







## A Report of Three Days Training on

## "Seed, Nursery and Plantation Techniques of Oak Species" for other Stakeholders held at ICFRE-HFRI, Shimla from 22<sup>nd</sup> to 24<sup>th</sup> October, 2025 <u>First Day (22<sup>nd</sup> Oct., 2025)</u>

Three days Training course on "Seed, Nursery and Plantation Techniques of Oak Species" was organized by ICFRE-Himalayan Forest Research Institute, Shimla (HFRI) from 22<sup>nd</sup> to 24<sup>th</sup> October, 2025 at ICFRE-HFRI, Shimla. 30 participants constituting students from Department of Biosciences, Himachal Pradesh University, Shimla, Centre of Excellence, Govt. Degree College, Sanjauli, St. Bedes College, Shimla, Social Activist/Ex Pradhan/Ward members of Gram Panchayat- Behna Brahmna, District-Bilaspur, Officials of 133-Eco-Task Force, Kufri and Members of Tridev Aushdiye Paudhey Utpadhan Society, Rohal, district, Shimla participated in this Training Course.

At the beginning of the inaugural session of the training, **Sh. Pitamber Singh Negi**, Scientist-E & Training Coordinator welcomed the Chief Guest, **Dr. Sandeep Sharma**, Director-Link & Group Coordinator (Research), HFRI, Shimla, Heads of Divisions, Scientist, students from Department of Biosciences, Himachal Pradesh University, Shimla, Centre of Excellence, Govt. Degree College, Sanjauli, St. Bedes College, Shimla, Social Activist/Ex Pradhan/Ward members of Gram Panchayat- Behna Brahmna, District-Bilaspur, Officials of 133-Eco-task Force, Kufri and Members of Tridev Aushdiye Paudhey Utpadhan Society, Rohal, Rohru district, Shimla. He informed the participants that five species of Oaks are

found in Himachal Pradesh and these species are very useful from social, economic and ecological point of view. Keeping in view the importance of different Oak species in the North-west Himalayan region, this training programme sponsored and funded by the Ministry of Environment, Forests & Climate Change (MoEF&CC), Govt. of India for



other stakeholders. Thereafter, he briefed about the schedule of three days training program to the participants of training present in the conference Hall and thereafter, invited **Dr.** 

**Sandeep Sharma**, Director-Link, and Group Coordinator (Research) HFRI, Shimla to deliver his inaugural address.

After this, Dr. Sandeep Sharma, Director-Link and Group Coordinator (Research),

ICFRE-HFRI, Shimla welcomed all the participants of training programme along with the Scientists and Technical Officers of HFRI, Shimla present in the conference Hall. He said that Oak species are valuable components of forest ecosystem and help in conserving moisture and improves soil fertility



and store carbon in their biomass besides providing fodder for the livestock, fuel wood and in making charcoal. They are a very good substitute for green fodder during winter season. He also told the participants that Oak Forest is facing regeneration problem due to heavy lopping. The incidence of diseases has also been observed in Oak trees due to heavy lopping. He further said that this training program will prove to be extremely beneficial for other stakeholders, because during this training, the participants will be given detailed information on various aspects of Oak species by the resource persons. In the end, he also requested the trainees to sensitize the local communities about the importance of these fodder species of North-west Himalayan region, so that they can be conserved for the benefit of future generations.

At the end of the inaugural session, **Sh. Jawala Prasad**, Senior Technical Officer, ICFRE-HFRI, Shimla extended a vote of thanks to the Chief Guest, **Dr. Sandeep Sharma**, Director-Link of the Institute, scientists, officers and all the participants of training programme and employees present in the conference hall. Beside this, he also



extended heartfelt thanks to the *Ministry of Environment, Forest and Climate Change* (MoEF&CC), Govt. of India for selecting ICFRE-Himalayan Forest Research Institute, Shimla for this three-day training program and also for providing financial assistance for

organizing this three-day training program.

In the Technical session of first day, **Sh. Pitamber Singh Negi**, Scientist-E & Training Coordinator invited **Dr. Vaneet Jishtu** (Retired Scientist) to



deliver a lecture on "Understanding the Role of Oaks in Our Ecosystem". **Dr. Jishtu** made a detailed presentation on the Role of Oaks in our Ecosystem" and expressed his deep concerns on decreasing natural populations of Oaks in the Himalayan region.

Thereafter, **Sh. Pitamber Singh Negi**, Scientist-E & Training Coordinator invited **Dr. Sandeep Sharma**, Scientist-G, ICFRE-HFRI, Shimla to deliver a lecture on "Modern Nursery Techniques for Production of Quality Planting Stock". **Dr. Sandeep Sharma** made a detailed presentation on various aspects of modern nursery techniques used in the production of quality planting stock for various forestry species and Oaks.



After that **Sh. P. S. Negi** invited **Dr. Ashwani Tapwal,** Scientist-F to deliver a lecture on "Diseases of Oaks and Their Eco-friendly Management". **Dr. Tapwal** made a detailed presentation on various diseases of Oak species and eco-friendly management practices for controlling Oak diseases.



After that, Sh. P. S. Negi invited Dr. Shiv Paul, Senior Project Associate to deliver lecture

on "Himalayan Oaks: Distribution, Uses and Conservation Needs". **Dr. Shiv Paul,** made a detailed presentation on "Himalayan Oaks: Distribution, Uses and Conservation Needs".

Thereafter, **Sh. P. S. Negi,** Scientist-E delivered a lecture on "Seed, Nursery and Plantation techniques of Himalayan Oaks". In his presentation, he elaborated in detail on the seeds of five Oak species i.e., time of collection, pre-sowing treatments, seed storage behaviour and nursery techniques viz, methods of seed sowing, time of sowing, transplanting, potting media, irrigation requirement in the nursery. Besides this, he also explained in detail the plantation techniques of these five oak species.





In the end of first day of training programme, **Dr. Balkrishan Tiwari, Scientist-C** made a detailed presentation on "Genetic Diversity and Population Structure of Oak species in the North-Western Himalaya: Implications for Conservation and Genetic Improvement.



## **Second Day (23th Oct., 2025)**

In the second day of the Training programme, a field tour was organized by Training Coordinator, **Sh. Sh. P. S. Negi**, Scientist-E and **Sh. Jawala Prashad**, Senior Technical Officer and Sh. Manoj Kumar, Senior Technician of ICFRE-HFRI, Shimla to Field Research Centre, Shillaru and Oak Forest at Hatu near Narkanda. All 30 participants actively participated in this field tour to Shillaru and Narkanda. **Sh. P. S. Negi** apprized the trainees about the ongoing research activities of the Institute at Field Research Centre, Shillaru. The participants were also given training on raising of Oak species and temperate medicinal plants in the nursery. The participants were also shown various Oak species on the way to Kufri, Shillaru, Narkanda and Kharsu Oak Forest at Hatu near Narkanda. In the evening, all the trainees were brought back to HFRI, Shimla.

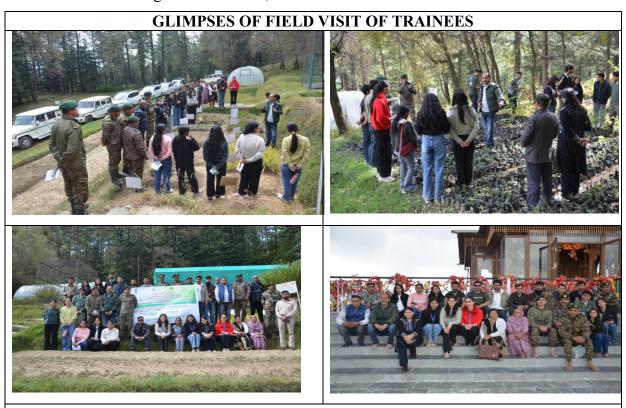


Figure 1 to 4. Visit to Field Research Station, Shillaru and Hatu, Narkanda

## Third Day (24th Oct., 2025)

In the third day of Training Programme, Sh. P. S. Negi, Training Coordinator invited

**Dr. Pawan Rana**, Scientist-F, to deliver a lecture on "Insect Pest of Himalayan Oaks and their Control Measures". **Dr. Pawan Rana** made a detailed presentation on various insect pests infesting oak species. He also suggested various bio-control measures for controlling the insect-pests of Oak species and other forestry species.

After that, **Sh. P. S. Negi**, Training Coordinator invited **Dr. R.K. Verma**, Scientist-G, to deliver a lecture on "Assessment of Carbon Stock in Ban Oak and other species in Shimla Forest Circle, Himachal Pradesh". **Dr. R. K. Verma** made a detailed presentation on Carbon Stock of Oak forests and other





forestry species of Shimla Forest Circle. He informed that Oak species contributes significantly in storing carbon in their biomass.

After that, Sh. P. S. Negi, invited Dr. Pravin Rawat, Scientist-C, to deliver a lecture on

"Fodder Uses and Nutritive Value of Himalayan Oaks". Dr. Pravin Rawat made a detailed presentation on the importance of five Himalayan Oak species in meeting fodder requirements of domestic animals raised by local communities in the hilly region and also the nutritive value of five Oak



species found in the North-west Himalayan regions. He also informed the participants that the nutritive value of Oak species varies on seasonal and altitudinal basis in the Himalayan region.

In the end of technical session of third day of training programme, Sh. P. S. Negi invited Dr.

Mohd. Ibrahim, Scientist-E to deliver a lecture on "Selection of Quality Planting Material for the Plantation Programme". Dr. Ibrahim made a detailed presentation on various methods and criteria



to be adopted during the selection of quality planting material for the plantation programme. He informed the participants that best quality material always results in the production of uniform and quality planting stock in the nursery.

After the end of the technical sessions, a valedictory session was organized. Sh. P. S. Negi, Training Coordinator welcomed the Chief Guest of the valedictory session, Dr. R. K. Verma, Scientist-G and Head of Office, ICFRE- HFRI, Shimla and also briefed about the various lectures delivered by experts during the technical sessions and activities undertaken during the field visits of participants. Dr. R. K. Verma, Scientist-G and Head of Office, ICFRE- HFRI, Shimla, in his valedictory speech said that Oak species are very important tree species for fulfilling the fodder and fuel wood requirements of livestock in the Himalayan region. They provide varied ecological and hydrological functions and hence, the conservation of Oak species is necessary in the present context. At the end of valedictory function, Chief Guest, Dr. R. K. Verma, Scientist-G and Head of Office, ICFRE- HFRI, Shimla distributed certificates to all the participants of three-days training programme. The participants were also taken to Technology Demonstration Centre (TDC) and Laboratories of ICFRE-HFRI, Shimla for demonstration of technologies developed by the Institute.





The training program ended with a vote of thanks by **Sh. Jawala Prashad**, Senior Technical Officer. He summed up the suggestions of the participants of the training program and extended a vote of thanks to **Chief Guest**, **Dr. R. K. Verma**, **Scientist-G and Head of Office**, ICFRE-HFRI, Shimla, all the participants, heads of their institutions for sponsoring their names for three days training programme. He also thanked MoEF&CC, Govt. of India, New Delhi for giving an opportunity to ICFRE-HFRI, Shimla to organize this three-day training programme. He also thanked various resource persons and institute staff for providing full support during the training program.