National Symposium on ‘Lac in the New Millennium’

Indian Lac Research Institute (ILRI), a pioneering organisation for R & D activities on lac, is celebrating the Platinum Jubilee of its Foundation. The institute, a unit of ICAR, is the apex body on lac in the country, engaged in R&D encompassing biological, chemical and technological aspects. A two-day Symposium is being organised this year on 20th-21st September to commemorate the Foundation day of the institute. Lac industries, Farmers, GOs, NGOs and other related agencies are cordially invited to attend the Symposium.

RESEARCH HIGHLIGHTS

Coverage of host shoot by the lac insect

Experimental evidences have revealed that only 22.1, 21.3 and 26.4% of the total shoot length of tillers, primary and secondary branches available was preferred by the lac larvae for their settlement in winter season lac crop (aghani) on Flemingia macrophylla, F. semialata and Acacia auriculiformis respectively. Out of this length, only 52.2, 22.3 and 31.6 per cent was found to be covered with significant lac encrustation. Girth of twigs covered with lac encrustation ranged between 2.39-3.37, 2.50-3.45 and 2.37-3.38 cm for the respective hosts.

Bio-active compounds with possible repellent activity

1,9-nonane-diacetate and (E)-2-undecene 1,11-diol acetate have been synthesised from aleuritic acid of lac, adopting simple reaction sequences. These compounds are expected to exhibit insect repellent activity.

Lac-based hot-melt adhesive

The hot-melt adhesive developed [vide ILRI Newsletter vol. 3(1)] is non-toxic, non-inflammable and developed fast bond strength within one hr. It was found that it can be used in book-binding, paper & packaging, footwear industry and bonding in ceramics, for making ply-wood boxes etc. The binding material is impervious to water when dipped for 24 hrs. Surfaces used for testing included rubber to rubber, ceramic to ceramic and rubber to leather.

TRANSFER OF TECHNOLOGY

Training programmes conducted

- One-week training in lac cultivation was organised, in three batches, for 27 farmers sponsored by TRIFED and nominated by Rural Organisation for People’s Action, Tamar, Ranchi; Agriculture Training Centre, Gumla and Nav Bharat Jagriti Kendra, Murhu, Ranchi. Besides, 22 B.Sc. (Ag.) students of B.H.U. completed a one-week special training course on “Scientific Method of Lac Cultivation”.
- One-Day Orientation Programme on Lac was organised for 144 farmers (4 batches) sponsored by Society for Rural Industrialisation, Ranchi; Wish Care, Rural Technology Park, Angarha; Support for Sustainable Society and R.K. Mission, Ranchi.
- Vocational Training Programme on Lac based products such as lac processing, sealing wax, French polish and water-soluble lac was conducted for 25 entrepreneurs sponsored by Institute of Entrepreneurship Development (Bihar), Ranchi from 25.5 to 21.6.2000.
Out-reach programmes

- On-farm Education programme on lac cultivation was organised for 75 farmers in three villages (Haham, Libudih and Hud of Namkum block (Ranchi District) and for 344 farmers in 11 villages (Barahaguda, Futanoda and Vinaypur of Raighar block, Chikli and Chachamar of Jharigram Block and Rajkot, Bandakona, Vedpada, Patkaliya, Dalabeda and Bhatipada of Chandahandi block) of Nabarangpur district, Orissa.
- Off-Campus Extension Education Programme was organised by Christian Children Fund and Chakriya Vikas Sansthan at Dorma (Torpa) and Dhuu (Ormanjhi) villages, respectively, in which 68 farmers participated.
- Off-campus training-cum-demonstrations were organised in two districts of NEH Region. Forty-five Karbi Anglong villagers from different villages of Karbi Anglong district were given training on scientific methods of lac cultivation at Amsoi Bazar (Nagaon, Assam). Similarly, five other camps were organised at Haltugaon (North, South & Central), Ijugaon and Haldibari (Kokrajhar, Assam) where about 75 farmers were involved. Training camps were organised in active collaboration with TRIFED, Guwahati; Brahamputra Krishi Vikas Samiti and Assam Tribal Marketing and Manufacturing Cooperative Society. The video film on lac cultivation was also screened at all the villages for the benefit of the farmers.

TV/Radio talk

- Chhotanagpur ke Vikas mein Lah ka Yogdan by Dr KN Sharma was telecast by DDK Ranchi on 26.4.2000.
- Lah poshak urikshon ke shatru keet by Dr KK Kumar was telecast by DDK Ranchi on 19.6.2000

Institute Publication

Advantages

- Increase in productivity
- Reduction in human drudgery
- Reduction in operating cost
- Improved performance
- Increase in profit of lac grower

MISCELLANEA

Tin Can Lacquer Formulations conform to BIS Standards

Regional Testing Centre (E.R.), Ministry of Industry, Govt. of India, Calcutta has declared that the two shellac-based Tin Can Lacquer formulations developed by the ILRI and submitted for evaluation as per IS : 5818 (1988) specifications have passed the BIS requirements as regards appearance, specific gravity, viscosity, flash point, flexibility and adhesion, resistance to acid, resistance to sulphur staining, flavour tests for (i) processed food and (ii) general line cans, as well as test for accelerated shelf life.

Visits/seminars/conferences/workshops

- Dr A Bhattacharya, Sr Sc visited Defence Research Laboratory, Tezpur and TRIFED, Guwahati during March 30 to April 2, 2000 in connection with promotion of lac cultivation in the NEH Region. He held discussion with the officials of DRL, Tezpur and TRIFED, Guwahati and has prepared an action plan for carrying out lac cultivation in the region during 2000-01.
- Dr A Bhattacharya and Dr KK Sharma visited different districts of Assam during 24.5 to 5.6.2000 to conduct training-cum-demonstration on lac cultivation.

EVENTS

Hon'ble Union Minster of Agriculture Sri Nitish Kumar visits ILRI

Sri Nitish Kumar, Hon'ble Union Minister of Agriculture paid a visit to Indian Lac Research Institute, Ranchi on 19.6.2000. The minister was apprised of the activities of the institute and its achievements in research and extension as well as about the lac cultivation, its processing by various techniques, raw materials and by-products that can be obtained from lac and various applications of lac. He was given a set of recent publications of the institute by the Director.

Staff Research Council (SRC) meeting

The SRC meeting was held on 2-3 & 22nd May, 2000 under the Chairmanship of Dr KK Kumar, Acting Director to discuss about the salient achievements made since previous meeting, finalise the new projects to be taken up and the research programme for the year 2000-2001. All the scientists of the institute participated in the meeting. The following new projects were approved in the meeting.

- Nutrient management in soil for maximising lac yield.
- Management of Flemingia semialata for sustainable lac production under different crop geometry and irrigation.
- Mechanisation of bhatta process

SRC also approved the project, 'Development of food grade lac dye' for its forwardal to the Council, for consideration under NATP.

Institute Management Committee (IMC) meeting

The 29th meeting of the IMC was held on 6-7th April 2000 under the chairmanship of Dr KK Kumar, Acting Director. The other members present were : Dr RP Kachru ADG (PE) ICAR; Dr JB Tornar Incharge NBPGR Station; Dr PC Gupta, Pr Sc and Head LP6PD Div; Mr G Singh, Sr Sc; Mr SKC Bose, F&AO, CIFTRI Barrackpore; Mr RK Singh, F&AO and Mr A Rastogi, AO (Member-Secretary). The Chairperson apprised the members of the achievements and developmental activities of the institute. The IMC confirmed the proceedings of the last meeting. Progress of research projects and schemes was also reviewed in the meeting. It also approved the Budget Estimate for the year 2000-01, equipment to be purchased and work to be executed besides several other important decisions such as providing intercom facility and digital diaries to the scientists to improve the work efficiency.
HRD

- Dr AK Jaiswal successfully completed the training programme on ‘Statistical Softwares for Data Analysis’ from April 4 to April 15, 2000 conducted by National Academy of Agricultural Research Management, Hyderabad.

- Dr. S. N. Sushil successfully completed two-month training on ‘Biological Control of pests in different cropping systems from 3.4 to 2.6.2000 at Project Directorate of Biological Control, Bangalore Under the NATP Programme,’ Team of Excellence for Human Resource Development in Biological Control.

Appointments

Dr Sanjay Kumar Srivastava, Sc LP&PD Division w.e.f. 1.5.2000
Mr Md. Fahim Ansari, Sc LP&PD Division w.e.f. 1.6.2000

Retirements

Mr Mongal Munda SSG II w.e.f. 31.5.2000

संस्थान संस्थापक परिषद की बैठक

संस्थान संस्थापक परिषद की 12वीं बैठक दिनांक 26.5.2000 को आयोजित की गई। बैठक में हर. के. के. कुमार, निदेशक, हर. के. के. साधु, सचिव (शासकीय पक्ष) और नव राज्य प्रौद्योग, निदेशक (कर्मचारी पक्ष) सहित परिषद के 11 सदस्यों ने भाग लिया।

अद्वितीय भारतीय राजभाषा विचार होंगे

राष्ट्रीय जानकार्यहरू के संस्थान प्रशिक्षण समिति में हुआ दूसरा बैठक 4.4.2000 को आयोजित की गई। बैठक में हर. के. के. सहित सदस्यों के समय, नव राज्य प्रौद्योग, निदेशक (कर्मचारी पक्ष) सहित परिषद के 11 सदस्यों ने भाग लिया।

अन्य बैठकों व गोपियों

- हिन्दी में वैज्ञानिक गोपी आयोजन के क्रम में संस्थान के बराबर वैज्ञानिक हर. प्रौद्योगिकी गोपी मुख्यालय में आयोजन के अनुसार विक्रम, नव राज्य प्रौद्योग, निदेशक (कर्मचारी पक्ष) सहित परिषद के 11 सदस्यों ने भाग लिया।

Erratum:

ILRI Newsletter, Jan-Mar 2000 issue
Dr SC Agarwal retires:

...Director of the Institute on 3.10.98...
may be read as

...Director of the Institute on 8.10.93...

The error is regretted. — Eds.