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Indian Council of Forestry Research and Education

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Memorandum of Understanding:



A Memorandum of Understanding (MoU) between Indian Council of Forestry Research and Education (ICFRE), Dehradun and Indian Council of Agricultural Research (ICAR), New Delhi was signed on 28 August, 2018 at Krishi Bhawan, Ministry of Agriculture and Farmers' Welfare, New Delhi. The MoU was signed by Dr. S.C. Gairola, Director General, ICFRE, Dehradun and Dr. T. Mohapatra, Director General, ICAR, New Delhi.

SIGNIFICANT RESEARCH FINDINGS:

Forest Research Institute, Dehradun

- Successful conversion of pre-treated baggase residue to pulp has been achieved after optimum extraction of reducing sugars. A significant pattern of pulp yield was observed which correlates pre-treatment conditions to that of pulping conditions. The residual reducing sugar content from the black liquor obtained after pulping of pre-treated baggase and untreated baggase were compared. The sugar content of the former is highly diminished from the later.
- Survey in the New Forest area was conducted under the project "Taxonomic study of *Tettigoniidae* (*Orthoptera*) of India (AICOPTAX, MoEFCC)". Only nymphal stages were found in the forest.
- Alate aphids were processed and mounted on slides for their morphometric studies under the project "Cecidology and

- nursery establishment of *Pistacia integerrima* for exploring possibility of in situ leaf gall production" funded by Dabur India Pvt Ltd.
- Fifteen insect larval samples were collected from New Forest, Dehradun for the emergence of *Apanteles* spp. from forestry trees including *Pongamia pinnata*, *Dalbergia sissoo*, and *Eucalyptus* sp. Slide preparation and species identification of *Apanteles* spp. are in progress under the project "Studies on taxonomy and host range of larval Parasitoids, *Apanteles* spp. (Hymenoptera: Braconidae) from Uttarakhand and Haryana".
- Ten samples of insect eggs were collected from New Forest, Dehradun for the emergence of egg parasitoids from different forestry trees including *Pongamia*

pinnata, Dalbergia sissoo and Cassia fistula. Detailed morphometric study of emerged parasitoid Brachygrammatella indica (Trichogrammatidae) from eggs of Oxyrachis tarandus on Acacia tree has been carried out. Photography of different egg parasitoids mounted on cards has been carried out under the project "Studies on diversity and host range of hymenopteran egg parasitoids from northern India (Haryana, Uttar Pradesh and Uttarakhand)".

- Infested bamboo species were collected from the field, examined and caged in zinc, wooden, chimney and outdoor cages for rearing. Biology of *C. annularis* is continuing. Dried bamboo pieces were sent to Wood Preservation Division, FRI for treatment. Experiment trial for the management of borer have been laid down using systemic and contact insecticides in the Insectary under the project "Epidemiology and management of *Chlorophorus annularis* Fab. (Coleoptera: Cerambycidae) –A major borer of cut and dry bamboo".
- Herbarium specimens of 11 plant species brought from the field (Kumaon) of different forest sub-types were identified preserved and photograph added to the database. Database on species of butterflies under different forest types was updated by adding 14 new species from the data on 56 species sampled during the last tour, to 169 species sampled so far. Database on food plants of 106 species of butterflies sampled under different forest sub-types were prepared based on literature survey under the project "Butterflies associated with different forest types/sub-types in Uttarakhand".
- Six species of Lepidoptera during the survey were reared for life history studies besides their identification. Borer infesting Kharsu oak logs collected from the field earlier are being kept in the laboratory for rearing experiments on the life cycle of *Xylotrechus basifuliginous* & *Aphrodisium hardwickianum* reared on ban oak. Database on insect pests of western Himalayan oaks was updated by adding information on 10 species of *Lepidoptera* under the project "Insect pests of Western Himalayan Oaks and their Control".
- 650 species of beetles were digitized and about 1200 photographs of 600 species were edited and stored. Database was updated for editing species holding data in the database. Scanning Electron Microscopy of eulophid species which made vein galls on the leaves of Madhuca longifolia was done at Wadia Institute of Himalayan Geology, Dehradun under the project "Digitization and enrichment of National Forest Insect Collection (NFIC) of Forest Research Institute, Phase-II (minute insects)".
- Collection and rearing of Clostera Cupreata for their biology, biochemical analysis of poplar leaf of 5 Clones is continued under the project "Screening of poplar clones

- for tolerance against poplar leaf defoliator, *Clostera* cupreata But".
- Recorded initial growth data of *G. arborea* and *E. officinalis* at village Dhaluwala majbata (Haridwar). Analysis of soil samples from both sites Fatehpur Pelio (Saharanpur) and Dhaluwala Majbata (Haridwar) is in progress. Maintenance and monitoring of plantation of *G. arborea* and *E. officinalis* at both above sites under the project "Development of *Gmelina arborea* and *Emblica officinalis* based agroforestry models on fallow lands in Uttarakhand and Uttar Pradesh" continued.
- Recorded initial growth data of Kachnar (Bauhinia variegata), Bhimal (Grewia optiva) and Kadam (Anthocephala cadamba) at both sites of Dhaluwala majbata (Haridwar). Collected soil samples from both sites at Dhaluwala majbata (Haridwar). Maintenance and monitoring of plantation of Kachnar, Bhimal and Kadam at both above sites under the project "Project: Development of Kachnar (Bauhinia variegata), Bhimal (Grewia optiva) and Kadam (Anthocephalus cadamba) based agroforestry models on farmers land under rainfed conditions in Uttarakhand" done.
- Plants of Habenaria intermedia and Habenaria edgeworthii were collected from Mussorie, Chakrata and Nainital region of Uttarakhand for phytochemical evaluation.
- Three wild populations (AP3, AP4 and AP5) of Valeriana
 jatamansi collected from Arunachal Pradesh were
 characterized for the first time for their volatile
 constituents determined in their rhizomes.
- One population of *Myrica esculenta* grown in the Binsar Takula of Almora Forest Division was characterized for the first time for total phenolic contents (TPCs) determined in their bark.
- Fruits of Myrica esculenta collected from the Champavat Forest Division were processed and their juice was isolated. Carbohydrate content in the juice was determined.
- Exhaustive and serial extraction of Rubus ellipticus fruits, determination of extractive values and evaluation of some of the physicochemical and nutritional parameters of fruits was done.
- Determination of fatty oil content in neem seed samples of two progeny under varying extraction conditions was done.

Arid Forest Research Institute, Jodhpur

 Two species of Hymenoptera: Apidae Xylocopa fenestrata and Xylocopa aestuans recorded on seedlings of two tree species and five species of defoliators recorded on seedlings of 10 tree species Identification is in process, documentation of host range and literature review is in progress. Nest of insectivorous bird *Orthotomus sutorius* (Common Tailorbird) recorded again on *Aegle marmelos* with four eggs and 100% hatchability.

Himalayan Forest Research Institute, Shimla

 Fifty-two species of butterflies' fauna along with their host plants have been reported from the Sub-alpine forests of Himachal Pradesh, which is useful in biodiversity conservation and monitoring the climatic changes in the region.

VISIT ABROAD:

Name of Personnel	Institute	Purpose of Visit	Duration	Place
Shri N. Bala, Scientist-F & Head	FRI, Dehradun	Best Practices for implementing forest landscape respirations in South Asia	14-18 August 2018	Chilaw, Srilanka
Dr. Meena Bakshi, Scientist-E	FRI, Dehradun	11 th World Bamboo Congress	14-18 August 2018	Xalapa (Veracruz), Mexico



11th World Bamboo Congress

PUBLICATIONS:

- · AFRI Jodhpur published Fifty copies each of two Pamphlets:-
 - 1. Productivity enhancement of Kair fruit yield with the use of organic and in organic fertilizers.
 - 2. विभिन्न जैविक व रासायनिक खादो के संयोजन से कैर फल उत्पादन में वृद्धि।

WORKSHOPS/ SEMINARS/ MEETINGS:

S.No.	Торіс	Duration	Beneficiaries		
Institute of Forest Genetics and Tree Breeding, Coimbatore					
1.	1 st Research Scholars' Monthly Seminar	10 August 2018	40 JRF / SRF of IFGTB		
2.	Seminar on Commercialization of Technologies and Patents	21 August 2018	45 Scientists, Officers, HoDs and Technical Staff		





Seminar on Commercialization of Technologies and Patents at IFGTB

1st Research Scholars' Monthly Seminar at IFGTB

Arid Forest Research Institute, Jodhpur				
3.	Agroforestry Research for sustainable production in Rajasthan.	17 August 2018	28 Scientists/Technical staff/ Research Scholar of AFRI	
4.	Assessment of Biological Diversity and People Perception for Developmental Plan and Awareness Generation in Community Reserve Areas in Jodhpur District	21 August 2018	10 SFD, NGOs and Farmers	

Himalayan Forest Research Institute, Shimla

5. Role of Forest Nursery for Improving Quality of Forests

28 August 2018

scientists, officers, research and technical support staff and research scholars



Seminar on Role of Forest Nursery for Improving Quality of Forests at HFRI

RAJBHASHA NEWS:

• दिनांक 30 अगस्त, 2018 को हिमालयन वन अनुसंधान संस्थान शिमला द्वारा राजभाषा हिन्दी में पिछले चार महीनों में किये गये कार्यों की समीक्षा हेतु राजभाषा कार्यान्वयन समिति की बैठक का आयोजन किया गया । जिसमें संस्थान के सभी प्रभागाध्यक्षों एवं अधिकारियों ने भाग लिया ।

TRAINING PROGRAMMES:

S.No.	Торіс	Duration	Beneficiaries
	Institute of Forest Genetics and 1	Tree Breeding, Coimbatore	
1.	Quality Planting Material Producer (QPMP)" under the Green Skill Development Programme (GSDP)	1August- 6 September 2018	18 nos. Skill India Development programme trainees from New Delhi, West Bengal, Karnataka and Tamil Nadu



Quality Planting Material Producer (QPMP)" under the Green Skill Development Programme (GSDP) at IFGTB

Rain Forest Research Institute, Jorhat				
2.	Training on Agarwood and Bamboo for farmers of Kerala held at RFRI, Jorhat	13 - 17 August 2018	4 participants from Kerala	
3.	Skill Development Training on Bamboo, Agarwood, Lac cultivation, Agroforestry and Vermicomposting held at Biswanath Chariali under Van Vigyan Kendra, Assam	17-18 August 2018	25 Staff of Assam Forest department, Farmers, NGC /JMFC members of Sonitpur District, Assam.	
4.	Bamboo value addition	20 August to 18 September 2018	25 Officials of FRC-BR, BDA, Mizoram and CBTC,	
			Burnihat.	





Skill Development training at Jorhat

Himalayan Forest Research Institute, Shimla

5. Seed and Nursery Techniques of Juniper and Important Medicinal Plants of Cold Desert Region

20 - 21 August 2018

frontline field staff of Leh & Kargil Forest Divisions of Jammu & Kashmir forest Department and progressive



Training on Seed and Nursery Techniques of Juniper and Important Medicinal Plants of Cold Desert Region at Sumur, Nubra, Leh

6.	Farmers' Interactive meet on Juniper Propagation and management	22 August 2018	42 progressive farmers from Sumur and Khardung villages
7.	"वैज्ञानिक विधि द्वारा चिलगोजा के शंकुओ का तुड़ान"	23 - 24 August 2018	Panchayat Pradhans, members and villagers of Moorang & Nesang village, Kinnaur (H.P.)



Farmers' Interactive meet on Juniper propagation and management at Sumur and Khardung villages (H.P.)

Institute of Forest Productivity, Ranchi					
8. लाख एवं तसर की खेती पर प्रशिक्षण 1August - 30 September 2018		-			
	Institute of Forest Biodiversity, Hyderabad				
9.	Inception training of Andhra Pradesh Working Plan	9 – 10 & 16 - 17 August 2018	-		

VISIT OF DIGNITARIES:

 Sh. C.K. Mishra, Secretary, Ministry of Environment, Forest & Climate Change, and Government of India visited FRI, Dehradun. Herbarium and Xylarium of Forest Botany Division, FRI, Dehradun on 16 and 17 August 2018 respectively.



Sh. C.K. Mishra, Secretary, MoEF&CC, New Delhi visited FRI, Dehradun

- Shri Shishir Sinha, Hon'ble Chairman, Bihar Public Service Commission (BPSC) Patna, Bihar visited FRI, Dehradun on 29 August 2018.
- Dr. S.S. Negi, IFS (Retd.), Chairman, Uttarakhand Village Development & Migration Commission visited IFGTB, Coimbatore on 2 August 2018.

AWARENESS & DEMONSTRATION PROGRAMME:

- RFRI, Jorhat organized demonstration programme on various research and development activities of RFRI, Jorhat on 9 and 23 August 2018. 29 students of JIST, Jorhat attended the programme.
- "Parthenium Awareness Week" was observed by TFRI, Jabalpur on 17 August 2018 in collaboration with DWR Scientists on "how to manage menace of Partheniums".
 All employees including JRFs attended the programme.
- HFRI, Shimla celebrated Parthenium Awareness Week from 16-22 August 2018. All the Officers, Scientists, Research staff of HFRI, Shimla participated.



HFRI, Shimla celebrated Parthenium Awareness Week

HR NEWS:

Promotions

Name of Officer Dated

Shri Sankar Sarma, Hindi Translator (Jr.), RFRI, Jorhat to the post of Hindi Officer at FRI, Dehradun

Retirement

Name of Officer	Dated
Dr. K.S. Kapoor, Sci- G, HFRI, Shimla	31 Au
Smt. Jyoti Dua, Private Secretary, ICFRE	31 Aug

31 August 2018

31 August 2018



20 August 2018

Patron:

Dr. Suresh Gairola, Director General

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