



ILRI Lac Newsletter

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From the Director's Desk

A one-day *Lakh Krishak Sammelan* (Lac Growers' Meet) was organised at the institute premises on June 11, 2001. It would be remembered as a milestone in the annals of the institute as on this day a new beginning was made, by forging a dynamic relationship with the Government of Jharkhand. It is for the first time in the history of the institute that State Govt. has come forward to sponsor lac extension activities for promoting scientific methods of lac cultivation in the state. About 700 farmers of four village clusters of Ranchi District would be brought under the umbrella of this scheme. They would be demonstrated scientific methods of lac cultivation developed by the institute besides being provided with various inputs such as broodlac, pesticides and

implements and equipment used in lac cultivation. A Farmers' Hostel for the lac growers coming to the institute for training is also on the anvil.

Being the only institute catering to the needs of lac growers and industries as well, we sometimes feel handicapped in reaching out to every nook and corner of the vast lac growing region of the country. Therefore, the institute has developed close links with a number of NGOs for extending the modern methods of lac cultivation among the farmers. The institute will continue to strive for strengthening the existing and developing new linkages with various agencies interested in development of lac.

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RESEARCH HIGHLIGHTS

Use of natural resin shellac in manufacture of fibre glass sheets

Success has been achieved in using shellac, along with synthetic resin, in preparing fibre glass reinforced sheets. Tensile strength, tensile modulus, flexural strength and flexural modulus of shellac containing sheets (3 mm thin) were higher than those of shellac-free sheets. Impact strength of shellac containing sheets (71 kgcm/cm of notch) was marginally lower than that (73 kgcm/cm of notch) of shellac-free synthetic resin based sheets. The sheets possess resistance to water, kerosene oil, transformer oil, brine solution, HCL (10%) and acetone (10%).



Tea coasters made of fibre glass reinforced sheets prepared with shellac-filled SMC

Attempt has also been made to use scraped lac (raw lac) in place of shellac in jute (a natural fibre) for partial and full replacement of fibre glass mats in preparing reinforced sheets. Since shellac is known to be UV resistant, shellac/lac based sheets appear to have potential for structural purpose.

Tea coasters (3.5x3.5") of attractive colours and finish have been prepared based on scraped lac/shellac, synthetic resin and fibre glass mats. These do not break, if dropped, unlike plastic-based coasters. Manufacture of coasters is easy and can be adopted even by unskilled entrepreneurs including women. The use of lac in manufacture of tea coasters is deemed to be exploited commercially for larger consumption of lac in the domestic market.

TRANSFER OF TECHNOLOGY

Training programmes conducted

- Four courses of one week training in lac cultivation were organised for 118 farmers sponsored by Forest Dept., Ranchi.
- 59 B.Sc. (Ag.) students of BHU Varanasi and Allahabad Agricultural Institute, Naini completed one week special training course on "Scientific Method of Lac Cultivation"
- One day orientation programme on lac was organised for 69 farmers of Ranchi in three batches.



Inauguration of drip irrigation system at Institute Plantation

Visit of Director-General

Padma Bhushan Dr RS Paroda, DG, ICAR and Secretary, DARE, Ministry of Agriculture visited the Institute on May 9, 2001. He presided over the newly installed drip irrigation system for lac hosts, at ILRI Plantation. He also launched the web site of ILRI providing information about the institute, its activities, achievements and general information on lac. He also released the following publications:

- ◆ ILRI Newsletter Jan-Mar 2001
- ◆ ILRI Bulletin No. 4, Package of practices for *rangeeni* lac production on *ber*

Both the above publications had been composed and printed at in-house facility of the Institute. He also held a meeting with the scientists and senior officers of the institute at the Conference Hall. Dr K. K. Kumar, Director, welcoming the audience, expressed his

gratitude over DG's concern about the Institute. He also expressed his happiness over the visit of DG to the Institute for the second time.

Commenting about the age structure of the scientific manpower in the Institute, DG felt that there is a strong need for inducting more of fresh scientific blood in the system. He promised that he would take initiative for filling up of a number of scientific positions lying vacant in the institute. He felt that a new work culture should be developed at the Institute to ensure visibility of our work. He assured that ICAR is willing to provide the required funds for the development of the Institute. Dr. Paroda expressed his happiness over the improvement made in the Institute Plantation since his previous visit. He wanted that all the old buildings should be renovated and modernized to make them better for working. He also desired that a special Information Center be created at the entrance of the Institute.

Dr. Paroda commented about the importance of lac to the country and the newly formed State of Jharkhand. He said that the scientists should convince the growers about the technologies developed at the Institute. He said that the scientists would also be able to learn from the farmers, which would help them in refining the technologies. He also felt the need for initiating IVLP in the area of lac culture. DG said that there is a need for technology assessment, refinement and transfer to ensure adequate adoption of the technologies developed by the Institute.

During his programme, DG also interacted with scientific, technical and other staff of the Institute to know about any difficulties in working, promotion etc. He stated that ICAR, on its own, has sanctioned a special grant for maintenance of residential quarters.



Release of Lac Bulletin by DG

- On-farm extension education programme on lac cultivation was organised at Sarengtoli (Lali) of Khijri Block, Bururdih of Tamar Block, Ranchi and Kurpani of Thethaitangar in Simdega District. 520 farmers participated in the programmes.

Organisation/participation in Exhibitions

The institute put up stall and distributed literature on lac cultivation and utilization at the *Kisan mela* organized by Sahbhagi Vikas, Simdega at Village Kurpani of Thethaitangar Block in Simdega District on May 30, 2001.

Publicity

Institute publications

- ILRI Newsletter, Jan-Mar. 2001, 4 pp
- Package of practices for *rangeeni* lac production on *ber*, ILRI Bulletin No. 4, 4pp

TV/Radio talks

'*Lakh keet palan ki vageyanik vidhi*' by Dr P. Kumar was telecast on 12th June, 2000 by DDK, Ranchi.

Museum

The institute museum was visited by 163 persons from all walks of life during the period. Besides 151 farmers / trainees

sponsored by various GOs and NGOs also visited the museum.

MISCELLANEA

Quality Testing Laboratory

The laboratory carried out 61 tests of 36 samples received from 'entrepreneurs/ business houses/different Divisions of the Institute during the period under report. An amount of Rs 4380/- was realised as testing charges.

Resource Generation

An amount of Rs 4,42,594 (Rupees four lakh forty two thousand five hundred ninety four only) was earned through training, sale of products and Lac Sale Counter, training charges under Farmer's Adoption programme.

Papers/popular articles published /Lectures delivered

Sarkar PC and Kumar KK 2001. An investigation into the different forms of lac resin using FT-IR and diffuse reflectance Spectroscopy. *Pigment & Resin Technology*, 30(1):25-33.

Sharma KK 2001. *Gramin Arth-vyavastha ki kunji : Lakh adharit kutir Udyog*.

Udyamita Vikas (May, 2001):73-74

Seminars/workshops attended/visits undertaken

- Dr KK Kumar, Director and Dr A. Bhattacharya, Sr Sc (Entomology) visited the North East Hill Region during June 13-18, 2001, for establishing linkage with research organisations and probe the possibility of lac promotion in the region. They visited Institute of Rain



B.Sc. (Ag.) students of BHU Varanasi and Allahabad Agricultural Institute, Naini under one-week special training programme on lac cultivation

and Moist Deciduous Forests Research; Entomology Department of Assam Agricultural University, Jorhat; Defence Research Laboratory, Tezpur and TRIFED, Guwahati. A meeting with Mr BS Basumatary, Vice-Chairman, TRIFED was held at Guwahati to acquaint him with the activities taken by the ILRI for promotion of lac cultivation in the region. A team of scientists and technicians has been constituted for the purpose.

- Ramani R, Sharma KK and Sarkar PC attended a seminar on e-governance organised by Chhotanagpur Chamber of Commerce and Industries on 14.6.2001 at Ranchi and presented a paper on 'Village networking for agricultural information extension'.
- Dr KK Kumar, Director and Dr Niranjana Prasad, Principal Scientist visited Indian Toxicological Research Centre, Lucknow on 29.6.01 to discuss and finalise the proposal for Toxicological evaluation of lac dye.
- Dr KK Kumar, Director attended Workshop at BAU, Kanke, Ranchi on 26.6.01

Revolving Fund Scheme (RFS)

Since Mr YD Mishra has shown his inability to continue as Principal Investigator of RFS on health grounds, Dr A Bhattacharya would act as PI and Dr KK Sharma as Co-PI from May, 2001. However, Mr Mishra will continue as Associate investigator.

EVENTS

ILRI Launches its Web Site



Dr Paroda, DG, ICAR inspecting ILRI website

ILRI web site (First phase) designed by Dr PC Sarkar was launched by Dr RS Paroda, DG, ICAR on May 9, 2001.

The website is presently available at <http://www.nic.in/icar/ilri/default.htm> or as a link of ICAR website > subordinate offices > Indian Lac Research Institute.

PERSONALIA

HRD

The following scientists successfully completed 72nd Foundation Course for Agricultural Research Service (FOCARs) conducted at NAARM, Hyderabad from December 1, 2000 to March 30, 2001.

- Mr SK Giri (ASPE)
- Mr SKS Yadav (Org. Chem.)
- Mr MF Ansari (Org. Chem.)
- Mr D Saha (Biotech.)
- Mr Arvind Kumar (SWCE)

Honours/Recognition /Awards

Dr PC Sarkar was elected a Fellow of the Institution of Chemists (India) in May, 2000.

Promotions etc.

On the recommendations of the Assessment Committee, the following staff members have been promoted/placed in the next higher grade/category, granted advance increments/next higher scale:

(i) Promotion to next higher scale through Assessment

Name and Designation	Promoted to	Effective Date
Mr ML Ravidas, T-II-3	T-4	8.6.1997
Mr Bhola Ram, T-II-3	T-4	8.6.1997
Mr C Pandey, T-II-3	T-4	1.1.2000
Mr KP Gupta, T-II-3	T-4	1.1.2000
Mr AK. Sinha, T-II-3	T-4	1.1.2000
Mr RL Ram, T-II-3	T-4	1.1.2000
Mr VK Tewari, T-II-3	T-4	1.1.2000
Mr DK Singh, T-II-3	T-4	1.1.2000
Mr SS Prasad, T-II-3	T-4	1.1.2000
Mrs Ratna Sen, T-II-3	T-4	1.1.2000
Mr BP Ghosh, T-II-3	T-4	1.1.2000
Mr DD Prasad, T-II-3	T-4	1.1.2000
Mr RP Srivastava, T-II-3	T-4	1.1.2000
Mr PA Ansari, T-2	T-II-3	1.1.1996
Mr RG Singh, T-I	T-2	8.6.1997
Mr H Das, T-I	T-2	8.6.1997
Mr BS Chaudhary, T-I	T-2	1.7.1999

(ii) Advance increments

Name & Designation	Increments (No.)	Effective Date
Mr KK Prasad, T-5	Three	1.1.1996
Mr J Singh, T-5	Two	1.1.1996
Mr SK Srivastava, T-5	Two	1.7.1997
Mr SK Bhaduri, T-5	Two	1.1.1998
Mr NK Dey, T-5	One	1.1.1996
Mr U Sahay, T-II-3	Two	1.1.2000
Mr BP Keshry, T-II-3	Two	1.1.2000
Mr MK Singh, T-II-3	Two	1.1.2000
Mr. HL Bhakta, T-II-3	Two	1.1.2000
Mr Tulsi Ram, T-II-3	One	1.1.2000
Mr BL Dey, T-II-3	One	1.1.2000
Mr RK Swansi, T-I-3	Three	1.1.1998
Mr KA Nagrurur, T-I-3	Three	1.1.1999
Mr Mohan Singh, T-I-3	Three	1.7.1999
Mr B Runda, T-I-3	Two	1.7.1996
Mr M Surin, T-I-3	One	1.1.1994
Mr Jiwan Lal, T-I-3	One	1.1.1997
Mr BS Choudhary, T-I	One	1.1.1990
-do-	One	1.7.1992
-do-	One	1.7.1998

(iii) Placement in the next higher category

Name & Designation	Placed in	Effective Date
Mrs P Devi, T-I-3	T-3	1.1.2000
Mr SB Azad, T-2	T-3	1.7.2000

(iv) Placement in next higher scale under Assured Career Progression

Name and Designation	Grant of Financial upgradation	Effective Date
Mr Vijay Ram, Sr. Clerk	One	9.8.1999
Mr Emil Gari, Sr. Clerk	One	9.8.1999
Mr BN Gope, Sr. Clerk	One	23.7.2000
Mr Wilson Guria, Sr. Clerk	One	15.12.2000
Mr Sukra Ekka, SG III	One	5.4.2000
Mr Mahadeo Oraon, SG II	One	9.8.1999
Mr VP Kujur, SG II	One	5.8.2000
Mr Birsa Oraon(L), SG I	Two	9.8.1999
Mr Budhram Oraon, SG I	One	9.8.1999
Mr BS Baraik, SG I	One	9.8.1999
Mr Budhram Oraon, SG I	One	9.8.1999
Mr Duka Toppo, SG I	One	9.8.1999
Mr Jublal Mahto, SG I	One	9.8.1999
Mr KP Kashi, SG I	One	9.8.1999

Transfer

Mr Arvind Kumar, Sc, LP Division transferred to Indian Agricultural Research Institute, New Delhi w.e.f. 12.4.2001.

Retirements

Smt Sati Guha, Assistant - w.e.f. 30.4.2001
Sri Thomas Minz, SG II - w.e.f. 30.4.2001
Sri RB Singh, Assistant - w.e.f. 30.6.2001

हिन्दी कार्यशाला

प्रशासनिक कार्यों में हिन्दी के प्रयोग को प्रोत्साहित करने एवं संस्थान के अधिकारियों एवं कर्मचारियों को 'पेशान निर्धारण एवं उसके पूर्व सेवा निवृत्त होने वाले कर्मचारियों का दायित्व' विषय पर दिनांक 27.06.2001 को एक दिवसीय कार्यशाला का आयोजन किया गया। संस्थान के विल्ल व लेखा अधिकारी श्री रजनीश कुमार सिंह ने उपरोक्त विषय पर सरल, रोचक एवं सारगर्भित व्याख्यान दिया। कार्यशाला में प्रशासनिक वर्ग के समस्त अधिकारियों एवं कर्मचारियों ने भाग लिया।



संयुक्त कर्मचारी परिषद की बैठक

संस्थान संयुक्त कर्मचारी परिषद की 35 वीं बैठक

नवगठित संस्थान संयुक्त कर्मचारी परिषद की प्रथम बैठक का आयोजन 10 अप्रैल 2001 को किया गया। सर्वप्रथम निदेशक महोदय ने नवनिर्वाचित सदस्यों का स्वागत करते हुये उनकी समस्याओं पर सहानुभूतिपूर्वक विचार करने का अश्वासन दिया। कर्मचारियों ने भी संस्थान की कार्यवाही सुचारू रूप से चलाने में हर तरह के सहयोग का वचन दिया। सौहार्दपूर्ण वातावरण में हुई बैठक में कर्मचारियों के कल्याण हेतु 24 महत्वपूर्ण निर्णय लिये गये। ■



Lighting of inaugural lamp

Lakh Krishak Sammelan at ILRI

A one-day 'Lakh Krishak Sammelan' (Lac Growers' Meet), sponsored by Tribal Welfare Department of Jharkhand Government was organised by Indian Lac Research Institute, Ranchi on June 11, 2001 at the Institute premises. The Sammelan was inaugurated by Shri Babulal Marandi, Honourable Chief Minister of Jharkhand and presided over by Shri Arjun Munda, Welfare Minister of the State. Dr. Anwar Alam, DDG (Engg.), ICAR was the Guest of Honour on this occasion. State Forest & Environment Minister, Shri Yamuna Singh and Agriculture Minister Shri DD Kushwaha also graced the occasion. The Sammelan also marked the launching of 'Lac Growers' Adoption Programme' fully sponsored by the Tribal Welfare Department of the State Govt. and to be executed by the ILRI with the co-operation of NGOs.

Welcoming the distinguished guests Dr KK Kumar, Director of the Institute expressed his gratitude to the State Govt. especially Tribal Welfare Department for initiating steps to promote lac cultivation in the State. He also briefed the audience about the activities and achievements of the institute.

(Engg.) said that keeping in view the importance of lac, the Council recognises the contribution made by the ILRI. He said that ICAR was ready to establish Krishi Vigyan Kendras in Jharkhand in collaboration with the State Government. He said that this is a first major initiative taken by State Govt. with ILRI to promote lac culture in the State. He said that this marked the beginning of a new partnership which is a good sign.

Hon'ble Chief Minister Shri Babulal Marandi, in his inaugural address stressed on co-ordination of Forest, Agriculture, Industry and Tribal Welfare Departments of the State with Indian Lac Research Institute for betterment of the lac growers. He exhorted the scientists to work on need-based research catering to the local problems. Referring to the eco-friendly nature, he hoped that demand for lac would increase in the future. He responded favourably to the proposal of opening Krishi Vigyan Kendra in the State and assured all possible help from the Govt. He also handed over a cheque of Rs.20 lakhs provided by Tribal Welfare Department to the Institute for the Lac Growers' Adoption Programme to be implemented in four village clusters of Ranchi district.

Forest and Environment Minister Mr. Yamuna Singh expressed commitment of his ministry in promoting lac-cultivators. He instructed the officials of his Ministry to give importance to lac-host plants in afforestation programme to be undertaken by the department. He also appealed to the scientists of the Institute to visit the farmers fields more frequently and to provide the latest information on scientific methods of lac cultivation in the local language. Mr DD Kushwaha, Agriculture Minister stressed upon the farmers to integrate lac cultivation with agriculture for better returns. Reacting to the demand of abolition of agriculture marketing tax on lac, he told that it was the legacy of the undivided Bihar and department would consider the demand sympathetically.

While delivering his presidential address, Mr. Arjun Munda, Welfare Minister assured that his Ministry would continue to strive for economic upliftment of the farmers. Sponsorship of lac-growers adoption programme is only the beginning of the events to be unfolded in the future. He declared that his department plans to build a Hostel in ILRI for lac-growers.

Two extension publications, viz., 'Jahan Chah Tahan Lah (in Nagpuri) and 'Lakh Ki Khèti :Sawal Kisanon ke Jawab Visheshagyon ke' (in Hindi) were released by the Chief Minister. Mr. AC Ranjan, Agriculture Secretary; Mr JB Tubid, Industry Secretary; Mr. AK Singh, Director (Industries); Mr. RM Vaidya, General Manager, TRIFED; Managing Director, BISCOLAMF. Besides scientists of the Institute and sister organisations were also present on the occasion. Ms. Raj Bala Verma, Tribal Welfare Commissioner conducted the proceedings of the Sammelan. More than 1000 farmers were present in the Meet. A number of NGOs particularly, Xavier Institute of Social Services, Ranchi; Chakriya Vikas Sansthan, Ormanjhi; VARDAN, Ranchi and TUDA, Namkum participated actively in making the programme a success; the other NGOs included INDAL, Parvatiya Durgam Shiksha Vikas and Adim Jati Sewa Mandal.

The Chief Minister also planted a sapling of *kusum* at the Institute Plantation and visited the Museum of the Institute to apprise himself about lac, its processing and application. Participating farmers were shown around the Institute plantation and Museum to make them familiar with the latest technologies of lac cultivation and to motivate them to take lac cultivation on commercial scale, Extension literature on latest technologies and equipment developed by the Institute was distributed free to all the farmers.



Shri Babulal Marandi, CM, Jharkhand addressing the audience



Dr Anwar Alam, DDG (Engg.) receiving the cheque for implementing Farmer Adoption Programme from the CM, Jharkhand

A view of participating farmers and invited guests