

Prioritization, Monitoring and Evaluation (PME) Cell
ICAR - INDIAN INSTITUTE OF NATURAL RESINS AND GUMS
NAMKUM, RANCHI – 834 010
LIST OF RESEARCH PROJECTS FOR THE YEAR 2022-23

Ref.: IINRG/PMEC/IRC/July 2022

QUALITY AND PRODUCTIVITY IMPROVEMENT DIVISION						
Core Programme – I : Biodiversity conservation of lac insect and NRG yielding plants						
Sl. No.	Project No.	Title of the Project	Name of Investigators	% Time	Year of Start	Year of Completion
1.	1.1.070/2020 (Old1.1.072)	Collection, conservation, characterization and evaluation of lac insect/ host plant diversity	Dr. VD Lohot (PI) Dr. J Ghosh Dr. Thamilarasi K Dr. Achintya Pramanik	25 25 25 25	March, 2020	Of continuing nature
2.	1.1.082/2018 (Old1.1.070)	Taxonomic studies of lac insects (Hemiptera: Coccoidea: Tachardidae) and associated insect fauna Sub project Taxonomic studies on lac insect predators and host plant associated insects in <i>Kusum</i> and common <i>Ficus</i> species	Dr. Achintya Pramanik	25	June, 2018	Of continuing nature
Core Programme – II: Lac insect-host plant environment for improved quality and productivity						
3	1.1.088/2021	Study of physiological adaptations of <i>Kerria lacca</i> (Kerr) under moisture stress	Dr. Achintya Pramanik (PI) Mr. Sandeep Kumar	25 25	July, 2021	June, 2024
4	1.1.089/2021	In Vitro Production of Aleuritic Acid	Dr. Thamilarasi K (PI) Ms. Shruti Sinha Mr. Sandeep Kumar Dr. Preeti Srivastava (IIT Delhi)	25 25 25	May, 2021	April, 2024
5.	1.1.090/2021	Seed Deterioration and Amelioration strategies during Storage in <i>Flemingia semialata</i>	Dr. NK Sinha (PI) Dr. VD Lohot	25 25	August, 2021	July, 2024
7.	1.1.097/2022 (New)	Biochemical Characterization of Major <i>Kerria</i> genotypes for Aleuritic acid content	Mr Sandeep Kumar (PI) Dr Sujit Bishi, IIAB	25	April 2022	March 2025
8.	1.1.098/2022 (New)	Induced Mutations for Forward/Reverse Breeding for the Development of Novel <i>Semialata</i> (<i>Flemingia semialata</i>) 'SEMILLNRG'	Dr. J Ghosh (PI)	25	June 2022	June 2026

PRODUCTION AND EXTENSION MANAGEMENT DIVISION

Core Programme – III : Crop Production System Management and Evaluation

9.	1.1.084/2019 (Old1.1.069)	Agronomic interventions influencing lac production in <i>palas (Butea monosperma)</i> in summer season	Dr. S Ghosal (PI)	50	March, 2019	May, 2025	-
10.	1.2.058/2019 (Old1.1.071)	Lac Integrated Cropping System through Participatory Approach	Dr. S Ghosal (PI) Dr. NK Sinha	25 25	April, 2019	March, 2022 (Extension upto June 2022)	-
11.	1.2.091/2021	Estimation of water requirement and determination of growth-stage-specific crop coefficient (Kc) of <i>Flemingia semialata</i> Roxb."	Er. Pradosh Paramaguru (PI) Dr. S Ghosal Dr. Santosh S. Mali, FSRCHPR, Plandu	25 25	April, 2021	March, 2024	-
12.	1.2.092/2021	Characterization and management of sooty mold associated fungi in lac and documentation of other diseases of lac host plants	Dr. Rahul R. Bakade (PI)	25	April, 2021	March, 2024	Dr. Achintya Pramanik Dr. N Thombare
13.	1.2.099/2022 (New)	Management of inimical entomofauna of lac insect through organics and newer insecticidal molecules	Dr. Asish Kumar Rout (PI)	25	April 2022	March 2025	Dr. Rahul Bakade, Sc.

Core Programme – IV :Capacity Building, Technology Dissemination, Impact Assessment and Market Intelligence

14.	1.2.076/2017 (Old1.3.052)	Capacity building, skill development, extension education and information service on natural resins and gums	Dr. Nirmal Kumar (PI) Dr. Rahul R. Bakade Er. Pradosh Paramaguru Dr. Asish Kumar Rout	25 25 25 25	October, 2017	Of continuing nature	-
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APPLICATION & PRODUCT DEVELOPMENT (APD) DIVISION

Core Programme – V : Synthesis, Process Development and Quality Management

15.	1.3.093/2021	Synthesis of <i>Terminalia bellirica</i> exudate gum hydrogel-metal nanoparticle composite materials for evaluation in drug release	Dr. SKS Yadav (PI) Dr. Ch. Jamkhokai M	50 25	August, 2021	July, 2023	
16.	1.3.094/2021	Synthesis of Gum Arabic based Hydrogel for remediation of dye contaminated water	Dr. Ch. Jamkhokai M (PI) Dr. SKS Yadav	30 25	April, 2021	March, 2024	Dr. N Thombare Dr. Arnab R. Chowdhury
17.	1.3.095/2021	Synthesis of rosin derivative for its use as tackifier	Dr. M F Ansari (PI)	25	April, 2021	March, 2023	Dr. Arnab R. Chowdhury

18.	1.3.100/2022 (New)	A study on various techniques for identification commercially important natural gums	Dr. Nandkishore (PI) Dr. A R Chowdhury Dr. MF Ansari	25 25 25	April, 2022	March, 2025
Core Programme – VI : Value Addition and Product Development						
20.	1.3.086/2019 (Old1.2.075)	Study on natural gum based dietary fibre as encapsulant for delivery of functional feed	Dr. AR Chowdhury (PI) Shri Ch. Jamkhokai Mate Dr. Biplab Sarkar, ICAR-IIAB	30 25 -	September 2019	August, 2022
MECHANIZATION AND PROCESS ENGINEERING (MPE) DIVISION						
Core Programme – VII : Designing and development of farm tools and processing machineries						
21.	1.4.073/2017 (Old1.2.070)	Development of pilot plant of guar gum derivative for training and demonstration	Dr. S. C. Sharma (PI) Dr. N. Prasad Er. S. K. Pandey Dr. S K Giri, CIAE, Bhopal	25 25 25	April, 2017	March, 2022 (Extension upto March 2023)
22.	1.4.101/2022 (New)	Development of Refractance Window Dryer for Gum based Hydrogels	Dr. Sakharan Kale (PI) Dr. Nandkishore Thombare	25 25	April 2022	March 2025
23.	1.4.102/2022 (New)	Development of Extrusion based Mechanized System for Hot filtration of Seedlac	Dr. Sakharan Kale (PI) Dr. S. C. Sharma	35 25	April 2022	March 2025
Core Programme – VIII : Process refinement, commercialization and entrepreneurship development						
24.	1.4.103/2022	Standardization of sealing lac/wax preparation and process mechanization	Er. S. K. Pandey (PI)	25	April 2022	March 2024
						Dr. S. C. Sharma Dr. N. Prasad, PS

ICAR-Network Projects						
20.	3.4.026/2009 (Old3.2.026)	Network project on Harvesting, Processing and Value Addition of Natural Resins and Gums (ICAR)	Dr. N Prasad (PC & PI) Dr. A. R. Chowdhury Dr. S. C. Sharma Er. S. K. Pandey	25 25 25 25	February, 2009	March, 2026 Dr. Nandkishore Thombare Dr. VD Lohot
21.	3.1.055/2014 (Old3.1.054)	Network project on Conservation of Lac Insect Genetic Resources (ICAR)	Dr. KK Sharma (PC & PI) Dr. VD Lohot Dr. Thamilarasi K	25 25 25	August, 2014	March, 2026 -
KVK, Khunti, Ranchi						
22.	4.2.087/2020	Evaluation and dissemination of agricultural technologies for sustainable livelihood in tribal region	Dr. Jyotirmoy Ghosh (PI) Dr. N K Sinha Dr. VD Lohot Dr. SC Sharma Dr. Rahul Bakade Dr. Ashish K Rout Er. Pradosh K	25 10 10 10 25 25 25	July, 2020	June, 2025 Dr. Nirmal Kumar
Agri-Business Incubation						
23.	Institute Activity	Agri-Business Incubation under Component-II of NAIF Scheme of ICAR	Er. SK Pandey (PI) Dr. SC Sharma	25 25	April, 2019	Continuous in nature
Inter-Institutional Projects						
1. ICAR-IINRG, Ranchi & ICAR-IIAB, Ranchi						
1.		Development and evaluation of the efficacy of novel nanoparticles for enhancing yield in rice and Indian major carp	Dr. AR Chowdhury, Co-PI	25	August, 2016	July, 2021 -
2. ICAR-IINRG, Ranchi & ICAR-RCER Farming System Research Centre for Hill and Plateau Region, Plandu, Ranchi						
2.		Enhancing food, nutritional and livelihood security of marginal and small farmers in Jharkhand through need based agricultural technologies	Dr. Nirmal Kumar, Co-PI	15	April, 2018	March, 2022 Dr. NK Sinha
3.		Development of technology for post harvest management for value addition of Jackfruit in Eastern region	Dr. Sakharan Kale Co-PI	15	January 2022	December 2024 -

4.	CRP on Secondary agriculture	Dr. AR Chowdhury Dr. Nandkishore Thombare						
Externally Funded Project								
1.	Design and development of portable device for estimation of life and color index of lac samples NABARD sponsored	Dr. Nandkishore Thombare (PI)	25	April 2022	March 2024			Dr. MF Ansari
2.	Aflatoxin management in spices: Development of preventive methods	Dr M F Ansari	25	December 2020	December 2022			

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

Shree
06/7/22
(VD Lohot)
I/c, PMEC

KK Sharma
8/7/22
(KK Sharma)
Director & Chairman IRC

Explanation for coding of the Project Nos.

- i. First number indicate the category of the project (1) Institute (2) Externally funded (3) Network Project (4) KVK
- ii. Second number indicate the Division (1) QPI (2) PEM (3) APD (4) MPE
- iii. Third number will indicate the project number
- iv. Year: Project Starting Year

For example **1.1.070/Year**

