



A Report of Three Days Training On “Seed, Nursery and Plantation Techniques of Oak Species” for other Stakeholders held at ICFRE-HFRI, Shimla from 23rd to 25th October, 2024

First Day (23rd Oct., 2024)

Three days Training course on “*Seed, Nursery and Plantation Techniques of Oak Species*” was organized by ICFRE-Himalayan Forest Research Institute, Shimla (HFRI) from 23rd to 25th October, 2024 at ICFRE-HFRI, Shimla. 30 participants constituting students & faculty member from Centre of Excellence, Govt. Degree College, Sanjauli, St. Bedes College, Shimla, Pradhan/Up-Pradhan/Ward Member from Mashivar & Jaunaji Gram Panchayats of Solan district, Bala Gram Panchayat of Bilaspur District, Pujarli Panchayat, Shimla, Officials of 133-Eco-Task Force, Kufri and Members of Tridev Aushdiye Paudhey Utpadhan Society, Rohru participated in this Training Course.



At the beginning of the inaugural session of the training, **Sh. Pitamber Singh Negi**, Scientist-D & **Training Coordinator** welcomed the Chief Guest, **Colonel Mohan Singh**, Commanding Officer, 133-Eco-Task Force, Kufri, **Dr. Sandeep Sharma**, Director, HFRI, Shimla, Heads of Divisions, Scientist, students & faculty member from Centre of Excellence, Govt. Degree College, Sanjauli, St. Bedes College, Shimla, Pradhan/Up-Pradhan/Ward Member from Mashivar and Jaunaji Panchayat of Solan district, Bala Panchayat of Bilaspur District, Pujarli Panchayat, Shimla, Officials of 133-Eco-task Force, Kufri and Members of Tridev Aushdiye Paudhey Utpadhan Society, Rohru district, Shimla. He informed the house 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 Oak species in the Himalayan region, this training programme is funded by the Ministry of Environment, Forests & Climate Change (MoEF&CC), Govt. of India for other stakeholders. Thereafter, he presented the outline of the three-day training program to the trainees present in the auditorium and also invited Director, HFRI, Shimla to give his inaugural address.



After this, **Dr. Sandeep Sharma**, Director, ICFRE- HFRI, Shimla again welcomed the Chief Guest **Colonel Mohan Singh**, Commanding Officer, 133-Eco-Task Force, Kufri and all the participants of training programme along with the Scientist and officers of HFRI, Shimla present in the conference Hall. He said that Oak species not only provide fodder for the livestock but also help in conserving moisture, improves soil fertility and store carbon in their biomass. Thereafter, Chief Guest, **Colonel Mohan Singh**, Commanding Officer, 133-Eco-Task Force, Kufri, inaugurated the three-day training programme. In his inaugural address, he said that oak species are very important multipurpose species and they provide fodder, fire wood, and other products. He 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 that the trainees should go to their areas and sensitize the local communities about the importance of these evergreen fodder species of Himalayan region, so that they can be conserved for the benefit of future generations.



At the end of the inaugural session, **Dr. Swarn Lata**, Scientist-D, ICFRE-HFRI, Shimla extended a vote of thanks to the **Chief Guest Colonel Sh. Mohan Singh**, Commanding Officer, 133-Eco-Task Force, Kufri, Shimla, **Dr. Sandeep Sharma**, Director of the Institute, scientists, officers and all the participants of training programme and employees present in the conference hall for attending the inaugural session. Apart from this, she also extended heartfelt thanks to the *Ministry of Environment, Forest and Climate Change (MoEF&CC)*, Govt. of India for selecting 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-D & **Training Coordinator** invited Dr. Swarn Lata, Scientist-D to deliver lecture on “*Himalayan Oaks: Distribution, Uses and Conservation Needs*”. Dr. Swarn Lata, Scientist-D made a detailed presentation on “*Himalayan Oaks: Distribution, Uses and Conservation Needs*”.

Thereafter, **Sh. Negi** made a detailed presentation on “*Seed Technology of Himalayan Oaks*”. His talk was mainly focussed on seed collection methods, seed handling, seed viability, storage methods for enhancing seed longevity and pre-sowing treatments for enhancing seed germination. After that he invited Dr. Sandeep Sharma, Director, ICFRE-HFRI, Shimla to deliver a lecture on “*Modern Nursery Techniques for Production of Quality Planting Stock*”. **Dr. Sharma** made a detailed presentation on various aspects of modern nursery techniques employed in the production of quality planting stock for various forestry species including Oaks.



After that **Sh. Negi** invited **Dr. Jagdish Singh**, Scientist-G to deliver a lecture on “*Status of Agroforestry in Himachal Pradesh*”. **Dr. Singh**, made a detailed presentation on the Status of Agroforestry in Himachal Pradesh and also talked about different agroforestry systems and the species combination used by local communities under different agroforestry systems in Himachal Pradesh. He also highlighted the role of oak trees in Agri-silvicultural and silvi-pastoral systems in meeting fodder requirements in the villages.



After that **Sh.** 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. The queries raised by the participants were also addressed by the resource person amicably.



After that **Sh. Negi** invited **Dr. Pravin Rawat**, Scientist-C to deliver a lecture on “*Fodder Uses and Nutritive Value of Himalayan Oaks*”. **Dr. Rawat** made a detailed presentation on the importance of Oak species in meeting fodder requirements during lean period in the hilly region and also the nutritive value of various Oak species found in the North-west Himalayan regions.



Second Day (24th Oct., 2024)

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

GLIMPSES OF FIELD VISIT OF TRAINEES



Figure 1 to 6. Field Visit to Field Research Centre, Shillaru



Figure 7 & 8. Field Visit to Kharsu Oak Forest, Hatu Peak, Narkanda

Third Day (25th Oct., 2024)

In the third day of Training Programme, **Sh. Pitamber Singh Negi, Training Coordinator** invited **Dr. Vaneet Jishtu**, Scientist-E 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*”.



Thereafter, **Sh. Negi** delivered a lecture on “*Nursery and Plantation techniques of Himalayan Oaks*”. In his presentation, he elaborated various aspects of nursery techniques viz, methods of seed sowing, time of sowing, transplanting, potting media, irrigation requirement of 5 Oak species in the nursery. Besides this, he also explained in detail the plantation techniques of these oak species.

After that, **Sh. 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.



After that, **Sh. Negi** invited **Sh. Akhil Sharma**, Chief Technical Officer, to deliver a lecture on “*Insect Pest of Himalayan Oaks and their Control Measures*”. **Sh. Akhil** made a detailed presentation on insect-pest of Himalayan oaks and also suggested the control measures to be adopted for controlling the incidence of insect-pest infestation in Oak species.



After that, **Sh. Negi, Training** invited **Sh. Dushyant Kumar**, Senior Technical Officer, to deliver a lecture on “*Assessment of Carbon Stock of Oak and other Forestry species of Shimla Forest Circle*”. **Sh. Dushyant** made a detailed presentation on Carbon Stock of Oak and other forestry species of Shimla Forest Circle.



After the end of the lecture sessions, a valedictory session was organized. **Sh. Pitamber Singh Negi, Training Coordinator** welcomed the Chief Guest of the valedictory session, **Sh. Anil Joshi, IFS, Member Secretary**, Himachal Pradesh Pollution Control Board, Shimla. Thereafter, **Dr. Sandeep Sharma**, Director, ICFRE- HFRI, Shimla welcomed the Chief Guest. He thanked the Chief Guest for accepting the offer of ICFRE-HFRI, Shimla for the Valedictory function. **Sh. Anil Joshi, IFS, Member Secretary**, Himachal Pradesh Pollution Control Board, Shimla thanked the Director, ICFRE-HFRI, Shimla for extending the invitation to him for this valedictory function. He said that Oaks are very important tree species for fulfilling the fodder requirement of livestock in the Hilly region, however, some regulation must be there to check the excessive lopping of trees in the Himalayan region. At the end of valedictory function, Chief Guest, **Sh. Anil Joshi, IFS**,

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, **Sh. Anil Joshi, IFS, Member Secretary**, Himachal Pradesh Pollution Control Board, Shimla, Director, ICFRE- HFRI, all the participants and MoEF&CC, Govt. of India, for providing an opportunity to ICFRE-HFRI, Shimla to organize this three-day training program. He also thanked various resource persons and institute staff for providing full support during the training program.

