



VVK



ICFRE-INSTITUTE OF FOREST BIODIVERSITY (IFB), HYDERABAD

A report of VVK Training on “Scientific Bee Keeping” on 10th March, 2025 at Forest College and Research Institute (FCRI), Mulugu

Institute of Forest Biodiversity (IFB), Hyderabad, organized a one-day training program on “**Scientific Bee Keeping**” on 10th March 2025 under VVK at the Forest College and Research Institute (FCRI), Mulugu, for the farmers of Telangana state.

Dr. P. S. Srikanth, Scientist-B & Program Coordinator, welcomed the dignitaries and farmers to the training program. He provided a brief overview of the training's genesis, emphasizing the importance of the VVK program. The program was inaugurated by **Dr. Pankaj Singh, Scientist-D, Head of Extension Division (I/C), ICFRE-IFB, Hyderabad**. He encouraged farmers to take advantage of the institute's training sessions and expressed gratitude to the Director of ICFRE-IFB and the Dean of FCRI for granting permission to conduct the training. The program also emphasized the importance of mutual cooperation between ICFRE-IFB and FCRI, highlighted by **Dr. Chiranjeevi, Nodal Officer, FCRI Mulugu**.

Dr. Deepa M, Scientist-E & Course Coordinator, highlighted the significance of scientific beekeeping and provided details of the training program. She also extended her thanks to the Director of ICFRE-IFB and the Dean of FCRI. Following this, **Dr. Sailaja, Assistant Professor, FCRI, Mulugu**, discussed the importance of pollinators and pollination in food production, particularly in pulses, oilseeds, fruits, and vegetables, which are mostly cross-pollinated. She explained the vital role of honey bees in pollination, food security, and the impact of increased usage of chemical pesticides and fertilizers since the Green Revolution, which has drastically reduced pollinator populations. Dr. Sailaja emphasized that the extinction of bees could lead to the extinction of humans due to a significant reduction in food production. She suggested that farmers reduce the use of agro-chemicals, implement integrated pest management, and maintain bee hives on their farms to increase productivity and earn extra income from honey and its by-products.

The session began with a presentation by **Smt. Sanjana**, Founder of Shree Natural Honey, Karimnagar, on “Apiculture.” She discussed honey and its by-products, the uses of honey, multifloral and single floral honey,

the importance of pollination, and the benefits of bee pollen for humans. She covered the types of honey bee species used in apiculture, the caste system in bees, and the roles of queen bees, worker bees, and drones in the hive. Smt. Sanjana provided detailed information on how to start beekeeping, the basic requirements, government subsidies, essential equipment, pest and disease management, and real-life challenges such as production and marketing. She also interacted with farmers, answering questions about the cost of maintaining bee hives, government subsidies, suitable crops for apiculture, hive costs, transportation challenges, adulteration, and the best times to introduce bee hives into fields.

Dr. Deepa M, Scientist-E, gave the second presentation on “Pests and Diseases of Honeybees.” She introduced apiculture, the castes of bees, and the species of honey bees used in apiculture. Dr. Deepa explained various pests and diseases that affect honey bees, such as greater wax moth, lesser wax moth, ants, wasps, wax beetles, birds, toads, frogs, and lizards. She covered brood diseases like American foulbrood, European foulbrood, Thai sac brood virus, chalk brood, stone brood, and adult diseases like Nosema and acarine diseases, along with their management practices. She then interacted with farmers to clarify their doubts.

Dr. Srikanth, Scientist-B, Nodal Officer (VVK), presented on “Quality Assessment of Honey.” He explained different adulteration methods, the composition of good-quality honey, global and Indian regulatory bodies, quality parameters for honey, diastase number, techniques for determining impurities, and various tests for identifying adulterations, including C4 sugar analysis. Dr. Srikanth addressed farmers' questions about adulteration and the different tests used to identify it.

The final session featured **Dr. Sailaja, Assistant Professor, Forest College and Research Institute, Mulugu**, who described the importance of pollinators, the caste system of the European/Italian honey bee (*Apis mellifera*), and the roles of the queen, workers, and drones. She provided comprehensive details about apiculture and then took farmers to the honey testing laboratory, explaining the process in detail. Dr. Sailaja also took the farmers to the field to show bee hives and handling equipment like bee veils and smokers, followed by a visit to the honey processing lab where honey is extracted, filtered, and bottled. She concluded by addressing farmers' questions.

The participants were highly attentive throughout the training and actively engaged by asking questions and seeking clarifications. The training sparked their interest, particularly in apiculture, subsidies, and marketing. During the feedback session, participants expressed the need for regular future training sessions. Certificates were distributed to all participants for successfully completing the training. The one-day program concluded with a vote of thanks by **Dr. Srikanth, Scientist-B, Nodal Officer (VVK)**. The program was successfully organized by the extension team.

Glimpses of the Program







Shri E Venkat Reddy
Director,
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