



A Report on the Training Program

“Management of Insect-Pests of North-Western Himalayan Oaks and forests of High-Altitude Transition Zones (HATZ)”

Palampur, District Kangra, (H.P.)

February 25, 2023

ICFRE-Himalayan Forest Research Institute, Shimla, H. P. organized one day training programme “Insect-pests of oaks and High-altitude Transition Zones and their management” on 25 February, 2023 at Municipal corporation office, Palampur, District Kangra H.P. The training was attended by around 40 participants including staff of Forest Division Palampur, members of Local Panchayat and Mahila Mandal participated in this training program. At the onset, Dr. Pawan Kumar, Scientist & Head, Forest Protection Division ICFRE-HFRI, Shimla and Training Coordinator welcomed the Chief Guest Smt. Poonam Bali, Mayor, MC Palampur; Dr. Nitin Patil, IFS, DCF Palampur; other dignitaries and participants.

Dr. Pawan Kumar, Training Coordinator briefly apprised the participants about the main objective of this training. He emphasized the gathering about insect-pest problems in the Oak forests, and informed that unsustainable harvesting of Oak trees is one of the root cause of drying of Oak trees, whereas, role of climate change and global warming in population build up and epidemic outbreak of insect-pests in forests cannot be ignored. He further intimated that a main objective of this training is to sensitize the field staff and local communities about the insect pest problems of oaks and their management.

Smt. Poonam Bali, the Chief Guest, while inaugurating the training addressed the gathering on issues and concerns related to the use of insecticides and their harmful impacts on environment and life including socioeconomic importance of Oak and other forestry species of NW Himalaya. She further intimated that unsustainable lopping of oaks and other trees is a serious concern, and people often unintentionally lop trees in such a way that they become susceptible to various kinds of pests and diseases. Sh. Anish Nag, Deputy Mayor, MC Palampur emphasized that Oaks and other forestry species of NW Himalaya provide fuel, fodder, etc. to the local community. The current threats of insect pests and diseases are major concern and the research organization like HFRI, Shimla should focus on developing eco-friendly alternates to protect the valuable vegetation of NW Himalaya. Dr. Nitin Patil, IFS & DCF, Palampur in his remarks highlighted the role of Oak forests with perspective of local communities in fulfilling their requirements of fuel, fodder etc. Dr. Patil while addressing the participants, expressed that HFRI, Shimla is working in close association with State Forest Department and these trainings are definitely helping the forest department as well as other stake holders keeping in view the emerging challenges of tree mortality due to insect pests and disease attack. The initiatives taken by the ICFRE-HFRI, Shimla will definitely benefit

the stakeholders in mitigating these challenges. Sh. Om Prakash Chandel, ACF, Forest Division Palampur expressed his views on various factors affecting the survival of nursery, plantation as well as natural forests. Citing about the problems of natural forests, he emphasis the destructive role of insect pests in forest ecosystem. He urged field staff to enquire more about insect pest problems in practical way, so that such outbreaks in forests can be addressed well in time so as to save our forest wealth in a time bound manner. Sh. Akhil Kumar, Chief Technical Officer, ICFRE-HFRI, Shimla delivered detailed presentation on the research education and extension activities of the institute along with significant achievements in the field of forestry.

The technical session started with the talk of Dr. Gireesh Nadda, Principal Scientist, CSIR-IHBT, Palampur H.P. He



suggested the participants to follow the instruction suggested by insecticide board before applying them in the field. He also suggested some do's and don'ts which everyone should adopt before application of insecticides. He presented detailed information about insecticides, herbicides,

weedicides & their mode of action. He emphasized the importance of biological control methods including BT (*Bacillus thuringiensis*) and NPV (Nuclear Polyhedron Virus) and their role in controlling the major insect-pests. While concluding his talk, he assured to provide any technical inputs to solve the field problems related to the insect-pests attacks. He emphasized the need of bio-control practices in containing the serious insect pests along with the technologies developed by CSIR-IHBT, Palampur.



Dr. Pawan Kumar Training Coordinator delivered the talk 'ecofriendly management of insect pests of oaks and High Altitude Transition Zones (HATZ)'. He informed that High altitude forest cover inhabits some of the very important economical tree species like- Bird-cherry, Himalayan Poplar, *Betula* sp., *Abies pindrow*, *Quercus* sp., *Juniper* spp. etc. Being

multipurpose tree species, they provide fodder, fuelwood, timber and also have very important role in livelihood generation of these areas. Any damage to forest can directly impact the rural sector of these areas. He further emphasizes that these trees of NW Himalaya are under stress due to frequent incidences of insect-pests attacks sometimes leading to epidemic outbreaks. Keeping in view the fragile ecosystem, it is very important to manage these insect pest attacks in high altitude transition zone at earliest, before it causes more damage to forest cover by using ecofriendly management practices. He highlighted the ecofriendly technologies developed by the institute which are very effective in containing the menace of insect pest attacks in NW Himalaya.

He further delivered a talk on “Insect pests of oaks of North-Western Himalaya and their ecofriendly management”. He told that all the five species of Oaks distributed in the NW Himalaya are susceptible to insect pests attack and in recent many insect pests outbreaks in oaks were noticed by the institute. The entire western Himalaya is witnessing an ‘Oak



Decline’ throughout its distributional range and the insect pest attacks are aggravating the problem. He further talked about different insect-pests of oak species and their management practices. Talking about management practices, he

deliberated that the institute has isolated Natural enemies like Predators, and parasitoids and standardized the techniques to utilize them as ecofriendly alternate to the toxic chemical insecticides which are found to be very effective in insect pest management of oaks of NW Himalaya.

The technical session was followed by feedback and discussions which was attended by Smt. Poonam Bali, Mayor; Sh. Anish Nag, Deputy Mayor; Dr. Nitin Patil IFS, DCF Palampur; Sh. Om Prakash Chandel, ACF Palampur; staff of SFD, members of mahila mandal & local body along with experts of ICFRE-HFRI Shimla and CSIR-IHBT Palampur.

The training program culminated with the vote of thanks proposed by Sh. Akhil Kumar, CTO, ICFRE-HFRI Shimla, H. P.

Glimpses of the Training Program






