

Prioritization, Monitoring and Evaluation (PME) Cell  
**ICAR - INDIAN INSTITUTE OF NATURAL RESINS AND GUMS**  
**NAMKUM, RANCHI - 834 010**

**LIST OF APPROVED RESEARCH PROJECTS FOR THE YEAR 2017-2018**

Core Program - I : Productivity and Quality Improvement						
Sl. No.	Project No.	Title of the Project	Name of Investigators	% Time	Year of Start	Year of Completion
1	1.1.060	Collection, conservation, characterization and documentation of lac insect/host plant biodiversity and potentiality trials (Phase - III).	Dr. VD Lohot Dr. J Ghosh Dr. Thamilarasi K Dr. A Mohanasundaram Dr. KK Sharma		April, 2017	March, 2020
2	1.1.049	Integrated nutrient management and vegetative propagation technique for quick establishment of <i>Kusum</i> ( <i>Schleichera oleosa</i> (Lour.) Oken).	Dr. S Ghosal Dr. SS Bhat Dr. VD Lohot		May, 2014	June, 2018
3	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 Dr. VD Lohot Dr. S Ghosal		July, 2014	March, 2018
4	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
5	1.1.061	Comparative analysis of life table and population parameters of both <i>kusmi</i> and <i>rangeeni</i> strains of lac insect, <i>Kerria lacca</i> on three bushy host plants.	Mr. Asish Kumar Rout		June, 2017	December, 2019
Core Program - II : Crop Production System Management						
6	1.1.047	Tritrophic interaction in lac ecosystem.	Dr. A Mohanasundaram Dr. MF Ansari		February, 2012	October, 2017
7	1.1.048	Carbon sequestration under different lac host	Dr. SS Bhat	--	June, 2014	May, 2017

		based land use systems.						PI will be submitting RPP-III by the end of Aug., 2017.
8	1.1.058	Lac Integrated Farming System Phase - II.	Dr. SS Bhat Mr. Asish Kumar Rout	April, 2015				March, 2019
9	1.1.059	Effect of abiotic factors on lac associated fauna in <i>rangeeni</i> crops.	Dr. A Mohanasundaram Mr. Asish Kumar Rout	October, 2014				July, 2018
<b>Core Program - III : Processing, Storage and Quality Management</b>								
10	1.2.060	Development of pilot-plant of dewaxed decolourized lac (DDL) for training, demonstration and process refinement.	Er. SK Pandey Dr. SC Sharma Dr. N Prasad	April, 2015	40% 25% 15%			March, 2018
11	1.2.061	Control of deacetylation in gum <i>karaya</i> on storage for quality retention.	Dr. S Srivastava Dr. SC Sharma Dr. A Roy Chowdhury	April, 2015	20% 15%			September, 2017
12	1.2.066	Biodegradation studies on lac resin using soil burial method <del>processing</del> <sup>plow C</sup>	Dr. MF Ansari Dr. S Maurya, ICAR-RCER, Plandu	April, 2016	30%			March, 2019
13	1.2.070	Development of pilot of <i>guar</i> gum derivative for training and demonstration.	Dr. SC Sharma Dr. A Roy Chowdhury Dr. N Prasad Er. SK Pandey	April, 2017	25% 15% 15% 25%			March, 2020
<b>Core Program - IV : Value Addition, Application Development and Product Diversification</b>								
14	1.2.062	Synthesis and evaluation of cross-linked <i>guar</i> gum hydrogels for application in bio-remediation and in agriculture.	Mr. N Thombare Dr. MZ Siddiqui Dr. Usha Jha, BIT, Mesra Dr. Sumit Mishra, BIT, Mesra	April, 2015	30% 15%			March, 2018
15	1.2.063	Green synthesis of silver nanoparticles capped in <i>acacia</i> and <i>Jhingan</i> gum for bactericidal application.	Dr. MZ Siddiqui Dr. A Roy Chowdhury Mr. Mohd Ali	April, 2015	35% 15% 25%			March, 2018
16	1.2.065	Development of coating formulation for paper packaging materials.	Dr. MF Ansari Dr. N Prasad	July, 2015	50% 10%			June, 2018

17	1.2.067	Modification of <i>guar</i> and <i>arabic</i> gum for potential use as dietary fibre.	Dr. A Roy Chowdhury Dr. S Srivastava Dr. Thamilarasi K	25% 25%	April, 2016	March, 2018
18	1.2.068	Natural gum based adsorbents for removal of heavy metals from water.	Mr. Mohd Ali Mr. N Thombare	60% 25%	April, 2016	March, 2018
19	1.2.069	Synthesis of natural gum based nanocomposite hydrogel for wound healing and water treatment.	Dr. S Srivastava Dr. Biplab Sarkar, ICAR-IIAB	30%	April, 2017	March, 2019
20	1.2.071	Synthesis of <i>guar</i> gum hydrogel-nanoparticle hybrid scaffold.	Dr. Arnab Roy Chowdhury Dr. SKS Yadav	15%	July, 2017	June, 2020

**Core Program – V: Capacity Building of Farmers and Entrepreneurship Development**

21	1.3.037	Learning, capacity building, extension education and information service on natural resins and gums.	Dr. SKS Yadav Dr. N Prasad	10%	April, 2012	September, 2017
22	1.3.052	Capacity building, skill development, extension education and information service on natural resins and gums.	Dr. SKS Yadav Dr. N Prasad	10%	October, 2017	March, 2020

**Core Program – VI: Technology Evaluation, Refinement, Dissemination and Demonstration**

23	1.3.050	Information & Communication Technology (ICT) intervention on natural resins and gums knowledge dissemination system.	Dr. RK Yogi Dr. SKS Yadav		July, 2014	July, 2018
24	1.3.053	Market information support and impact assessment of technological interventions for NRGs.	Dr. RK Yogi		October, 2017	March, 2020

**Network Projects**

25	3.2.026	Network project on Harvesting, Processing and Value Addition of Natural Resins and Gums (ICAR).	Dr. N Prasad (PC)	15%	February, 2009	March, 2020
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3.2.026.01	Field guide for identification of major resin and gum producing plants.	Mr. N Thombare Dr. VD Lohot Dr. N Prasad	25% 10%	April, 2015	March, 2020
3.2.026.02	Development and antibacterial activity of <i>Buchananian lanzan (piyar)</i> gum-based silver nanoparticles.	Dr. MZ Siddiqui Dr. A Roy Chowdhury	30% 15%	October, 2015	March, 2018
26 3.1.054	Network project on Conservation of Lac Insect Genetic Resources (ICAR).	Dr. KK Sharma (PC) Dr. A Mohanasundaram Dr. Thamilarasi K Dr. VD Lohot		November, 2014	March, 2020
3.1.054.01	Elemental budgeting of lac production system in <i>Flemingia semialata</i> for sustainable lac insect-host plant ecosystem.	Dr. VD Lohot Dr. A Mohanasundaram		January, 2016	March, 2018

*Siddiqui*  
(MZ Siddiqui)  
I/c, PMEC

(KK Sharma)  
Director

Explanation for coding of the Project Nos.

- (i) First number indicates category of projects: Institute Project-1, Externally Funded Project-2, Network Project-3, (ii) Second number indicates the Divisions: LPD-1, PPDD-2, TOT-3 and (iii) Third number indicates the project number.