



Centre of Excellence

**GOVERNMENT COLLEGE SANJAULI
SHIMLA-06, H.P.**

**Department of Zoology, Botany &
Environmental Science**

Report

Three-Day Training Course: “Application of Bio-fertilizers and Bio-pesticides in Forestry Practices”

Date: September 25-27, 2024

Introduction

The three-day training course, organized by the Himalayan Forest Research Institute (HFRI), aimed to provide participants with practical knowledge and applications of bio-fertilizers and bio-pesticides in forestry. The course witnessed participation from nearly 30 individuals, including six students and two faculty members from the Centre of Excellence Government College, Sanjauli, six students from St. Bede's College, Shimla, some grampanchayat members, and soldiers from the Eco Task Force. It was a highly engaging program featuring expert speakers, presentations, and field visits that facilitated an enriching learning experience.

Day 1: Inauguration and Presentations

The program commenced with an inauguration and welcome address by Dr. Pawan Kumar, Training Coordinator, Scientist-F, and Head of the Forest Protection Division at ICFRE-HFRI, Shimla. He welcomed the participants and set the tone for the event.

Key Sessions:

- **Akhil Kumar, CTO of the Forest Protection Division, ICFRE-HFRI**, outlined the R&D activities of HFRI.



- **Ms. Kanchan Devi, IFS, Hon'ble Director General of ICFR**, delivered the inaugural address, emphasizing the importance of sustainable forestry practices.
- **Dr. Rajesh Kumar Jaryal, Asst. Prof. (Zoology), Dept. of Biosciences, HPU, Shimla**, presented a compelling talk on **“Vermitechnology for Raising Socio-Economic Standards and Doubling Farmers' Income.”** The key highlights included vermicomposting, organic farming, and the role of beekeeping as pollinators.



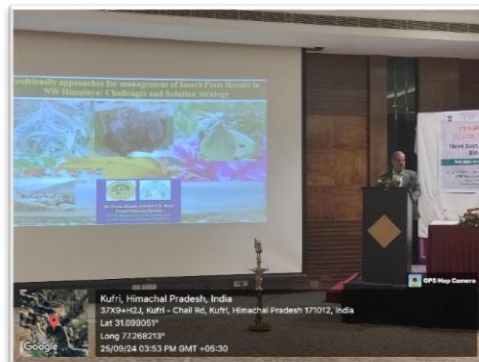
The presentation provided valuable insights on how vermitechnology can enhance farm productivity and income.

- **Dr. Harinder Singh Banyal, Chairman, Dept. of Biosciences, HPU, Shimla**, discussed **“Bio-pesticides and Sustainable Development,”** highlighting the role of bio-pesticides in promoting sustainable agriculture and minimizing chemical use.
- **Dr. Mahender Thakur, Chairman, Dept. of Environmental Sciences, HPU, Shimla**, presented on **“Bio-pesticides & Bio-fertilizers: Impacts on Insect Pollinators & Role of Organic Farming.”** Key highlights included the impact of bio-



fertilizers on insect pollinators and the critical role of organic farming practices in preserving biodiversity.

- After lunch, **Dr. Ashwani Tapwal, Scientist-F, ICFRE-HFRI, Shimla**, delivered a presentation on **“Application of Bio-fertilizers in Forestry.”** Key highlights included practical applications of bio-fertilizers to improve soil health and tree growth in forestry.
- The last presentation of the day was on **“Bio-control Practices: An Effective Tool to Manage Insect Pests in Forests of N-W Himalaya,”** presented by Dr. Pawan Kumar, Scientist-F, ICFRE-HFRI, Shimla. Key highlights included bio-control agents and their effectiveness in managing forest pests in the northwestern Himalayan region.



Day 2: Field Visits

The second day featured a field visit to the Shillaru Research Station and experimental sites. Participants visited various experimental locations, including Hattu Peak and Naldehra, to observe the application of bio-fertilizers and bio-pesticides in



real-world forestry settings.

Key Demonstrations included:

- **Mycorrhizal Application and Bio-fertilizers in Nurseries and Plantations**, led by Dr. Ashwani Tapwal, focusing on how bio-fertilizers improve plant health.
- **Application of Mycorrhiza in Plant Growth**, demonstrated by Ms. Neha Thakur, Technical Assistant.
- **Bio-pesticide Application in Forest Nurseries**, led by Dr. Pawan Kumar, emphasizing pest management in forest nurseries.



- **Application of Bio-control Agents**, demonstrated by Akhil Kumar, Chief Technical Officer, showcasing bio-control agents in action to manage pests effectively.

The field visit was a highlight of the training, providing hands-on experience to participants, who gained practical knowledge about bio-fertilizer and bio-pesticide applications in forestry.

Day 3: Presentations and Valedictory Session The final day included an engaging presentation on “**Modern Nursery Techniques and Quality Stock Production for Productivity Enhancement**,” presented by Dr. Sandeep Sharma, Director, ICFRE-HFRI, Shimla. Key highlights emphasized the



importance of modern nursery techniques and polyhouses in enhancing productivity, particularly in vegetable and forestry production.

Next, **Dr. Prakash Pathania, Scientist-E, ZSI, Solan, H.P.**, discussed the **“Role of Bio-pesticides in Managing Insect Pests of North-West Himalaya.”**



After a tea break, **Mrs. Deep Shikha Sharma, IFS, Deputy Conservator of Forest, HFRI, Shimla**, presented on **“Current Challenges in Forestry Practices.”** She shared her extensive experience across different

regions, including Goa, Sikkim, and the Andaman Islands, providing an engaging discussion on the challenges faced by forestry professionals today.

The training concluded with a valedictory session graced by the Chief Guest, **Dr. Jagdeesh Chandra, Senior IFS Officer**, who shared his vast knowledge and experiences in the forestry sector. His insights into forestry practices and their practical applications were highly appreciated by the participants. At last all the participants get facilitated by certificates.



Conclusion

The three-day training program was a tremendous success, providing a comprehensive understanding of bio-fertilizers and bio-pesticides in forestry. Participants gained practical knowledge through engaging presentations, hands-on field visits, and interactive discussions with experts. The training emphasized the importance of sustainable practices in forestry, organic farming, and bio-pesticide applications, contributing to long-term environmental benefits.

Participants left the program with a wealth of knowledge and a better understanding of how to implement bio-fertilizers and bio-pesticides in both academic and practical forestry contexts.



List of Students

Sr. No.	Student's Name	Father's Name	Class	University Roll no.	Class Roll no.
1.	Vineet Ronta	Sh. Mahender Singh Ronta	B.Sc. 2 nd year	2231730209	23401067
2 .	Hricha Sharma	Sh. Ajay Kumar	B.Sc. 3 rd year	2221730064	22401094
3.	Suryakant Negi	Sh. Anand Singh	B.Sc. 3 rd year	2221730174	22401056
4.	Ishan Thakur	Sh. Subhash Chand	B.Sc. 3 rd year	2221730067	22401055
5.	Vineeta Negi	Sh. Basu Dev Negi	B.Sc. 3 rd year	2221730191	22402008
6.	Tanish kimta	Sh. Inder Singh kimta	B.Sc. 2 nd year	2231730186	23401004

Reported by:

Hricha Sharma (B.Sc.3rd year)