

INDIAN INSTITUTE OF NATURAL RESINS AND GUMS
NAMKUM, RANCHI - 834 010

LIST OF APPROVED RESEARCH PROJECTS FOR THE YEAR 2015-2016

Core Program - I : Productivity and Quality Improvement

Sl.	Project No.	Title of the Project	Name of Investigators	% time	Year of start	Year of completion
1	I.1.031	Collection, conservation, characterization and documentation of lac insect and host plant bio-diversity and potentiality trials	Dr. V. D Lohot Dr. A.Mohanasundaram Dr. K. K. Sharma Dr. J Ghosh Dr. Thamilarasi, K		January 2012	March 2017
	Sub-project-1 (I.1.031)	Collection, conservation, characterization and documentation of lac insect and host plant bio-diversity (Phase-I)	Dr. V. D Lohot			
	Sub-project-2 (I.1.028)	Potentiality trials of <i>Kerria chinensis</i> on new lac host plants	Dr. A.Mohanasundaram			
2	I.1.045	Isolation and characterization of root nodule bacteria from <i>Flemingia spp</i>	Mr. Kishor U. Tribhuvan Dr. Thamilarasi, K Dr. V.D. Lohot		January 2014	December 2015
3	I.1.049	Integrated nutrient management and vegetative propagation technique for quick establishment of Kusum (<i>Schleichera Oleosa</i> (Lour.) Oken)	Dr. S. Ghosal Mr. S. S. Bhat Dr. V.D. Lohot		June 2014	June 2018
	Sub-project-1	Integrated nutrient management for quick establishment of Kusum	Dr. S. Ghosal			

परिचालित
CIRCULATED

to Scientists
of the Division
for filing
time
involved
different
projects.

Approved
10/8/15

Sl. no. 108

Prop/REC/154
29 July 2015

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		plantation						
	Sub-project-2	Vegetative propagation of <i>Laccium (Sobletenera oleosa)</i> (Low.) Oken)	Mr. S. S. Bhat					
4	1.1.056	Development and evaluation of lac production practices for <i>Swadi Palas</i> for productivity and two bushy hosts- <i>arhar</i> and <i>semialata</i> for summer sustainability	Dr J Ghosh, Sr. Sc. Dr V D Lohot, Sc. Dr S Ghosal, Pr.Sc. Dr K U Tribhuvan, Sc.		July 2014 April 2015		March 2018	
5	1.1.064	Identification and cloning of Putative Key Genes involved in Terpene biosynthesis of the Indian Lac Insect, <i>Kerria Lacca</i> (Kerr)	Dr. Thamilarasi K		August 2015		July 2018	
Core Program – II : Crop Production System Management								
6	1.1.047	Tritrophic interaction in lac ecosystem	Mr. S.C.Meena Dr. A.Mohanasundaram Dr. Md. Monobrullah Ansari	10%	February, 2012		May 2017	
	Sub-project-1	Tritrophic interaction in lac ecosystem: a semiochemical approach	Dr. A.Mohanasundaram					
	Sub-project-2	Study of variation of lac associated fauna in relation to different host plants.	Sri S. C. Meena					
7	1.1.048	Carbon sequestration under different lac host based land use systems	Mr. S. S. Bhat Dr. S. R. Meena, Sc. (Agronomy), ICAR-IIAB, subject to approval from OSD, IIAB.		June 2014		May 2017	
8	1.1.057	Management of stem Canker/Wilt disease of <i>Flemingia semialata</i>, a commercial Lac host	Dr. A.K Singh, Pr. Sc		April 2015		March 2017	

9	1.1.058	Lac Integrated Farming System-Phase II	Mr. Sheeraz Saleem Bhat, Sc., Dr. S.R.Meena, Scientist, ICAR-IIAB	April 2015	March 2019
10	1.1.059	Effect of abiotic factors on lac associated fauna in <i>rangeeni</i> crops	Dr Md. Monobrullah, Pr.Sc. Dr. A. Mohanasundaram	October 2014 April 2015	July 2018
Core Program -III : Processing, Storage and Quality Management					
11	1.2.032	Design and development of integrated small scale lac processing unit for conversion of sticklac - seedlac	Dr. S C Sharma Er. S K Pandey Dr. N Prasad	April, 2012	March, 2014+ extn. upto March 2015 + extn. upto Sept. 2015
12	1.2.040	Characterization, chemical profiling and evaluation of Gum Ghatti (<i>Anogeissus latifolia</i> Wall.)	Sri. N Thombare Dr. A Roy Chowdhury Dr. Sanjay Srivastava Dr. K. Tamilarasi	July, 2013	June, 2015 + extn. upto March 2016
13	1.2.055	Physico-chemical characterization and monosaccharides profiling of Jhingan gum (<i>Lannea coromandelica</i>)	Mr Ch. Jamkhokai Mate, Scientist Sri. N. Thombare Dr. K. Tamilarasi	September 2014	August 2015 + extn. upto March 2016
14	1.2.060	Development of pilot-plant of dewaxed decolourised lac (DDL) for training, demonstration and process refinement.	Er. S.K.Pandey, Sc.(SS) Dr. S. C. Sharma Sc Dr. N. Prasad, PS & Head	April 2015	March 2017
15	1.2.061	Control of deacetylation in gum <i>karaya</i> on storage for quality retention.	Dr. S. Srivastava, PS Dr. S.C. Sharma, Sc Dr. A. Roy Chowdhury, Sc	April, 2015	March, 2017
Core Program -IV : Value Addition, Application Development and Product Diversification					
16	1.2.041	Synthesis and evaluation of Guar gum derivatives	Dr. A Roy Chowdhury Sri. N Thombare Dr. S Srivastava	July, 2013	June, 2015 + extn. upto December 2015

17	1.2.062	Synthesis and evaluation of cross-linked guar gum hydrogels for application in bio-remediation and in agriculture	Mr. Nandkishore Thombare, Sc Dr. MZ Siddiqui, PS Dr. Usha Jha, Professor, BIT, Mesra Dr. Sumit Mishra, Asst. Professor, BIT, Mesra	25% → 10%	April, 2015	March, 2017
18	1.2.063	Green synthesis of silver nanoparticles capped in gum acacia for bactericidal application	Dr. M. Z. Siddiqui, PS Dr. A. Roy Chowdhury, Sc	40% 15%	April, 2015	March, 2017
19	1.2.065	Development of coating formulation for paper packaging materials	Dr. M.F. Ansari, Sr.Sc. <i>Dr. N. Prasad, PS</i>	50% 10%	August 2015	
Core Program - V: Capacity Building of Farmers and Entrepreneurship Development						
20	1.3.037	Learning, capacity building, extension education and information service on Natural Resins and Gums	Dr. A. K. Jaiswal Dr. Alok Kumar Sri S. K. S. Yadav Dr. N. Prasad	10	April, 2012	March, 2017
Core Program - VI: Technology Evaluation, Refinement, Dissemination and Demonstration						
21	1.3.043	Impact assessment of technological interventions and market research on natural resins & gums (NRGs)	Dr. R. K. Yogi Dr. Alok Kumar		April 2012	March, 2017
	Sub-project-1	Impact assessment of technological interventions and constraints analysis of lac cultivation.	Dr. R. K. Yogi			
	Sub-project-2	Market research for production and marketing of natural resins and gums	Dr. R. K. Yogi			

22	1.3.038	Development and validation of IPM modules for the management of predators and parasitoids associated with lac insect, <i>Kerria lacca</i> (Kerr)	Dr. A. K. Jaiswal	July 2012	June, 2016
23	1.3.042	Evaluation of lac mud as organic manure	Dr. A. K. Singh, Sr. Sc. Dr. S. Ghosal, Pr.Sc.	June 2013	June, 2016
24	1.3.051	Standardization of package of practices for rangeeni lac cultivation on <i>Flemingia semialata</i>	Dr. A. K. Singh, Sr. Sc.	April 2014	September 2017
25	1.3.050	Information Technology (ICT) Intervention on Natural Resins and Gums knowledge dissemination system	Dr. Alok Kumar Dr. A.K. Jaiswal Dr. R. K. Yogi Dr. S.K.S. Yadav	July 2014	June, 2017
Externally Funded Projects					
26	2.3.039 (Jharkhand Govt. Sponsored)	Lac cultivation and processing unit establishment.	Dr. A. K. Singh, Sr. Sc. Dr. R.K. Yogi	October, 2012	
27	FQ 3029 NFBSFARA sponsored	Jute based bio-composites for industry	Dr. S.K. Pandey Dr. M.F. Ansari Mr. N. Thombare	June, 2012	May, 2015
28	2.2.052 (Sponsored by the Ministry of Food Processing, Govt. of India)	Use of Natural Resins and Gums for Preservation and Value Addition of Fishery Products	Dr. P. C Sarfkar Dr. P. K Binsi (CIFT, Mumbai)	Dec., 2013	Nov., 2015
Network Projects					
29	3.2.026	Network project on harvesting, processing and value addition of natural resins and gums	Dr. N. Prasad Dr. M.Z. Siddiqui Sri. M.F. Ansari	February, 2009	January, 2014 Will continue during XI: Plan

	(ICAR)	Sri. S.K.S. Yadav Dr. S. Srivastava Dr. S. C. Sharma	20%		
	Sub-project entitled 'Chemical profiling and rheological study of <i>Buchanania lanzan</i> (Piyar) gum exudates' under Network Project HPVA of NRGs (3.2.026)	Dr. (Ms) M Z Siddiqui, Pr.Sc.			Six months extension
30	3.1.054 Network project on Conservation of Lac Insect Genetic Resources	Dr K K Sharma (PC) Dr. Md. Monobrullah(PI) Dr. A.Mohanasundaram Dr. Thamilarasi Dr. V.D. Lohot Mr. S.C.Meena		July, 2014	March, 2017
Collaborative and Exploratory Studies					
31	Collaborative Development of seri-lac culture model for income augmentation (CSRTI, Mysore and IINRG, Ranchi)	Dr. Srikantaswamy, CSRTI, Mysore Dr A Mohanasundaram, IINRG Dr. Sibayan Sen, CSRTI, Mysore		January 2013	December 2016
32	Exploratory Field guide for identification of major resin and gum producing plants under Network project on harvesting, processing and value addition of natural resins and gums (ICAR)	Mr. Nandkishore Thombare, Sc. Dr. Vaibhav D. Lohot, Sc Dr. Niranjan Prasad, PS & Head		April, 2015	March, 2016

As per decision taken in the meeting held on 30th June 2014 in Director's chamber regarding reduction in number of the Institute funded projects by 25% as per instruction from SMD, four projects have been modified/merged as mentioned below:

- I. **Projects 1.1.028 & 1.1.031** will be conducted as sub-projects under title 'Collection, conservation, characterization and documentation of lac insect and host plant bio-diversity and potentiality trials'
- II. **Projects 1.1.049 & 1.1.044** will be conducted as sub-projects under title 'Propagation and nutrient management for *kusum* (*Schleichera oleosa*)'
- III. **Projects 1.3.043 & 1.3.036** will be conducted as sub-projects under title 'Impact assessment of technology propagation and market research on natural resins & gums (NRGs).'
- IV. **Projects 1.1.047 & 1.1.029** will be conducted as sub-projects under title 'Tritrophic interactions in lac ecosystem'

(A. K. Singh)
I/C IRIS

(A K Jaiswal)
Director

Explanation for coding of the Project Nos.

- (i) First number will indicate category of projects (1) Institute Project (2) Externally Funded Project (3) Network Project
- (ii) The second number will indicate the Divisions (1) LPD (2) PPDD (3) TOT
- (iii) The third number will indicate the project number

Example

- (1) 1.1.001 - 1- Indicates Institute Project; 1- Indicate Lac Production Division and 001- Indicates Project No.
- (2) 1.2.010 - 1- Indicates Institute Project; 2- Indicate PPD Division and 010- Indicates Project No.
- (3) 1.3.017 - 1- Indicates Institute Project; 3- Indicate TOT Division and 017- Indicates Project No.
- (4) 2.2.019 - 2- Indicates Externally funded project; 2- Indicates PPD Division and 019- Indicates Project no.
- (5) 3.2.026 - 3- Indicates Network project; 2- Indicates PPD Division and 026- Indicates Project no.

NOTE: Network Project on High Value crops / phytochemicals
 is of process & inclusion in IR on-going
 research project, Details are as follows:

Project No.	Title of Project	Name of Investigator	Year of start	Year of completion
3.3.066	Network Project on High value crops and phytochemicals (ICAR sponsored)	Dr. S. S. Sivarao	2014	2017

Signed
 15/08/2015
 (Dr. S. Sivarao)