

PAZHASSIRAJA COLLEGE

DEPARTMENT OF VOCATIONAL STUDIES (AGRICULTURE)

WEBINAR

Topic: APICULTURE

Date: 17/12/2020

Resource Person: Mr. Akhil Ajith, PhD Scholar, Department of Agriculture Extension, Kerala Agriculture University

On 17th December 2020, as a part of internship session 3 which was an introduction to Apiculture was held. The session was handled by Ms. Jyothis P Joseph who is pursuing MSc. Agricultural Entomology in Kerala Agriculture University. The session was started at 2.30pm with welcome speech by Kavya Raj T. B. and later the session was handled by the resource person, Ms. Jyothis P Joseph regarding the topic. She explained on the apiculture species of bees, castes of bees, benefits, pollination, location of apiary, tools, honey extraction, pests and disease, economics.

The main aim of the session was to make each student capable for doing apiculture. The session begins by bee keeping which is an interesting hobby and an ideal agro-based subsidiary enterprise, providing supplementary income to the people in the rural areas. After apiculture species of bees and castes of bees were taken. The major species of bees are *Apis dorsata* and *Apis florea* which are wild bees and *Apis cerana indica* and *Apis mellifera* which are domesticated bees. The honey bees are social insects and live in colonies with highly organised system of devotion and labour. A family which includes a queen, drones and workers. Queen: every colony has a queen which is the mother and only sexually developed female. Drone is the male bee which is to mate with queen. Workers are females which produced from the fertilized eggs but remain sterile due to non availability of royal jelly. Bee products include honey, bee wax, propolis, royal jelly and bee venom. Having a honey bee apiary which is the entire habitat where bee hives are kept, can be a wonderful addition to your life as honey bees supply tasty and beneficial honey, and they naturally pollinate vegetables, flowers, garden plants and trees. Pollination is the important service of honey bee. Insect pollination enhanced the seed quality, leading to heavier seeds, increased oil content and decreased chlorophyll content, the oil seed rape.

An apiary is a location where bee hives of honey bees are kept. The requirement of apiary location are sufficient amount of nectar and pollen, clean and protected from ants, avoid heaping up of dried leaves, away from power stations, high ways, rail way tracks, open and shade areas, easily accessible by road and availability of freshwater, prohibit the entry of animals near apiary, avoid stagnation of polluted water. Indian bee hive/Asian bee (*Apis cerana indica*) they are the domesticated species, which construct multiple parallel combs with an average honey yield of 6-8 kg per colony per year. These bees are larger

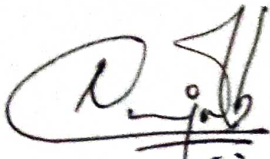
than *apis florum* but smaller than *Apis mellifera*. They are more prone to swarming and absconding. The tools of beekeeping are hive tool, smoker, decapping knife, bee brush and honey extractor. Hive tool is a piece of iron flattened edge down at one end. It is used to separate hive parts and frame glued together with propolis. Smoker is used to calm the bees. Decapping knife is a single or double edge steel knife used for removing wax capping from the honey comb. Bee brush is made up of camel hair. It is used to bring the scattered bees during swarm hiving. Honey extractor is used to extract the honey from comb. Major pest of honey bees are, wax moth, hive beetles, birds, wasp and ants. Honey bees encounter two types of disease; brood disease and adult disease. Brood disease such as American foulbrood (AFB) and European foulbrood (EFB) affect honey bees in larval and pupal stage. Adult disease such as Acarine and nosema disease. Honey bees are of huge importance, the values may change depending on the location and availability. It is important to understand that there could be some extra costs involved for land and maintenance.

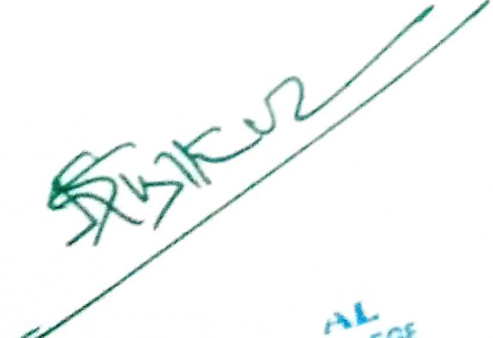
And finally she concluded the session by how can we start beekeeping for beginners? This session provide each students motivation and confidence to start beekeeping. After that an interaction session was taken where each students interact with resource person. And finally the session was concluded with vote of thanks by Anupriya Anil. The session was end at 4.30pm.

List of students participated:

Sl. No.	Name of the Candidate
1.	ANITTA ROSE JOHN
2.	ANUPRIYA ANIL
3.	ANUSREE K. S.
4	APARNA K V
5	ARCHANA DIVAKARAN
6	ASWIN SURESH
7	ATHUL THOMAS
8	EBIN ROBERT
9	ELDHO K. S.
10	FATHIMA MURSHIDA T.
11	FINGLE STEIN
12	JISHNU RAJ P. R.
13	JOJI VARGHESE
14	KAMAL K. S.
15	KAVYA RAJ T. B.
16	LINTO LEO
17	MANUSHANKAR P. S.
18	MEGHA RAJESH
19	NAFIAH SHARIN

20	NAYANA T. S.
21	NUSRATH P. K.
22	RASMINA USMAN
23	RINU P. K.
24	SAMBHU JAYANTHAN
25	SANA THASNI
26	SARANYA S. S.
27	SHERIN MARTIN
28	SIJIL V. S.
29	SNETHA P. T.
30	SUBHASH P. S.
31	VISHNU APPU


Department of Agriculture
(Vocational Studies)
Pazhassiraja College
Pulpally P.O., Wayanad



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PRINCIPAL
PAZHASSIRAJA COLLEGE
PULPALLY 673 570