

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

**LIST OF APPROVED RESEARCH PROJECTS FOR THE YEAR - 2008-2009**

<b>Core Program – I : Insect Improvement</b>				
<b>Project No.</b>	<b>Title of the Project</b>	<b>Name of Investigators/ % of time devoted</b>	<b>Year of start</b>	<b>Year of completion</b>
I.I.1	Collection, conservation, characterization and documentation of lac insect bio-diversity	Dr K. K. Sharma (25%). Sri R. Ramani (10%) Md. Monobrullah (20%)	2007-08	Long term project
I.I.2	Field evaluation of promising lac insect races, lines and breeds for higher productivity and superior performance	Md. Monobrullah (50%) Dr. K.K. Sharma (25%) Dr. R. Ramani (10%) Sri. Y. D. Mishra (20%)	2007-08	Oct., 2011
<b>Core Program – II : Host Improvement</b>				
I.II.1	Collection, conservation, characterization and documentation of lac host bio-diversity	Sri. S.C. Srivastava (60%) Sri Y.D. Mishra (10%) Dr D. Saha (30%) Dr. S. Ghosal (10%)	2007-08	Long Term Project
I.II.2	Host plant evaluation and improvement for lac productivity and summer sustainability.	Dr R. Ramani (15%) Sri Y.D. Mishra (20%) Sri S.C. Srivastava (30%)	2007-08	Oct., 2013
I.II.3	Clonal propagation of <i>Schleichera oleosa (kusum)</i> , a major lac host plant through tissue culture	Dr D. Saha (50%) Sri Y.D. Mishra (5%)	2007-08	March, 2010

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**Core Program – III : Crop Production**

<b>I.III.1</b>	Studies on <i>in-situ</i> moisture conservation techniques for raising mixed plantation of <i>ber</i> and <i>kusum</i>	Sri. R.K. Singh (50%) Dr. B.P. Singh (15%)	2005 - 2006	March, 2009
<b>I.III.2</b>	Development of <i>Kusmi</i> lac cultivation technology on <i>Albizia procera</i> ( <i>Siris</i> )	Dr. A.K. Jaiswal (15%) Dr. A. Bhattacharya (10%)	June, 2006	March, 2011
<b>I.III.3</b>	Collection, identification and assessment of the diseases of commercial lac hosts	Dr. A.K. Singh (30%)	July, 2007	June, 2009
<b>I.III.4</b>	Management of sooty mould, causing lac insect death and failure of lac crop	Dr. A.K. Singh (30%)	July, 2007	June, 2010
<b>I.III.5</b>	Soil fertility management of <i>ber</i> ( <i>Z. mauritiana</i> ) for shoot growth and lac yield ( <i>aghani</i> )	Dr. S. Ghosal, Scientist (50%) Sri Y.D. Mishra (10%)	2007-08	March, 2010
<b>I.III.6</b>	Production of quality broodlac on kusum and palas at different agro-climatic region (RFS)	Dr. K.K. Sharma, (5%)	2006	Long term
<b>I.III.7</b>	Evaluation of potential herbicides for weed management in <i>semialata</i> & <i>ber</i> plantation	Dr. B.P. Singh, PI (50%) Dr. A.K. Singh (10%) Sri Y.D. Mishra (10%) Dr. S. Ghoshal (10%)	2008-09	March, 2010
<b>Ex. III.1</b>	Development of lac production system using high density <i>ber</i> plantation under semi protected conditions ( NABARD sponsored)	Dr R. Ramani (20%) Dr. K.K. Sharma (10%) Dr. B.P. Singh (10%)	June, 2006	May, 2009

**Core Program –IV : Synthesis and product development**

<b>Project No.</b>	<b>Title of the Project</b>	<b>Name of Investigators</b>	<b>Year of start</b>	<b>Year of completion</b>
I.IV.3	Synthesis of thiosemicarbazide & thiazole from aleuritic acid and testing its activity as antifungal/hypoglycemic/antinemic	Dr. Divya (50%) Dr. S. Srivastava (10%) Dr. B.K. Rai (BAU, Kanke)	Sept., 2007	Sept., 2010
I.IV.4	Comparative evaluation of physico-chemical anti-inflammatory and hypolipidemic properties of oleo gum- resins from <i>Boswellia serrata</i> , <i>Commiphora mukul</i> and <i>Commiphora wightii</i>	Dr (Ms) M.Z. Siddiqui, (60%)  Dr.(Mrs.) Papiya Mitra Mazumdar, (BIT, MESRA)	April, 2008	April 2010
I.IV.5	Synthesis of hydrogel from gum acacia and gum karaya for their comparative evaluation in drug release	Shri S.K. S. Yadav (50%) Dr. S. Srivastava (25%) Dr. R. K. Dey (BIT)	April, 2008	March, 2011
I.IV.6	Screening of Bioactive compound synthesized from aleuritic acid	Dr. R.N. Majeed (100%) Dr. S. Srivastava (30%) Dr. Divya (30%)	June, 2008	May, 2009

<b>Core Program – V: Surface Coating and Use Diversification.</b>				
<b>Project No.</b>	<b>Title of the Project</b>	<b>Name of Investigators</b>	<b>Year of start</b>	<b>Year of completion</b>
I.V.1	Development of surface coating formulation based on shellac synthetic resin/polymer blends	Sri M.F. Ansari (40%) Dr. Bangali Baboo (10%)	2007-08	March, 2010
I.V.2	Documentation & characterization of physico-chemical properties of plant based gums of commercial importance	Dr. K.P. Sao (65%)	2007-08	March, 2010
I.V.3	Preparation & market evaluation of Heat & water proof shellac varnishes for wooden surfaces & air drying type shellac based glazing varnishes	Dr. (Ms) M.Z. Siddiqui (40%) Dr. M. Prasad (10%)	2007-08	March, 2009
I.V.4	Comparative performance of water soluble lac varnishes and their keeping quality by using different alkalis	Sri P.M. Patil (75%) Dr. K.M. Prasad (10%)	2006-07	Sept., 2008
<b>Core Program – VI: Processing and Storage</b>				
I.VI.2	Storage loss assessment for lac and lac based products	Dr. S.K. Giri (40%) Dr. B. Baboo (10%) Shri M.F. Ansari (25%)	2006-2007	Dec., 2008
I.VI.3	Establishment of commercially viable plant for aleuritic acid for training, demonstration & process refinement.	Er. S.K. Giri (30%) Er. S.K. Pandey (25%) Er. M. Prasad (20%)	2006-07	June, 2009

I.VI.4	Design and development of Seedlac dryer	Dr. (Er.) N. Prasad (50%) Shri S.K. Pandey (25%) Dr. K.K. Singh, Sr. Scientist, CIPHET, Ludhiana (25%)	June, 2006	June, 2008
I.VI.5	Establishment of pilot plant for Dewaxed bleached lac (40 Kg cap.) for training demonstration & process refinement	Dr. M. Prasad (40%) Dr. K.M. Prasad (20%) Dr. S.K. Pandey (25%)	2007-08	March, 2010
<b>Core Program – VII: HRD (Human Resource Development)</b>				
<b>Project No.</b>	<b>Title of the Project</b>	<b>Name of Investigators</b>	<b>Year of start</b>	<b>Year of completion</b>
I.VII.1	Training, demonstration, extension education and information service on lac culture, processing and product development	Dr. A.K. Jaiswal (40%) Dr. N. Prasad (25%) Dr. J.P. Singh (25%) Dr. G. Pal (20%)	1998-1999	Long term project
Ex.VII.1	Enhancing livelihood options for poor tribal families of the JHARKHAND state through capacity building in cultivation of lac and its value addition (JLDS)	Dr. K.K. Sharma, PI (25%) Dr R. Ramani (5%) Dr. A.K. Jaiswal (5%) Dr. Bangali Baboo, Programme coordinator	January, 2006	December, 2009
Ex. VII.2	Skill development and capacity building in lac culture through training and demonstration in Gujarat. (Gujarat Govt. project)	Sri. Y.D. Mishra (20%) Sri R. K. Singh (15%) Dy. C.F. (Research), Gujarat-Co-PI	July 2004	June 2008

Ex. VII.3	Developing sustainable farming system models for prioritized micro water shed in rainfed area in Jharkhand under component 3 : sustainable rural livelihood security (SRLS) of National Agricultural Innovation Project (NAIP)	Dr. A.K.Jaiswal (10%) Dr. N. Prasad (10%)	2007-08	March, 2012
<b>Core Program -VIII: Technology Assessment, refinement and dissemination</b>				
I.VIII.1	Evaluation of some newer insecticides & bio pesticides for eco-friendly management of insect pests associated with lac insect & host plants	Dr. J.P. Singh (50%) Dr. A.K. Jaiswal (20%) Md.Monobrullah (20%)	2007-08	March, 2011
<b>Core Program -IX: Liaison, information and Advisory Service</b>				
I.IX.1	Informatics on lac production and processing	Dr. G. Pal (60%) Dr. A. Bhattacharya (10%) Dr. A.K. Jaiswal (10%)	June, 2006	March, 2009
I.IX.2	Strengthening, liaison, information & advisory services on natural resins & gums	Dr. A. Bhattacharya (20%) Dr. J.P. Singh (20%) Dr. K.M. Prasad (30%) Dr. S.K. Giri (15%) Dr. G. Pal (20%)	2007-08	March, 2010

Note: 1. Institute funded project; EX: Externally funded project.

2. The scientist listed at serial no.-1 against each project would act as the Project Leader (Principal investigator)/ PI, and at

16/6/08  
(A.K. Jaiswal)  
i/c, RMU

Bangali Baboo  
16.6.08  
(Bangali Baboo)  
Director & Chairman SRC