाटनप्रसंगी प्राणिशास्त्र विभाग प्रमुख डॉ. बबन माने यांनी सदर परिसरातील निरनिराळ्या पिकांसाठी मधमाशी किती महत्त्वाची आहे, याबाबत माहिती दिली. महाविद्यालयीन विद्यार्थ्यांनी मधमाशी पालनाचे तंत्रज्ञान आत्मसात करून मधमाशी व त्यापासून मिळणारे विविध पदार्थ याचा अभ्यास करून विद्यार्थ्यांनी व्यावसायिक बनावे असे आवाहन केले.

कृषी विज्ञान केंद्र, बारामतीचे मधमाशी तज्ज्ञ प्रशांत गावडे यांनी मधमाशीपासून मिळणारे निरनिराळे पदार्थ, मधमाशीच्या विविध जाती,

मधमाशीचे परागीभवनात महत्त्व, मधमाशी पालनासाठी योग्य जातीची निवड, मधमाशीची हाताळणी, योग्य पद्धतीने शुद्ध मधाची काढणी, मधमाशी पालनासाठी लागणारे विविध साहित्य इत्यादी गोष्टींची माहिती दिली. तसेच प्रक्रिया उद्योगासाठी प्रधानमंत्री सूक्ष्म अन्न प्रक्रिया उद्योग योजना (PMFME) याबद्दल माहिती दिली.

वाधिरे महाविद्यालयाचे उपप्राचार्य डॉ. सुभाष वाव्हळ यांनी विद्यार्थ्यांना मधमाशी हा कीटक पर्यावरण आणि इको सिस्टीमसा किती महत्त्वाचा आहे. याविषय मार्गदर्शन केले. यावेळी प्राणिशा विभागातील प्रा. सुनील कोकरे, १ अभिजित देशमुख, कृषी विज्ञान केंद्र बारामतीचे सचिन क्षीरसागर यांच्यासह महाविद्यालयातील ६५ विद्यार्थी उपस्थित होते. हा कार्यक्रम यशस्वी होण्यासाठी अमोल भोसले, नवनाथ उरसळ आणि रोहिणी नेवसे यांनी प्रयत्न केले. डॉ. भाग्यश्री मदभावीकर यांनी उपस्थित विद्यार्थ्यांचे, शिक्षकांचे व कृषी विज्ञान केंद्राच्या अधिकाऱ्यांचे आभार मानले.

*Newspaper clip on News published in Local newspaper "Sakaal" on 30<sup>th</sup> January, 2022*

Dept. Co-ordinator

Head of Department

DBT Co-ordinator

Principal

**PDEA's Waghire College,  
Department of Zoology  
Report on One day Hands on Training on Honey Bee handling conducted by  
Zoology Department under the DBT- STAR College Scheme  
2021-2022**

Under the funding of the DBT-STAR College Scheme, the Zoology department of Waghire College, Saswad organized Hands on Training on Honey Bee handling for the Teaching and Non- teaching staff of Zoology department, S.Y.B. Sc Zoology students and nearby farmers on 2<sup>nd</sup> February, 2022.



*Hands on Training on Honey bee handling organised on 2<sup>nd</sup> February, 2022 in Waghire College campus*

The Hands on Training Workshop was organized under the guidance of Dr. B.U. Mane, Head of Zoology Department, Waghire College, Saswad and conducted by Resource persons Shri. Prashant Gavade and Shri. Sachin Kshirsagar, from Krishi Vidhnyan Kendra (KVK), Baramati, Pune. Along with the 4 Zoology department faculty members, 73 people benefited from this workshop out of which 11 people were nearby farmers and 62 were S.Y.B. Sc students.

Shri. Prashant Gavade and Shri. Kshirsagar explained to the Farmers and students the ecological and economical importance of Honey bees and placed the Langstroth bee-boxes in the College Botanical garden. They then showed the everyone how to Hive the colony from old colony frames into the new unoccupied frames of the new bee boxes.



*Hands on Training on Honey bee handling to the nearby farmers*

While setting up the bee boxes in the botanical garden, they explained how to setup the bee box, its direction, height from the ground and the location in which to place based on the availability of flora, nectar and water. The care and Precautionary measures to be implemented and followed after the setting up of an Apiary were also explained. They also explained

morphology of the worker, drone and the queen honey bee and the significance of the Queen bee in the colony.

During the actual colony hiving process they showed all those assembled there how to identify the queen from the workers within the colony and how to transfer her into the new bee boxes. With the entrance of the Queen bee in the bee box, all the workers enter the bee box and the process of hiving is completed. Thereafter, the bee boxes were installed in the botanical garden which will serve as an Apiary for the college.



*Hiving process of Bee colonies obtained from KVK, Baramati in New Departmental Bee boxes*

After the hiving process, the resource people explained the difference between Ripe and Unripe honey and showed the process of Honey extraction from sealed honey comb frames. The assembled mob devoured the sweet honey after the honey extraction process. During all these process the use of the beekeeping equipments like Hive tool, Bee-veil, Overall, gloves, Bee boxes, smoker etc. procured by the Zoology department under the DBT STAR College Scheme was done.



Overall the Hands on Training organised by the Department of Zoology under the DBT STAR College Scheme was a successful programme which motivated many students in terms of Entrepreneurship in Apiculture.

Dept. Coordinator

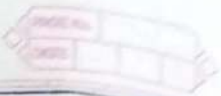
Head of Department

DBT Co-ordinator

Principal

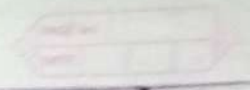


One day workshop on  
Honey bees



Sl. NO	Name of the student	MOB. NO	Sign
1)	Chivhe Vaishnavi Dasthath	7447351845	
2)	Pawar Vaishnavi Vishwas	9822620097	
3)	Deshpande Anagha Umesh	7920817963	
4)	Kapare Priti Kailas	8010420285	
5)	Shinde Jyoti Tanaji	8973473242	
6)	Mhetre Ankita Vijay	7888279643	
7)	Kazi Alfiya Ajay	7887867874	
8)	Gite Priti Vasudev	7219015853	
9)	Nale Supriya Subhash	7888103919	
10)	Shinde Ashwini Ramdas	7219886820	
11)	Shendkar Pradnya Vishwas	8010112022	
12)	Pise Anushka Santosh	8378930479	
13)	Karade Rutuja Bajiraj	9767376304	
14)	Somaje Nikita Tanaji	7721054522	
15)	Surve Shakti Nitin	9665021898	
16)	Bajapati Meenakshi Kapal	969965392	
17)	Botze Neha Namdev	9408207788	
18)	Kotte Tanuja Vikas	9175939659	
19)	Kamthe Vaishnavi Sambhaj	9561500953	
20)	Pawar Sakshi Nandkumar	7083945819	
21)	Zende Tejal Bajirao	9970851995	
22)	Khatwade Vaibhav Bharudab	9022273388	
23)	Gowale Vinhal Ramchandra	9021851278	
24)	Shinde Prashant Pralhad	8805359382	
25)	Pawar Gaurav Rohidas	7157997771	
26)	Dudhal Saurabh Sunil	9870871759	
27)	Gole Pratik Sanjay	8010189115	

22/1/2022



Sl. NO	Name of the student	MOB. NO.	Sign
28)	More Aditya Sandeep	9333713361	
29)	Barkade Prasad Balu	7620529735	
30)	Bhandalkar Abhijit Laxman	9821946685	
31)	Kale Pratik Sanjay	9404214940	
32)	More Mayur Somnath	7028045795	
33)	Rutvik Subhash Barkade	9359215981	
34)	Kapare Yash Arun	7447411488	
35)	Debnar Amit Dinkar	8880907453	
36)	Kamthe Prathmesh Prakash	8767228641	
37)	Chauhan Shailesh Vijay	9403242531	
38)	Gaikwad Rutuja Subhash	7720946387	
39)	Pawar Pankaj Subhash	7498133891	
40)	Mulik Tanuja Jalindar	7410189765	
41)	Khorrane Rutuja Rishikesh	9119526659	
42)	Shah Dipal Ashok	9172852631	
43)	Khedekar Harshada Bapu	9172716209	
44)	Yadav Ravina Gorakhd	9021094997	
45)	Gaikwad Poonam Rajaram	7498352084	
46)	Vedpathak Pratik Dinkar	9206805050	
47)	Jadhav Mayur Mahesh	7447549070	
48)	Shirke Sandip Tanaji	9075925520	
49)	Debnar Pranav Mahadev	9921799190	
50)	Pangare Dipali Dattatray	9322926967	
51)	Pangare Tanuja Pandurang	9322551595	
52)	Kulkarni Mruduladattatray	9307226144	
53)	Ambale Sayali Surykant	9822972688	
54)	Gaikwad Priya Balasa	9922589205	
55)	Botawake Isha Anil	7447227614	

Sr. No	Name of Student	Mobile No	Signature
56	Kokase Sunil Abasaheb	7875660334	
57	Girme Sakshi Shivaji	9503978044	
58	Kale Shweta Sanjay	7522967573	
59	Kale Saloni Sandip	7666404629	

HEAD

Department of Zoology,  
 Waghire College, Saswad,  
 Dist. Pune.

Co-Ordinator  
 DBT-STAR College

PRINCIPAL  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune.



Pune District Education Association's  
**Waghire College of Arts, Commerce and Science**  
**Saswad**



University of Pune

Tal- Purandar Dist- Pune,  
ORGANIZED BY

DEPARTMENT OF ZOOLOGY

**"One Day Workshop on "Honey Bee Handling & Practicals"  
(22<sup>nd</sup> January 2022)**

**CERTIFICATE OF PARTICIPATION**

This is to certify that Ms. Shirshat Vaishnavi Ramesh of  
S.Y.B.Sc has attended **One Day Workshop on "Honey  
Bee Handling & Practicals"** organized on **28/02/2022**. We appreciate and thank his/her active  
participation.

*Bhool*  
Co-ordinator

*P*  
Principal