HIMALAYAN FOREST RESEARCH INSTITUTE, SHIMLA

Training and Demonstration Programme on "Ashtavarga Group of Medicinal Plants"

Venue: HFRI, Shimla Dates: 09th -13th September, 2020

A Training and Demonstration Programme on **"Ashtavarga Group of Medicinal Plants"** was organised by the Himalayan Forest Research Institute, Shimla from **09**th – **13**th **September, 2020**. The Training Programme was funded by the **Research Wing of the Uttarakhand Forest Department** and the participants included Range Forest Officers, Foresters and Research Staff working in various research projects.

Ashtavarga has always been an important group of eight plants, forming key ingredient of various classical Ayurvedic formulations like Chavanprash. Ashtavarga has been assigned various medicinal properties by ancient *Materia Medica* dealing with Ayurveda. It is subject of rigorous botanical research. Although work has been done on its identification, still lot is to be required to develop their cultivation packages.

Keeping in view the COVID-19 pandemic, compliance of the directions issued by Govt. of India as well as the Govt. of Himachal Pradesh was strictly followed. The trainees were lodged and trained in the Institute's Guest House, which is located away from the main office complex and residences, as precautions were strictly followed. During the entire Training Programme all Ministry of Health & Family Welfare, Govt. of India guidelines were strictly adhered to. All the persons who participated in the above mentioned Training Programme were asked to follow social distancing. They were provided with quality face masks and wearing them was made mandatory.



DAY 1:

The Training Programme was inaugurated by **Dr. S.S. Samant**, Director, HFRI, who emphasised upon the importance of this RET group of plants and the urgent need to come forth with its propagation and cultivation techniques. He also apprised the participants about HFRI and the uses of various medicinal plants of Western Himalaya.



The trainees were given expert lectures by prominent Scientists in the field of nursery techniques of medicinal plants (Dr. Sandeep Sharma), research introduction and identification/taxonomy (Dr. R. K. Verma, Vaneet Jishtu and Dr. Anil Thakur), and cultivation of Ashtavarga species (Dr. Lal Singh, Dr. Jagdish Singh, Meenu Sood and Dr. Yashpal Sharma).

At the onset, **Dr. Vaneet Jishtu**, Coordinator for the training provided the road map for the one week programme. He presented the introductory

information on all the plant members of the Ashtavarga group in detail. Later, he also provided an overview for the conservation and management of medicinal plants in India.

Dr. Verma apprised the trainees about the Institute, its long history, infrastructure, brief inputs to the projects completed and the road ahead.

Dr. Sandeep Sharma talked on the prospects and use of Organic Farming in Forestry applications. He explained the simple techniques required for preparation of vermicompost and compost along with their appropriate application in forest nurseries.

One session in the evening was devoted towards the Himalayan Day-2020, where Dr. **S.S. Samant,** Director, HFRI sensitized the audience on the importance of the fragile Himalayan ecosystem and also to highlight the various issues concerning it. The participants were connected online from the main conference hall of the Institute.

DAY 2:

Day two began with the presentation of **Dr. Sandeep Sharma** on the cultivation of medicinal plants. He provided the cultivation techniques/protocols to be followed in case of *Aconitum heterophyllum* (Atish), *Polygonatum cirrhifolium* (Mahamedha) and *Angelica glauca* (Chora).



This was followed by the lecture of **Dr. Lal Singh**, **Director** Himalayan Research Group (HRG), who provided valuable inputs for the mass propagation of *Taxus wallichiana* and *Chirayita*. He discussed the success stories in context to the involvement of local communities in medicinal plants cultivation.

Sh. Sanjeev Thakur, DCF HFRI took a session on the Global Positioning System (GPS) and provided practical knowledge (on hands experience) to the participants in the nearby forests.

Sh. Jagdish Singh delivered his lecture on the Cultivation and Nursery Techniques of two important medicinal plants, namely *Podophyllum hexandrum* (Ban Kakri) and *Trillium govanianum* (Nag Chhatri).

DAY 3:

Field visit to the Medicinal Plants Nursery of the University of Horticulture and Forestry at Shilly, Solan was organised. **Dr. Meenu Sood**, Prof. & Head, Department of Forest Products, COF, UHF, Nauni, Solan provided an overall preview of the work being conducted by the University and their Natural Products Division in particular. She explained the cultivation techniques of Jeevak in great detail.



Dr. Yashpal Sharma, Associate Professor Dept. of Forest Products, COF, UHF, Nauni, shared his vast experience on the cultivation of Jeevak and *Swertia chirayita* for mass propagation and commercial applications. He also provided indepth information on the cultivation of other RET medicinal plants like *Gentiana kurroo* and *Atropa belladonna*.

Later, the participants visited the medicinal plants nursery of HFRI at Shilly, and were apprised about the activities being undertaken there.

In the evening, the trainees visited the Western Himalayan Temperate Arboretum near Summer Hill, Shimla and were shown the Ashtavarga Plants germplasm nursery in *ex situ* conservation for public display and awareness.

DAY 4:

Dr. Anil Thakur, Asst. Professor, RKMV College, Shimla presented a detailed, but simplified talk on Basics of Field Taxonomy. It was designed to cater to the field staffs basic plant identification problems in the forest. However, his major focus was on medicinal plants, including the Ashtavarga group.

Prof. (Dr.) T. N. Lakhanpal talked on the role of Mycorrhiza in propagation and survival of medicinal plants in the field. He stressed upon the nursery managers to use mycorrhiza for better survival of plants in the field.

After the in-house deliberations, trainees were taken around the various laboratories of the Institute and also the Herbarium and the Institutes Interpretation Centre. They were briefed about the activities being undertaken in these laboratories/centres.



The valedictory and interactive session was conducted in the main Conference Hall of the Institute. It was presided by **Dr. S.S. Samant,** Director, HFRI along with **Dr. Rajesh Sharma**, Group Coordinator Research, **Dr. R. K. Verma**, Head of Office. An interactive session followed on the Future of Medicinal Plants – The Road Ahead. Later the participating trainees shared their feedback on the Training Programme.



DAY 5:

A field trip to the forests around Kufri Catchment and Narkanda was arranged for the trainees for collecting plants for herbarium preparations. They also visited the Medicinal Plants nursery of HFRI at Shillaru. The visits to various research nurseries were organised by **Dr. Vaneet Jishtu**, the Coordinator for the Training Programme.



These participating trainees took keen interest in the various works being conducted at the Medicinal Plants Nursery at Shillaru. They also collected seeds and germplasm of some medicinal plants to take with them back to their station for propagation.





This was the first Training Programme organised by the Institute offline during COVID19, and was successfully conducted.



Glimpses of the Training Programme