

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

LIST OF APPROVED RESEARCH PROJECTS FOR THE YEAR 2009-2010

12/09/09

Core Program - I : Insect Improvement				
Project No.	Title of the Project	Name of Investigators/ % of time devoted	Year of start	Year of completion
I.I.1	Collection, conservation, characterization and documentation of lac insect bio-diversity	Dr K. K. Sharma (20%) Sri R. Ramani (10%) Md. Monobrullah (10%)	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 (15%) Dr. R. Ramani (05%) Sri. Y.D. Mishra (20%) up to 31.8.2009	2007-08	Oct., 2011
I.I.3	In Vitro culturing of lac insect cells	Dr. Thamilarasi, K (70%) Mr. Annes, K. (15%)	2009-10	August, 2012
Ex.I.1	To understand the nature of diversity in lac insects of <i>Kerria spp.</i> in India and the nature of insect x host interaction (NAIP)	Dr. R. Ramani (20%) Dr. K. K. Sharma (20%) Dr. D. Saha (30%) Mr. Anees K. (25%)	January, 2009	March, 2012
Core Program - II : Host Improvement				
I.II.1	Collection, conservation, characterization and documentation of lac host bio-diversity	Sri. S.C. Srivastava (60%) Sri Y.D. Mishra (10%) up to 31.8.2009 Dr D. Saha (25%) Dr. S. Ghosal (5%)	2007-08	Long Term Project
I.II.2	Host plant evaluation and improvement for lac productivity and summer sustainability.	Dr R. Ramani (10%) Sri Y.D. Mishra (20%) up to 31.8.2009 Sri S.C. Srivastava (20%)	2007-08	Oct., 2013

31/08/10

I.III.3	Clonal propagation of <i>Schleichera oleosa</i> (<i>kusum</i>), a major lac host plant through tissue culture	Dr D. Saha (45%) Sri Y.D. Mishra (5%) up to 31.8.2009	2007-08	March, 2010
---------	---	--	---------	-------------

Core Program – III : Crop Production

I.III.2	Development of <i>Kusmi</i> lac cultivation technology on <i>Albizia procera</i> (<i>Siris</i>)	Dr. A.K. Jaiswal (10%) Dr. A. Bhattacharya (10%)	June, 2006	November, 2010
I.III.3	Collection, identification and assessment of the diseases of commercial lac hosts	Dr. A.K. Singh (30%)	July, 2007	June, 2009
I.III.4	Management of sooty mould, causing lac insect death and failure of lac crop	Dr. A.K. Singh (50%)	July, 2007	June, 2010
I.III.5	Soil fertility management of <i>ber</i> (<i>Z. mauritiana</i>) for shoot growth and lac yield (<i>aghani</i>)	Dr. S. Ghosal, (50%) Sri Y.D. Mishra (10%) up to 31.8.2009	2007-08	March, 2010
I.III.6	Production of quality <i>kusmi</i> broodlac at Institute Research Farm (RFS)	Dr. K.K. Sharma, (5%)	2006	Long term
I.III.7	Evaluation of potential herbicides for weed management in <i>semialata</i> & <i>ber</i> plantation	Dr. B.P. Singh, (40%) Dr. A.K. Singh (20%) Sri Y.D. Mishra (10%) up to 31.8.2009 Dr. S. Ghoshal (5%)	2008-09	March, 2010
I.III.8	<i>Rangeeni</i> lac insect survival on <i>ber</i> and <i>palas</i> in relation to season, physiology of host plant and soil moisture stress: a biochemical approach from host plant perspective	Mr. Anees K. (50%) Dr. Md. Monobrullah (10%)	January 2009	December 2011

Ex. III.1	Development of lac production system using high density <i>ber</i> plantation under semi protected conditions (NABARD sponsored)	Dr R. Ramani (15%) Dr. K.K. Sharma (10%) Dr. B.P. Singh (10%)	June, 2006	May, 2009
Ex. III.2	Production of summer <i>kusmi</i> broodlac on <i>kusum</i> for promotion of lac cultivation in Gujarat with farmer's participation. (Forest Department Silva Division Gujarat)	Shri R. K. Singh (45%) Shri Y.D. Mishra (25%) up to August 31, 2009	March, 2009	February, 2011

Core Program –IV : Synthesis and product development

Project No.	Title of the Project	Name of Investigators	Year of start	Year of completion
I.IV.3	Synthesis of thiosemicarbazide & thiazole from aleuritic acid and testing its activity an 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. Majee (100%) Dr. S. Srivastava (30%) Dr. Divya (30%)	June, 2008	September, 2009

Core Program – V: Surface Coating and Use Diversification.

Project No.	Title of the Project	Name of Investigators	Year of start	Year of completion
I.V.1	Development of surface coating formulation based on shellac synthetic resin/polymer blends	Sri M.F. Ansari (50%) 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 (75%)	2007-08	December 2009
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 (25%) Dr. M. Prasad (10%)	2007-08	July, 2010

Core Program – VI : Processing and Storage

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	September, 2009
I.VI.5	Establishment of pilot plant for Dewaxed bleached lac (40 Kg cap.) for training demonstration & process refinement	Er. M. Prasad (20%) Dr. K.M. Prasad (20%) Dr. S.K. Pandey (25%)	July, 2007	September, 2009

Core Program – VII: HRD (Human Resource Development)

Project No.	Title of the Project	Name of Investigators	Year of start	Year of completion
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 (20%) 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 (20%) Dr R. Ramani (5%) Dr. A.K. Jaiswal (5%) Dr. Bangali Baboo, Programme coordinator	January, 2006	December, 2009
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
Ex.VII.4	Improving rural livelihood security through sustainable integrated farming system model and allied enterprises in Baster region of Chattatisgarh (NAIP)	Dr. A.K. Jaiswal (10%)	June, 08	May, 2012
Ex.VII.5	A value chain on lac and lac based products for domestic and export markets. (NAIP)	Dr. N. Prasad (35%) Dr. S. Srivastava (15%) Dr. S. K. Pandey (50%) Dr. S. K. Giri (30%) Dr. S. Ghosal (20%) Dr. G. Pal (30%)	January, 09	May, 2012

Core Program - VIII: Technology Assessment, refinement and dissemination

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 (10%)	2007-08	March, 2011
Ex.VIII.1	Lac based agro forestry in Bundeikhand region: introduction & evaluation. (NRCAF Collaborative Project) (AF 05.10)	Dr. S. Ghosal (5%) Dr. Md. Monobrullah (5%)	July, 2008	December, 2010

Ex.VIII.2	Study and documentation of cultivation & processing of lac in Chhattisgarh & market survey on lac based products (MFP Chhattisgarh Govt.)	Dr. G. Pal (30%)	January, 09	May, 2011
Core Program -IX: Liaison, information and Advisory Service				
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 (10%) Dr. S.K. Giri (10%) Dr. G. Pal (20%)	2007-08	March, 2010
Ex.IX.1	Network project on harvesting, processing and value addition of natural resin and gums (ICAR)	Dr. N. Prasad (35%) Dr. M.Z. Siddiqui (15%) Mr. M.F. Ansari (15%) Mr. S.K.S. Yadav (20%) Dr. S. Srivastava (15%) Dr. S. K. Giri (20%) Dr. Divya (20%)	February, 09	January, 2012
Exploratory trial	Effect of drip irrigation on <i>F. semialata</i> and pitcher irrigation on ber on growth and kusmi lac production	Mr. R. K. Singh (25%)	January, 09	December, 2012

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 SI.No. 2 as Co P.I.

Recd 3.10.09.
(A.K. Jaiswal)
I/C RMU

Bangali Baboo
3.10.09
(Bangali Baboo)
Director & Chairman IRC