

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 2020-21

Ref.: IINRG/PMEC/IRC/July, 2020

Sl. No.	Project No.	Title of the Project	Name of Investigators	% Time	Year of Start	Year of Completion	*
Core Programme - I : Productivity and Quality Improvement							
1.	1.1.066	Morpho-physiological characterization vis-à-vis strategies to augment quality and storability of seeds of <i>Schleicheraoleosa</i> under ambient condition	Dr. NK Sinha Dr. VD Lohot Ms LC Langlentombi		October, 2017	September, 2020	Dr. J Ghosh
2.	1.1.067	Understanding lac insect-host plant interaction --- A molecular approach	Ms Shruti Sinha Dr. Thamilarasi K		June, 2018	May, 2020	-
3.	1.1.070	Taxonomic studies of lac insects (Hemiptera: Coccoidea: Tachardiidae) and associated insect fauna	Shri NN Rajgopal		June, 2019	May, 2021	Dr. A Mohanasundaram
4.	1.1.072	Collection, conservation, characterization and evaluation of lac insect/ host plant diversity	Dr. VD Lohot Dr. J Ghosh Dr. Thamilarasi K Dr. A Mohanasundaram		July, 2020	Of continuing nature	Dr. KK Sharma, Director
Core Programme - II : Crop Production System Management							
5.	1.1.065	Evaluation of the effect of drip irrigation and plastic mulch on growth and seed yield of <i>Flemingiasemialata</i>	Er. SK Srivastava		January, 2018	March, 2021	Dr. S Ghosal
6.	1.1.068	Effect of abiotic factors on lac associated fauna in <i>rangeni</i> crops (Phase-II)	Dr. A Mohanasundaram		August, 2018	December, 2021	-
7.	1.1.069	Agronomic interventions influencing lac production in <i>palas</i> (<i>Butea monosperma</i>) in summer season	Dr. S Ghosal Shri NN Rajgopal		March, 2019	May, 2025	-
8.	1.1.071	Lac Integrated Cropping System through Participatory Approach	Ms LC Langlentombi Dr. S Ghosal Dr. NK Sinha Er. SK Srivastava Shri NN Rajgopal		April, 2019	March, 2022	-
Core Programme - III : Processing, Storage and Quality Management							

9.	1.2.060	Establishment of pilot-plant of dewaxed decolorized lac (DDL) for training, demonstration and process refinement	Er. SK Pandey, Dr. SC Sharma Dr. N Prasad	30%	Project kept in abeyance till finalization of tender
10.	1.2.070	Development of pilot plant of guar gum derivative for training and demonstration	Dr. SC Sharma Dr. AR Chowdhury Er. SK Pandey Dr. N Prasad	20%	Project kept in abeyance till fabrication starts
11.	1.2.073	Study on spray drying of gum ghatti (<i>Anogeissus latifolia</i>)	Er. Ranjit Singh Er. Priyanka Sakare (October, 2018)	30% 28%	April, 2018 March, 2021
12.	1.2.074	Study on infrared drying of seed lac	Er. Priyanka Sakare Er. Ranjit Singh	25% 25%	April, 2019 March, 2021
Core Programme – IV : Value Addition, Application Development and Product Diversification					
13.	1.2.071	Synthesis of guar gum hydrogel-nanoparticle hybrid scaffold	Dr. SKS Yadav		July, 2017 March, 2021
14.	1.2.072	Development and evaluation of resin/gum based sticky insect trap	Dr. N Thombare	25%	April, 2018 March, 2021
15.	1.2.075	Study on natural gum based dietary fibre as encapsulant for delivery of functional feed	Dr. AR Chowdhury Dr. N Thombare Er. Ranjit Singh Shri Ch. Jamkhokai Mate Dr. Biplab Sarkar, ICAR-IIAB	35% 25% 25% 15%	September, 2019 August, 2022
Core Programme – V: Capacity Building of Farmers and Entrepreneurship Development					
16.	1.3.052	Capacity building, skill development, extension education and information service on natural resins and gums	Dr. Nirmal Kumar Dr. SKS Yadav Dr. RK Yogi		October, 2017 October, 2017 March, 2021
17.	1.3.053	Market information support and impact assessment of technological interventions for NRGs	Dr. RK Yogi Dr. Nirmal Kumar		October, 2017 March, 2021
ICAR-Network Projects					
18.	3.2.026	Network project on Harvesting, Processing and Value Addition of Natural Resins and Gums (ICAR)	Dr. N Prasad (PC & PI)	40%	February, 2009 March, 2021


		Comparative evaluation of properties of <i>Bahera</i> (<i>Terminalia bellerica</i>) gum exudates collected from different agro-climatic zones	Er. Anamika Thakur, ICAR HQ Dr. MZ Siddiqui		April, 2018	March, 2020	-
		Exploration and preparation of field guide for minor gum & resin producing plants in India	Dr. N Thombare	25%	April, 2018	March, 2021	Dr. VD Lohot
		Effect of Tapping Techniques on Gum Yield from <i>Moringa oleifera</i> Trees	Dr. SC Sharma Er. SK Pandey	30%	January, 2019	March, 2021	Dr. VD Lohot
		'Preparation and characterization of modified guar gum nanocomposite films reinforced with <i>piyar</i> AgNPs for diversified applications'	Dr. MZ Siddiqui Er. Priyanka Sakare	25% 25%	November, 2019	March, 2021	Dr. AR Chowdhury
19.	3.1.054	Network project on Conservation of Lac Insect Genetic Resources (ICAR)	Dr. KK Sharma (PC & PI)		August, 2014	March, 2021	-
		Diversity analysis of aleuritic acid content in major lac insect species/strains and its use for better isolation strategies	Dr. A Mohanasundaram			March, 2020	-
		Field guide for lac hosts	Dr. VD Lohot			March, 2020	-
		<ul style="list-style-type: none"> Molecular characterization of new collection Study of endo symbionts 	Dr. Thamilarasi K			March, 2020	-
ICAR-ICRAF							
20.	2.1.054	Enabling tribal communities to improve their livelihoods through agroforestry systems on a sustainable basis	Dr. J Ghosh Dr. A Mohanasundaram Dr. RK Yogi		Oct., 2017	September, 2020	-
ICAR-DBT							
21.	2.1.055	Identification, cloning and characterization of genes involved in pigment biosynthesis of the Indian lac insect, <i>Kerria lacca</i> (Kerr)	Dr. Thamilarasi K Dr. VD Lohot		September, 2017	September, 2020	-
Inter-Institutional Projects							
1. ICAR-IINRG, Ranchi & ICAR-IIAB, Ranchi							
22.	--	Development and evaluation of the efficacy of novel nanoparticles for enhancing yield in rice and Indian major carp	Dr. AR Chowdhury, Co-PI	20%	August, 2016	July, 2021	-
2. ICAR-IINRG, Ranchi & ICAR-RCER Farming System Research Centre for Hill and Plateau Region, Plandur, Ranchi							

(Vijay Kumar) 7/2020

23.	Enhancing food, nutritional and livelihood security of marginal and small farmers in Jharkhand through need based agricultural technologies	Dr. Nirmal Kumar, Co-PI Dr. NK Sinha, Co-PI	April, 2018	March, 2021
3. ICAR-IINRG, Ranchi & ICAR-IIHR, Bengaluru				
24.	1. Title, 'Development of storage protocol for extending the marketable period of fruits (Mango, Guava, Fig, Jamun, Muskmelon) and vegetables (Drumstick, Brinjal, Bottlegourd) 2. Title, 'Development of bio-composite packages from horticultural waste'	Dr. MF Ansari, Co-PI	February, 2020	March, 2021
KVK, Khunti, Ranchi				
25.	Assessment, diffusion and adoption of crop production and NRGs technology	Dr. J Ghosh Dr. Nirmal Kumar Dr. NK Sinha Dr. VD Lohot Dr. A Mohanasundaram Dr. SC Sharma Dr. RK Yogi	July, 2020	June, 2025

Exploratory Study

1. 'Preparation and characterization of modified guar gum nanocomposite films reinforced with *Acacia nilotica*/Jhingan AgNPs for diversified applications' ---- Dr. MZ Siddiqui, PS, PPDD, 25%
2. 'Synthesis of rosin derivative for its use as tackifier' ---- Dr. MF Ansari, PS, PPDD --- 50% Award
3. 'Genetic manipulation in lac host plant (*F. semialata*) to establish better plant-lac insect interaction' ---- Dr. J Ghosh, PS, LPD,


(MZ Siddiqui)
I/c, P MEC

(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.
- (ii) *Indicates scientist concerned would assist/facilitate the study without formally being associated with the project.