

PROCEEDINGS OF THE INSTITUTE LEVEL MONTHLY RESEARCH SEMINAR HELD ON 27.09.2019

Monthly Research Seminar on the title “**Role of Forest Seeds in Production of Quality Planting stock**” under the issue “**Managing forests and forest products for livelihood support and economic growth**” was organized on 27th Sept, 2019 in the Conference Hall of Himalayan Forest Research Institute, Shimla. The speaker was Sh. Pitamber Singh Negi, Scientist-C Silviculture & Forest Management Division. The scientists, officers, technical staff and researchers of the institute attended the seminar for sharing their viewpoints viz-a-viz identification of the research needs and implementation strategies with specific reference to the topic. **Dr. S. S. Samant**, Director, HFRI chaired the proceedings of this research seminar.

Sh. Pitamber Singh Negi, Scientist- C made a detailed presentation on the topic and highlighted the importance of forest seeds and its role in production of quality planting stock. Shri Negi deliberated upon various aspects of forest seeds right from the seed collection, seed processing, seed dormancy, seed storage and various pre-sowing treatments for overcoming seed dormancy. He figured out that for raising quality nursery stock for successful plantations, seeds should be collected only from best trees in natural forest or from the known seed sources either from natural seed stands or from seed orchards.

The presenter enlisted in detail research works carried out in past at international, national and regional level on various aspects of forest seeds along with the prospects/future agenda/research needs at the state and national level. Shri Negi also highlighted the works carried out by HFRI, Shimla on different tree species especially high level conifers. He elaborated upon the works done on *Juniperus polycarpus*. Shri Negi concluded his talk by emphasizing the need for research on optimum time of seed collection, seed germination and storage protocol of important temperate forestry species in future.

During discussion, **Sh. Jagdish Singh**, Scientist-F suggested that institute should undertake research on seed germination problem of temperate medicinal plants. Sh. Kuldes Kumar, Senior Technical Assistant enquired about role of moisture stress during germination. In response, **Sh. P. S. Negi**, informed that moisture requirement varies from species to species, however, some species germinate better in slight moisture stress condition during seed germination.

The Chairman thanked the speaker for making nice efforts while highlighting the role of forest seeds in production of quality planting stock.

Outcomes of the Seminars:

- Forest seeds plays significant role in production of quality planting stock for use in various plantation programmes.

- Identification of gaps in research on temperate forest seeds should be done on priority basis.
- Optimum time of seed collection is an important criterion for getting better germination in nursery. Hence, studies on important forestry species for identifying optimum time of collection to have quality seeds for raising seedlings in the nursery.
- Studies on seed germination and storage protocols of important temperate species on priority basis.
- Biochemicals analysis of seeds of wild edible plants for estimation of various phytochemicals.

Formulation of Future strategies & Networking:

- Studies on phenology of important forestry species in reference to climatic change needs to be taken up.
- Seed handling, germination and storage protocols of important temperate species viz. *Betula utilis*, *Betula alnoides*, *Malus baccata*, *Sorbus lanata*, *Rhododendron campanulatum*, *Prunus cerasoides*, *Crataegus songarica*, *Acer* spp, *Quercus ilex* etc., need to be standardized for raising of quality stock.
- Standard operating procedures (SOPs) for seed testing of important temperate forestry species should be developed and disseminated to stakeholders.
- AICRP on forest seeds needs to be initiated in collaboration with other institutes namely, FRI, Dehradun, UHF, Nauni, IHBT, Palampur.
- Funding from DST, DBT, MoEF &CC, New Delhi and CAMPA fund of State Forest Departments for execution of research projects on Forest seeds.

The seminar ended with a vote of thanks by **Dr. Rajesh Sharma, Group Coordinator Research** for active participation by the participants and providing the best of their inputs for prioritizing the research needs and areas, identification of the gaps for developing future strategies.

SOME GLIMPSES OF THE SEMINAR





