## Training Programme on 'Nursery Techniques of Juniper & other important broad-leaved species of cold deserts and high altitude medicinal plants': A REPORT (14<sup>th</sup> & 15<sup>th</sup> November, 2017)

Himalayan Forest Research Institute, Shimla organized two days training and demonstration programme titled **'Nursery Techniques of Juniper & other important broad-leaved species of cold deserts and high altitude medicinal plants'** during 14<sup>th</sup> & 15<sup>th</sup> November 2017' at Kaza, Spiti (HP) which was funded by Wildlife Wing of Himachal Pradesh State Forest Department. 30 participants including officers and frontline staff of Wildlife Divisions of Spiti and Sarahan of Himachal Pradesh participated actively. The training was conducted with a view to build the capacity of wildlife staff towards modern nursery techniques for raising Juniper & other important cold desert species including high altitude medicinal plants.

**Dr. Sandeep Sharma, Scientist-F** and Coordinator of this training programme welcomed the chief guest, **Dr. Sushil Kapta, IFS, CCF Wildlife** and participants of the training on their arrival at Hotel Old Monk, Spiti - the venue of training programme and briefed them about this two days training programme. Subsequently, **Dr. Sushil Kapta, IFS,** inaugurated the training programme and in his inaugural address, he stressed upon the need for capacity building of wildlife staff towards modern nursery practices of cold desert species to raise quality nursery stock for harsh climatic conditions of that area. Keeping in view the huge potential of cold desert region for high altitude medicinal plants, he also requested HFRI team to specifically elaborate on nursery techniques of high altitude cold desert medicinal plants species during the training programme. DFO, Wildlife Division Spiti, **Sh. Rajeev Sharma, HPFS**, requested the experts to spend one full session in the nearby Shego Nursery of the division to demonstrate various nursery techniques in the field including GPS applications. **Sh. D. S. Dhaulta, HPFS,** DFO, HQ of CCF Wildlife office, Shimla requested participants to discuss threadbare about various nursery techniques during the training programme to clear all doubts about modern nursery techniques.

The first day's technical session started with the presentation of **Sh. P.S. Negi, Scientist-C** wherein, he highlighted the activities of the institute followed by the detailed pictorial presentation on medicinal wealth of Himachal Pradesh especially cold desert region of the state and their various traditional uses. Subsequent to the presentation of Sh. Negi, **Dr. Sandeep Sharma, Scientist-F** made detailed presentation on Modern Nursery Techniques for the benefit of participants especially covering polyhouse technology, composting and vermi-composting techniques, organic farming etc. and also discussed various interventions towards modernizing nursery techniques for raising cold desert species. To further benefit the participants, an interactive session amongst the participants and the experts was conducted in the evening before closing the day's proceedings.

The second day's proceedings also started with the detailed presentation of Sh. P.S. Negi, Scientist-C on seed & nursery techniques of Junipers (*Juniperus polycarpos*). Thereafter, Dr. Sandeep

**Sharma, Scientist** –**F** presented the work on nursery techniques standardized by the institute for raising Atish (*Aconitum heterophyllum*), Chora (*Angelica glauca*), Ban Kakri (*Podophyllum hexandrum*), Kutki (*Picrorhiza kurroa*), Salix, Poplar, Seabuckthorn and important shrubs of cold deserts. Thereafter, all the participants and experts went to **Shego nursery** for on the field demonstration of various nursery techniques such as bed preparation, pre-sowing treatments, sowing, irrigation, root and shoot cuttings preparation, composting, vermi-composting, polyhouse techniques by the experts. Dr. Sandeep Sharma and Sh. P.S. Negi demonstrated these techniques at Shego nursery to the participants and also elaborated plan for modernizing that nursery in coming months. Various GPS applications were also demonstrated to the participants in the nursery.

To further benefit the participants, an interactive session amongst the participants and the experts was conducted in the afternoon. During this session, participants expressed their opinion about modern nursery techniques, shrubs & medicinal plants cultivation and freely interacted with the resource persons. Relevant queries of the participants pertaining to various issues with emphasis on cold desert species/ conditions were duly addressed through expert opinion of the respective resource persons. In this session, participants freely gave their feedback were

In the end of the programme, Vote of Thanks to the participants and the resource persons as well was proposed by **Sh. Rajeev Sharma, DFO Wildlife Division Spiti**. He particularly thanked Dr. Sandeep Sharma training coordinator and Sh. P.S. Negi, Scientist-C for successfully organizing the training programme at Kaza in the heart of cold desert region of HP in these extremely chilly days when temperature remained between  $+3^{0}$ C to  $-8^{0}$ C.

## **Glimpses of Training Programme**











































