

November 2025 **Vol. 25** No. 11

Commemorate 150th year of Vande Mataram

To commemorate 150th year of Vande Mataram, ICFRE and its institutes organized a National Song recitation session. A tree plantation drive was also conducted across the country to mark the occasion and promote environmental awareness.

















1			ICFR	E-FRI
78	40.00			
			V	
		4		



Contents	Pg. No.
Commemorate 150 th years of Vande Mataram	01
Significant Research Finding	02
Consultancies	02
Workshops/Seminars/Meetings	03
Training Programme	03
Awareness and Demonstration Programme	07
Activities under Van Vigyan Kendra	09
Participation in Exhibition	09
Mission LiFE	10
Prakriti Programme	11
Memorandum of Understanding	12
Miscellaneous	13
HR NEWS	14
Publication	14

Significant Research Finding

ICFRE- Forest Research Institute, Dehradun

- For the Management of Shisham Defoliator, *Plecoptera reflexa* Guenée, Entomopathogenic fungi (EPF) were successfully isolated and cultured using Potato Dextrose Agar (PDA) medium. DNA barcoding was developed for accurate identification of the target insect species and the associated EPF isolate.
- The antifungal activity of *Skimmia laureola* leaf essential oil was systematically evaluated against *Candida albicans* (MTCC 183) using disk diffusion and broth microdilution assays. The essential oil exhibited strong, concentration-dependent antifungal activity, with the inhibition zone at 25% EO (23.0 ± 0.3 mm) comparable to the reference drug ketoconazole (23.4 ± 0.15 mm at 10 μg/disc), indicating both fungistatic and fungicidal potential. This observation was further supported by the broth microdilution assay, which demonstrated ≥95% growth inhibition up to 6.25% EO, establishing this concentration as the minimum inhibitory concentration (MIC).

ICFRE- Institute of Wood Science and Technology, Bengaluru

• Ceramic fiber-reinforced Fire-Retardant Door (FRD) shutter rated for 60 minutes" was successfully demonstrated in the factory. The factory manufactured samples were tested at ICFRE-IWST laboratory for 60 minutes fire rating. The samples conformed to the requirement of 60 minutes fire rating as per IS:3614.

Consultancies

Indian Council of Forestry Research and Education

• New project awarded on 03rd party Audit and Assessment of Environmental Clearance Condition Compliance imposed by MoEF&CC, Gol with respect to Khairaha underground and Batura Opencast Mine of South Eastern Coalfield Sohagpur Area District Shahdol, Madhya Pradesh.

ICFRE- Institute of Wood Science and Technology, Bengaluru

- Provided consultancy on the assessment/ estimation of heartwood formation in standing trees of sandalwood. using Electrical Tomograph (ERT) at Karya farmland, Najunagudu, Karnataka and MM Hills Wildlife Division office premises, Kollegal.
- Provided advisory consultancy services on sandalwood management to M/s Anjan Anjaniputra Estates, Mancherial, Telangana.

Workshops/Seminars/Meetings

	ICFRE- Fores	st Research In	stitute, Dehradun		
01	Seminar on "Modern Techniques in Isolation and Identification of Natural Products"	21 st November 2025	42 participants including scholars, scientists, and officers from FRI and ICFRE		
	ICFRE- Institu	te of Forest B	iodiversity, Hyderabad		
02	Seminar on "Taxonomy & the preparation of ethno medicinal knowledge"	10 th November 2025	25 official staff of ICFRE-IFB, Hyderabad		
03	Seminar on "Applications of Synthetic Pheromones in Pests and Disease Management in Forestry"	18 th November 2025	35 official staff of ICFRE-IFB, Hyderabad		
	ICFRE- Himalay	an Forest Res	earch Institute, Shimla		
04	Sexual Harassment of Women at Workplace and their legal implications	21 st November 2025	All staff of ICFRE-HFRI, Shimla		
05	Declining Insect Population: Future of Our Planet Earth	28 th November 2025	45 participants including Scientists, Forest Officers & Researchers of ICFRE-HFRI, Shimla		
	ICFRE- Institute o	f Wood Scienc	ce & Technology, Bengaluru		
06	Meeting on "Panels"	31 st November 2025	20 participants from Panel industries		
07	Seminar on "Performance optimization of Laminated Veneer Lumber: An Engineered Alternative to Solid Wood"	31 st November 2025	40 participants including Scientists, Technical staff, and Research Scholars of ICFRE-IWST, Bengaluru		
Training Programmes					
ICFRE- Forest Research Institute, Dehradun					
01	Conservation and uses of Forest Genetic Resource	18 th to 20 th November 2025	27 Forest Range Officers and Foresters of Uttarakhand, Uttar Pradesh, Punjab, Haryana, Jammu & Kashmir and Himachal Pradesh		
02	Reconstitute wood and handmade paper from Lantana	24 th to 28 th November 2025	10 participants from different NGO's working on Lantana		
03	Wood and Bamboo Preservation	27 th to 31 st November 2025	14 participants from Diverse Backgrounds		

	ICFRE- Himalayan Forest Research Institute, Shimla				
04	Growing, preserving and marketing of Kadu	08 th to 09 th November 2025	50 participants including Farmers and Front Line staff from Himchal Pradesh State Forest Department		
05	Handholding and skill development for cultivating, conserving, and marketing the medicinal plants Kadoo and Chirayata	20 th November 2025	68 participants imcluding Common Interest Groups (Taranda, Taranda-I, Taranda-II, Nigani, and Nigulsari), farmers and front line staff from Bhavanagar, Nichar Range, Kinnaur Forest Divisions of Himachal Pradesh		



Training programme on "Growing, preserving and marketing of Kadu" at Sargha, Kullu



Training programme on Handholding and skill development for cultivating, conserving, and marketing the medicinal plants Kadoo and Chirayata" at Nigulsari

06	Capacity building on establishment of
	modern nursery and use of mycorrhizal
	biotechnology in planting stock production

24th to 26th November 2025

84 Forest Official of State Forest Department of Himachal Pradesh

ICFRE- Arid Forest Research Institute, Jodhpur

07	Rehabilitation of Degraded Lands and Mitigation of Desertification through Natural Solutions		
	Mitigation of Desertification through		
	Natural Solutions		

12th to 14th November 2025 40 participants including NGO's members, Farmers and Students from Jodhpur

ICFRE- Tropical Forest Research Institute, Jabalpur

08	Processing of Medicinal plants	19^{th}	November	70 participants including Self Help Group
			2025	members and Forest officers from North
				Seoni, Lakhnadon

ICFRE- Rain Forest Research Institute, Jorhat

			,
0		25 th to 27 th	05 Administrative staff of ICFRE-LEC, Agartala
	software, its operations and management	November	
		2025	
1	Integrated Natural Resource Management	25 th to 27 th	20 participants including Officials from various
1	Strategies for Livelihood Security in	November	departments of Northeastern states, including
	Northeast India	2025	Horticulture, Agriculture, AH & Veterinary, Soil
			& Water Conservation, Bamboo Development
			Agency, Medicinal Plant Board, Pollution Control
			Board and NGOs etc.
	·		·

Forestry in addressing livelihood issues of people of North Eastern States

26th to 28th November 2025

30 participants including NGO's, NFMC members, Students, Panchayat members etc.



Training programme on "Integrated Natural Resource Management Strategies for Livelihood Security in Northeast India" at ICFRE-BRC, Aizawl



Training programme on "Forestry in addressing livelihood issues of people of North Eastern States" at ICFRE-LEC, Agartala

ICFRE- Institute of Forest Genetics and Tree Breeding, Coimbatore

HPLC: Instrumentation, principle and function 14th November 17 students from Coimbatore 2025

13 ABC of DNA 19th to 20th 77 students from various schools of Coimbatore November

2025



Training programme on "HPLC: Instrumentation, Principle and Function" at ICFRE-IFGTB, Coimbatore



Training programme on "ABC of DNA" at ICFRE-IFGTB, Coimbatore

ICFRE- Institute of Forest Productivity, Ranchi

Fire Safety Protocols 28th November All officials of ICFRE-IFP, Ranchi 2025

	ICFRE- Institute of Wood Science & Technology, Bengaluru		
15	Bamboo Housing for Sustainable Development	10 th to 12 th November 2025	30 participants including NGO, Students, Artisans, Architects etc.
16	Wood processing	10 th to 14 th November 2025	24 representatives from Wood-based industries



Training programme on "Bamboo Housing for Sustainable Development" at ICFRE-IWST, Bengaluru



Training programme on "Wood processing" at ICFRE-IWST, Bengaluru

Forest Corporation and production 17 Forestry

17th to 19th November 2025

20 IFS officers from different State Forest Department



Training programme on "Forest Corporation and production Forestry" at ICFRE-IWST, Bengaluru

Testing of formaldehyde content of 18 plywood 2025

29th to 31st November

09 participants from Plywood Industries

ICFRE- Institute of Forest Biodiversity, Hyderabad

Conservation, Value addition and Marketing 19 of Non-Timber Forest Products (NTFPs) cum Medicinal Plants

11th to 13th November 2025

30 Stakeholders from Hyderabad

Awareness and Demonstration Programme

ICFRE- Tropical Forest Research Institute, Jabalpur

 231 students from St. Alloysious college, Ravindranath Tagore Agriculture college, Dewghar, Pt. Deendayal Upadhyay Horticulture and Foresry, Piparkoti, Calicut university, Kerala and Guru Ramdas Khalsa college, Jabalpur visited ICFRE-TFRI, Jabalpur on 04th, 07th, 17th & 24th November 2025. They were briefed about various research activities of the institute.



Students from Guru Ramdas Khalsa College, Jabalpur visited ICFRE-TFRI, Jabalpur

• Organized training programme on "TFRI Technologies" on 26th November 2025. A total of 100 farmers from Saliwada, Neemkheda, and Khameriya villages of Jabalpur participated in the programme. The participants were briefed about various Agroforestry Models and were also shown a short film on charcoal production from weed waste and mushroom cultivation during the programme.



Training Programme on "TFRI Technologies" at ICFRE-TFRI, Jabalpur

ICFRE- Forest Research Institute, Dehradun

 40 students along with faculty from University of Lucknow visited DD Herbarium and Botanical Garden of ICFRE-FRI, Dehradun on 10th November 2025.

ICFRE- Institute of Forest Productivity, Ranchi

• Fifteen students from St. Xavier's College, Ranchi participated in an Educational Programme organized by ICFRE-IFP, Ranchi on 26th November 2025. During the programme, they were given a detailed explanation on sustainable soil health and the importance of bamboos in livelihood enhancement.

ICFRE- Rain Forest Research Institute, Jorhat

 28 officers from NABARD from the state of West Bengal and Assam visited Bamboo Nursery, Bambusetum, Bamboo Museum and Insectariums of ICFRE-RFRI, Jorhat on 11th November 2025.



Officers from NABARD, West Bengal and Assam visited ICFRE-RFRI, Jorhat

• ICFRE-RFRI, Jorhat organized an awareness programme on 28th November 2025. 31 participants from Central Silk Board, Jorhat participated in the programme. They were briefed about Bamboo Cultivation, Propagation, Nursery Management, Value addition & bamboo preservation techniques, Bamboo Charcoal making, Lac Cultivation and Vermicomposting, Agar plantation and different Research and Development activities of the Institute etc. during the programme.



Officers from NABARD, West Bengal and Assam visited ICFRE-RFRI, Jorhat

ICFRE- Institute of Forest Genetics and tree Breeding, Coimbatore

 40 students along with faculty from FRI Deemed to be University, Dehradun visited labs and Vegetative Multiplication Garden of ICFRE-IFGTB, Coimbatore on 10th November 2025. They were briefed about various research activities of the institute.



Students from FRI Deemed to be University, Dehradun visited ICFRE-IFGTB, Coimbatore

ICFRE- Institute of Wood Science & Technology, Bengaluru

• 128 students along with faculty from Bamboo Research and Training Centre, Maharastra, FRI Deemed to be University, Dehradun and T. John College of Pharmacy, Bannerghatta visited pilot plants of panel products, Advance Woodworking Training Centre, Wood Museum and laboratories of ICFRE-IWST, Bengaluru on 04th,06th,13th & 14th November 2025. They were demonstrated about research activities of institute during the visit.



Students from T. John College of Pharmacy, Bannerghatta visited ICFRE-IWST, Bengaluru

 Organized training programme on "Value Addition and Utilization of *Lantana camara*": A livelihood Opportunity" on 26th November 2025. 100 participants including Stakeholders, Students and Forest officials from Bangaluru participated in the programme.

ICFRE-Institute of Forest Biodiversity, Hyderabad

40 students from FCRI, Mulugu, Telangana visited ICFRE-IFB, Hyderabad on 04th November 2025. They were demonstrated about research activities of institute during the visit.



Students from FCRI, Mulugu, Telangana visited ICFRE-IFB, Hyderabad

- Organized training programme on "High yielding hybrid clones of Casuarina & their cultivation" on 19th November 2025. 25 farmers from Telangana participated in the programme.
- Organized training programme on "VermiCompost" at Sri Annadatha Vermicompost, Pedaamberpet, Hyderabad on 21st November 2025. Around 50 participants including Farmers & Government officials of Gangulur participated in the programme.



Training Programme on "VermiCompost" at Sri Annadatha Vermicompost, Pedaamberpet, Hyderabad

• ICFRE-CEC, Visakhapatnam organized training programme on "Capacity building on "Forest Carbon Assessment and Monitoring" at Bhubaneshwar on 21st November 2025. 31 Forest Officers from Forest Department of Odisha, Bhubaneswar participated in the programme.



Training Programme on "Capacity building on Forest Carbon Assessment and Monitoring" at Bhubaneshwar

Activities under Van Vigyan Kendra

ICFRE-IFP, Ranchi and Krishi Vigyan Kendra, Khunti jointly organized a training programme on 'Scientific Methods of Lac Cultivation' on 17th November 2025 at Torpa, Khunti District, Jharkhand. Around 60 participants from Torpa, Khunti attended the programme. They were briefed on scientific techniques of lac cultivation, the income generation potential from lac, and the importance of *Flemingia* species as an alternative lac host during the programme.



Training Programme on "Scientific Methods of Lac Cultivation" at Torpa, Khunti District, Jharkhand

Participation in Exhibition

ICFRE-FRI, Dehradun, participated in and showcased its technologies at the "Pride of India – Science Expo 2025," organized by the Uttarakhand State Council for Science & Technology, held from 28th to 30th November 2025 at Graphic Era University, Dehradun.



ICFRE-FRI, Dehradun participated in "Pride of India – Science Expo 2025" at Graphic Era University, Dehradun

• ICFRE-TFRI, Jabalpur participated and showcased its technologies in "19th Jigyasa Mela" organized by Vigyan Bharti, Jabalpur from 10th to 15th November 2025 at Guru Tegh Bahadur Khalsa College, Jabalpur.



ICFRE-TFRI, Jabalpur participated in "19th Jigyasa Mela" at Guru Tegh Bahadur Khalsa College, Jabalpur

• ICFRE-IWST, Bengaluru participated in "Krishi Mela 2025" and showcased its innovative technologies. The Mela was organized by the University of Agricultural Sciences and held from 13th to 16th November 2025 at the GKVK Campus, Bengaluru.



ICFRE-IWST, Bengaluru participated in "Krishi Mela 2025" at GVK Campus, Bengaluru

Mission LiFE

ICFRE-Forest Research Institute, Dehradun

• 50 students from GLA University, Mathura visited ICFRE-FRI, Dehradun on 13th November 2025. They were made aware about LED lighting for improved energy efficiency and reduced electricity bills during the visit.

ICFRE-Institute of Forest Biodiversity, Hyderabad

• Organized Awareness programme on "Energy Saved, Save Water & Single use plastic reduced" on 15th & 20th November 2025 at Bahudurapally, Hyderabad. 70 participants from nearby area of Bahudurapally, Hyderabad participated in the programme.



Awareness programme on "Energy Saved, Waste Reduced, and Single Used Plastic" by ICFRE-IFB, Hyderabad

• ICFRE-CEC, Visakhapatnam organized awareness programme on "Save Energy, Say No To Single Use Plastic and Reduce waste" on 11th & 12th November 2025 at Government School, Pallam and Kendriya Vidyalaya, Kakinada. 105 students participated in the programme. They were made aware about minimizing waste through reuse, recycling, and responsible consumption.



Awareness programme on "Save Energy, Say No To Single Use Plastic and Reduce Waste" by ICFRE-CEC, Visakhapatnam

• ICFRE-CEC, Visakhapatnam organized "Nursery Development Activity" at PM Shri Kendriya Vidyalaya, Malkapuram on 18th November 2025. 80 students participated in the programme.

Prakriti Programme

ICFRE-Himalayan Forest Research Institute, Shimla

 Organized awareness and demonstration programme on "Nursery Preparation and Management" on 04th November 2025 at Govt. Senior Secondary School, Kot Shillaru, Shimla. Around 68 students participated in the programme.



Demonstration Programme on "Nursery Preparation and Mangement" at Govt. Senior Secondary School, Shimla

ICFRE-Arid Forest Research Institute, Jodhpur

 Organized a demonstration programme on "Establishment of Nursery and its Management" on 10th November 2025 at PM Shri Kendriya Vidyalaya, Border Security Force, Mandore, Jodhpur. A total of 300 students participated in the programme, and they were also briefed on the importance of plants and environmental conservation.



Demonstration Programme on "Establishment of Nursery and its Management" at PM Shri Kendriya Vidyalaya, Border Security Force, Mandore, Jodhpur

ICFRE-Rain Forest Research Institute, Jorhat

259 students along with teachers from PM Shri Jawahar Navodaya Vidyalaya, Mukokchung, Nagaland, Rupnagar Jatiya Vidyalaya, Assam and Pranab Saikia Jatiya Vidyalaya, Melamati, Titabor, Jorhat visited Bamboo Nursery, Bambusetum, Bamboo Museum and Insectariums of ICFRE-RFRI, Jorhat on 07th, 11th & 28th November 2025.



Students from Rupnagar Jatiya Vidyalaya, Assam visited ICFRE-RFRI, Jorhat

ICFRE- Tropical Forest Research Institute, <u>Jabalpur</u>

 Organized demonstration programme on "Establishment of Nursery and its Management" on 13th November 2025 at PM Shri Kendriya Vidhyalaya, Jabalpur. 40 students participated in the programme.



Demonstration Programme on "Establishment of Nursery and its Management" at PM Shri Kendriya Vidyalaya, Jabalpur

• 178 students along with teachers from PM Shri Kendriya Vidhyalaya, Mandla and PM Shri Jawahar Navodaya Vidhyalaya, Umariya, Jabalpur visited ICFRE-TFRI, Jabalpur on 06th & 20th November 2025. They were demonstrated about ICFRE-TFRI technologies during the visit.



Students from PM Shri Jawahar Navodaya Vidhyalaya, Umariya, Jabalpur visited ICFRE-TFRI, Jabalpur

ICFRE-Institute of Forest Genetics & Tree Breeding, Coimbatore

• 574 students along with teachers from PEM School of Excellence, Sri Avinashilingam HSC School, Corporation HSC School, Motherland Matriculation HSC School, Telungupalayam, Coimbatore and Motherland Matriculation HSC School, Coimbatore visited ICFRE-IFGTB, Coimbatore on 20th, 25th, 26th, 27th & 28th November 2025. Lecture on "Communal benefits of tree planting, Rain water Harvesting, Environmental Protection, Forest fires Pesticides and its effect" during the visit.



Students from Motherland Matriculation HSC School, Coimbatore visited ICFRE-IFGTB, Coimbatore

ICFRE-Institute of Forest Biodiversity, Hyderabad

• Organized awareness programme on 04th, 06th, 14th & 20th November 2025. 147 students from Zilla Parishad High School, Dulapally, KV-No-2, Golconda, Hyderabad and Kendriya Vidyalaya Sangathan, AFS-No-2, Dundigal, Hyderabad participated in the programme. They were briefed about various research activities of the institute.



Awareness programme by ICFRE-IFB, Hyderabad

• ICFRE-CEC, Visakhapatnam organized Nursery Development programme on 15th November 2025 at PM Shri Kendriya Vidyalaya, Visakhapatnam. Around 120 students participated in the programme & they were briefed about plant propagation techniques during the programme.



ICFRE-CEC, Visakhapatnam organized Nursery Development programme at PM Shri Kendriya Vidyalaya, Visakhapatnam

Memorandum of Understanding

 ICFRE-TFRI, Jabalpur signed MoU with AP Narmada College, Sadar, Jabalpur on 14th November 2025 for facilitating academy and Research.



MoU signed between ICFRE-TFRI, Jabalpur and AP Narmada College, Sadar, Jabalpur

 ICFRE-IWST, Bengaluru signed MoU with Indus Tree Crafts Foundation, Bengaluru on 13th November 2025.



MoU signed between ICFRE-IWST, Bengaluru and Indus Tree Crafts Foundation, Bengaluru

• ICFRE-IFB, Hyderabad signed MoU with Mandal Parishad Development, Pulkal on 25th November 2025 for establishment of a Demo Village at Gongullur Village and developing demonstration fields, organizing farmer trainings, and conducting practical sessions on sustainable practices

ICFRE-IWST, Bengaluru signed MoU with M/s Vibrant Door craft, Mumbai on 18th November 2025 for the evaluation of door shutters with fire rating.



MoU signed between ICFRE-IWST, Bengaluru and M/s Vibrant Door craft, Mumbai

• ICFRE-FRI, Dehradun signed MoU with Dehradun Institute of Technology(DIT) University, Dehradun on 18th November 2025.

Miscellaneous

Janjatiya Gaurav Divas

• Janjatiya Gaurav Divas was celebrated by ICFRE, Dehradun and its institutes on the occasion of 150th Birth Anniversary of Birsa Munda on 26th November 2025.













Constitution Day

• ICFRE and its institutes celebrated Indian Constitution Day on 26th November 2025.













HR NEWS

Retirement

Name of Officer

Shri Rajendra Singh Topwal,
Scientist-F, ICFRE-FRI, Dehradun

Shri Chandralekha Taksande,

30.11.2025

Solution 1, Tell Ital, Dolladdin	
Shri Chandralekha Taksande, CTO, ICFRE-TFRI, Jabalpur	30.11.2025
<u>Transfer</u>	
Name of Officer	<u>Date</u>
Shri Rajeev Pandey, Scientist-F, ICFRE(HQ) To ICFRE-IFP, Ranchi	28.11.2025
Shri Aakash Anand Solanki, ACTO, ICFRE-IWST, Bengaluru to ICFRE(HQ)	21.11.2025
Repatriation	
Name of Officer	<u>Date</u>
Shri Shivkumar,	25.11.2025

C.M., IFS (HR:2003) CF, ICFRE-IWST, Bengaluru

Publication

Research Paper:

- Bhatt, A., Murali, K., Chitme, H. R. and Tripathi, Y. C. (2025). Chemical characterization of wild pomegranate peel extract by UPLC-QTOF-MS/MS and its antioxidant and anti-inflammatory potential. *Journal of Biologically Active Products from Nature*, 15(5), 505-522.
- Bhoi, T. K., Mahanta, D. K., Samal, I., & Komal, J. (2025). Exploring the Management of Forest Insects Using Silicon-Mediated Approaches through Bibliometrics. *Entomological News*, 132(5), 622-635.
- Bhoi, T. K., Vyas, V., Samal, I., Mahanta, D. K., Komal, J., Singh, S. and Sharma, K. (2025). Nano pesticides: Unleashing the Power of Tiny Warriors in Plant Protection. In *Nano biostimulants in Innovative Agriculture*. Springer Nature Singapore, 73-103.

- Charishma, K., Mahanta, D. K., Athulya, R., Uma, G. S. and Muthu Kumar, A. (2025). Diseases and Insect Pests of *Dalbergia latifolia*. In *Handbook of Asian Rosewoods*. Springer Nature Singapore, 143-153.
- Rathore, M., Gusain, M., Singh, S. and Kewat, P. (2025). Nutritional Modifications and Biochemical Changes during Ripening of Wild Pear (*Pyrus pashia*). *International Journal of Life Science and Agriculture Research*, 4 (11),688-693.
- Kondeboina, M., Choudhary, S.K., Sharma, L. and Bhadoriya, K (2025). Phytochemical Profiling of *Elwendia persica* Seeds Using UPLC-QTOF-MS/MS Analysis. *Natural Product Research*, 1–10.
- Thakur, N., Chitme, H. R., Tripathi, Y. C., and Varshney, V. K. (2025). Multitarget in Vitro and in Silico Evaluation of *Neolitsea pallens* Leaf Essential Oil: GC–MS Profiling, Molecular Docking, and ADMET Analysis. *Chemistry Select*, 10(44), e02787.
- Negi, P. S., Paul, S. and Lata, S. (2025). MaxEnt distribution modelling of *Betula utilis* D. Don under changing climatic conditions in North Western Himalaya, India. *Discover Geoscience*, 3(1), 214.
- Thakur, P., Khanal, S., Tapwal, A., Sharma, N., Chauhan, P., Thakur, T.S., Kumar, D. and Verma, R. (2025). A review update on Ganoderma species: etiology and management approaches. *Antonie van Leeuwenhoek*, 118(12), 185.
- Kumar, D., Perwez, A., Sen, M., Kothari, S., Jatav, S. S., and Midde, S. N. M. (2025). Economic evaluation of Isabgol, Chana and Moth under AFRI clone-based *Dalbergia sissoo* agroforestry systems in arid western Rajasthan. *International Journal of Agriculture Extension and Social Development*, 8(11), 382–386.
- Vyas, V., Singh, S., Choudhury, S., Bhoi, T. K., Dey, P., and Saraswat, A. (2025). Phenomorphological and biochemical characterization of root nodules and associated root-nodulating bacteria from *Pongamia pinnata* (L.) Pierre in the arid regions of India. *Frontiers in Plant Science*, 16, 1717750.
- Dasgupta, P., Dhruba, J., & Duara, S. (2025). An appraisal of the ecology and socio-economic

- implications of traditionally managed Trees Outside Forests (TOFs) in North East India. *International Journal of Environment and Climate Change*, 15(10), 485–499.
- Karmakar, P., Pal, S. & Chakraborty, G. (2025). Role of plant defense enzymes, H₂O₂ and phenolics in resistance of cabbage cultivars to *Plutella xylostella* (L.). *Journal of Plant Diseases and Protection*, 132(6), 184.
- Sarkar, B. C., Shahina, N. N., Shukla, G., Nath, A. J., & Chakravarty, S. (2025). Altitudinal influence on homegarden composition and livelihood contributions in the Darjeeling Himalayas. *Agroforestry Systems*, 99(8), 1-14.
- Sandhya, M.C., Sreeja, S., Shamili, K., Manoj, K.R., Harshita, S., Balasubramanian, A., Arun, M., Sivakumar, V., and Nambiar-Veetil, M (2025). Effect of explant sources, sonication combined with vacuum infiltration, and biochar on improving Agrobacterium-mediated transformation efficiency in Eucalyptus camaldulensis. Plant Biotechnology Reports, 935-945.
- D. Thangamani (2025). Smart and Sustainable Cultivation of Mahua (*Madhuca longifolia*): Integrating Organic and Smart Agriculture. In *Biodiversity in the Ecosystem*. Bharti Publications, 65-77.
- Kumar, A., Sharma, R., Singh, P. and Verma, S. (2025). Design and optimization of transethosomal gel loaded with herbal extracts for accelerated diabetic wound healing. *Tropical Plant Management and Applied Pharmacology*, 12(4), 2633–1994.
- Manohara, T. N. and Saini, N. (2025). Differential ion partitioning and salinity tolerance in willow (*Salix* spp.) clones under semi-arid conditions. *Phyto Talk*, 2(3), 467–477.
- Saini, N., and Manohara, T. N. (2025). Physiological and biochemical responses of willow (*Salix* spp.) clones to salinity stress in semi-arid conditions: Identifying salt-tolerant genotypes for sustainable land use. *Phyto Talk*, 2(3), 523–540.
- Manohara, T. N., Balakrishna, S. M., Madabhavi, A., and Srinivasan, G. (2025). Mistletoe (Viscum nepalenseSpreng.) infestation in Indian rosewood (*Dalbergia latifoliaRoxb.*): Ecological implications and conservation concerns in protected forests of southern India. *Phyto Talk*, 2(3), 490–495.
- Reddy, G. S., Rakesh, M., Pottepaka, S. and Durai,

- M. (2025). Bamboo: A Fast-Growing, Eco-Friendly, and Versatile Resource for a Sustainable Future. *International Journal of Environment and Climate Change*, *15*(11), 546-566.
- Sujatha, D., Chawla, V. K., Mamatha, B. S. and Uday, D. N. (2025). Effect of the black liquor molecular weight on the bond quality of boiling water proof grade plywood: An industrial approach. *International Journal of Innovative Science, Engineering & Technology*, 12(11), 12–28.
- Sil, A., Alkhatib, O. J., Das, I. and Kute, Y. D. (2025). Application of machine learning in structural analysis: Enhancing energy conservation and sustainable building practices in civil engineering. *TPM Testing, Psychometrics, Methodology in Applied Psychology, 32(S8), 455–466.
- Sil, A., Meena, R. K., Ramesh, S., Gupta, U. K., Venkatesh Babu, K. P., Tiwari, A., & Singh, D. (2025). Mathematical modelling and structural analysis in civil engineering: A comprehensive research study on predictive methods for load distribution, stress behaviour, and design optimisation. *International Journal of Applied Mathematics*, 38(4s), 1244–1254.
- Sahoo, S. C. (2025). Wastewater and Sludge Treatment and Reclamation: A Review of Woodbased Panel Industry Practices and Opportunities. *Journal of Chemical health Risks* 15(6), 1278-1288.
- Diksha, D., Sidharthan, V. K. and Baranwal, V. K. (2025). A novel begomovirus associated with mosaic disease of *Millingtonia hortensis* in India. *Archives of Virology*, 170(12), 241.
- Shivaprasad, K. M., Kumar, P. S., Kishore, A., Kumar, D. and Pattanaik, S. (2025). Evaluation of red sanders (*Pterocarpus santalinus*L.f.) germplasm for conservation and breeding. *Genetic Resources*, 6(12), 160–170.

Booklets:

- Manual on sustainable harvesting and managment of *Dendrocalamus strictus*
- FRI Initiatives- Recent Research & Achievements
- Recent advances in research and achievements

- Lab to Land Bridging Forestry Research and Stakeholders
- Important wild edible fruits of Uttarakhand
- Forest Tree Seed Laboratory
- Macrofungal diversity of Dihing Patkai National Park, Assam.
- Agroforestry: The Future of Global Land Use.
 P.K. Publishers and Distributors.

Patron:

Smt. Kanchan Devi, IFS, Director General, ICFRE, Dehradun

Editorial Board:

Dr. Sudhir Kumar, DDG(Extn.), Chairman

Dr. Geeta Joshi, ADG (M&Extn.), Honorary Editor

Dr. Vishwajeet Sharma, STO, (M&Extn.), Member

Assistance:

Mr. Prince, Technical Assistant, (M&Extn.)

Disclaimer

- * Published for private circulation only.
- * The content in the Newsletter do not necessarily reflect the view of the Editorial Board.
- * ICFRE is not responsible for any loss or damage, whatsoever may be due to the information published here.