Himalayan Forest Research Institute, Shimla organized training on “**Insect-Pest Management in Medicinal Plants**” from 25 to 27th September, 2017 for the benefit of farmers of Lahaul Valley at Udaipur under National Medicinal Plants Board Funded Project, “Biological Control of *Thysanoplusia orichalcea* (F.) (Lepidoptera: Noctuidae) : A Potential Insect-Pest of *Saussurea costus* in North-Western Himalayas and Extension of Protection Technology to Local Communities” in close cooperation with Lahaul Forest Division, Himachal Pradesh. The meeting primarily focused on the Insect-pests incidences of High Altitude Medicinal Plants in the Lahaul valley and their control measures. 20 farmers including frontline staff of Udaipur and Jhalma Forest ranges participated in this training.

Dr. Ranjeet Singh, Coordinator of the training programme, welcomed Shri Jai Ram Thakur, DFO, Lahaul the Chief Guest, and also the participants. Subsequently, he also emphasized upon the importance of Medicinal and Aromatic Plants (MAPs) and their use for curing various ailments in several indigenous systems of medicine.

Shri Jai Ram Thakur, Divisional Forest Officer, Lahaul Forest Division, inaugurated the training programme and informed that in the past there had been a controlled extraction of medicinal plants from the wild in the state of Himachal Pradesh and accordingly limited natural populations were sufficient to fulfill growing trade requirement. But with the passage of time, the limited natural population was unable to fulfill the growing trade requirements of the health care industries and commercial cultivation of high altitude medicinal plants as a regular crop was initiated by the farmers in Lahaul Valley. As a result of it, the area under medicinal plants has increased many-folds and the valley came to be recognized as a major source of medicinal plants both for export and domestic use. He also explained in detail on the role of state forest department in promoting the cultivation of Kuth and other medicinal plants in Lahaul Valley and also the Kuth Act enacted for the regulation of trade. He also appreciated the initiative taken by HFRI, Shimla to extend the scientific findings to the farmers and staff of Lahaul Forest Division on Pest management and further said that cultivation of medicinal plants can be made profitable if technology developed by HFRI especially in pest management be implemented in the field.

Following presentation of the DFO, Lahaul, **Dr. Ranjeet Singh** explained in detail the different insect pests encountered while cultivating the medicinal plants as a crop. Identification of these pests was also explained at length, besides use of various methods to keep them below the economic damage were also discussed. He also informed about the
indiscriminate use of pesticides in the agriculture, horticulture and forestry operations those had created many significant ecological backlashes including secondary insect-pest outbreaks. He also told that presence of residues of these chemicals in the food chain and other component of the environment proved to be quite toxic to human beings, birds and other beneficial organism of the forestry eco-system and advocated the use of biological control agents in pest management. He also informed about the different pest control methods to be employed in the field during epidemic situations which are ecologically sound and economically feasible and advised the farmer and State Forest officials to take correct timely action against various pests encountered in cultivation of medicinal plants.

On 26th September, 2017 Dr. Ranjeet Singh started his lecture on use of biological control agents for the management of pests in crop. He told the participants that conservation of natural enemies should be the first consideration in controlling the pest and explained that how to use “trap crop” in managing the attack of cabbage semi-looper in Kuth crop. Effective cultural practices such as deep ploughing, crop rotation etc. are particularly important for the destruction of root borers which are not easily attacked by natural predators and parasites.

Sh. Om Parkash, Range Officer, Udaipur said that due to various changes in climatic conditions the pest and diseases outbreaks had been observed in forests in Lahul Valley and these incidences are causing serious damages. He said that insect-pests and diseases incidence are becoming regular phenomenon in planted and natural forests in this region and opined that the best way to deal with these problems, is to develop species specific control programme, at least for the important species and make them available to the end users.

Shri Mast Ram, Range Officer, Pattan at Jhalma informed that due to unscientific and continuous extraction of medicinal plants from the wild habitat with negligible efforts for their conservation, the rich medicinal wealth of the state is becoming scarce day by day and many species in the process are on verge of extinction. He emphasised upon the promotion of cultivation of medicinal and aromatic plants in farmer’s field.

On 27th September, 2017 participants were taken to Jobrang, Rape & Shansha villages and were demonstrated various pest management operations to manage the pest incidences in field. Shri Akhil Kumar, Research Assistant, gave practical working knowledge on different...
pest control methods in forest nurseries and their effects on health of medicinal plants. Recognition of the damage caused by the most important insect, their damage potential and techniques to control them at appropriate time was also emphasized in the field. Dr. Ranjeet Singh taught the farmers about the safe use of insecticides and pesticides equipments in nurseries such as manually operated sprayers, knapsack sprayer and fan duster etc.

In the end Dr. Ranjeet Singh, extended formal vote of thanks to the participants and other officials of the Lahaul Forest Division.