

**PROCEEDINGS OF 27th SCIENTISTS MEET ON FORESTRY, BIOFUEL &
SERICULTURE - 2017, HELD AT TAMIL NADU AGRICULTURAL
UNIVERSITY, COIMBATORE, ON 18.5.2017 AND 19.5.2017**

The 27th Scientists meet on Forestry, Biofuel and Sericulture 2017, was held on 18.5.2017 and 19.5.2017 at the University Seminar hall, Tamil Nadu Agricultural University, Coimbatore, with a view to review the ongoing research projects in Forestry, Biofuel and Sericulture and to finalize the action plan for 2017-2019. A pre-review meeting was conducted on 18.5.2017 to review the ongoing research projects. Dr. K. K. Suresh, Dean, FC & RI, reviewed the progress of the research projects pertaining to forestry and biofuel and Dr. K. Ramaraju, Director, CPPS, reviewed the projects related to Sericulture.

On 19.5.2017, Dr. M. Maheswaran, Director of Research, TNAU, Coimbatore, welcomed the gathering and emphasized the importance of integrated approach in formulating research projects. Dr. C. R. Anandakumar, Registrar, TNAU, Coimbatore, offered his suggestions for streamlining the research projects based on the department perspective. Dr. K. K. Suresh, Dean, FC & RI, presented the action taken on the recommendations of the previous crop scientist meet. Research highlights were presented by Dr. K. Kumaran, Professor & Head, Department of Tree Breeding, Dr. A. Balasubramanian, Professor & Head, Department of Silviculture, Dr. K.T. Parthiban, Professor & Head, Department of Agroforestry and Nodal Officer (in-charge), Centre of Excellence in Biofuels, and Dr. R. Revathi, Professor & Head, Department of Forest Products & Utilization. Action plan for 2017-2019 was presented by Dr. K. K. Suresh, Dean, FC & RI for Forestry. Dr. K. Angappan, Professor (Sericulture) presented the research highlights and action plan for 2017-2019 for Sericulture. Dr. M. Maheswaran, Director of Research, TNAU, Coimbatore, proposed the vote of thanks and suggested that research on invasive species to be strengthened; Further, he added that importance should be given for basic research related to indigenous tree species and suggested that a catalogue of all available tree species should be prepared for all campus other than FC & RI.

Proceedings of 27th Scientists Meet on Forestry, Biofuel and Sericulture - 2017, are presented in the following order.

- 1) Staff Pattern
- 2) Remarks on the individual University Research Projects
- 3) Action Plan: 2017-2019
- 4) Work load of each scientist (Theme wise)

Staff Pattern of Forestry

Station	Designation	Discipline															Total			
		F OR	P BG	A GR	S ST	E NT	P AT	Mi cro	E NS	S	E X T	N E M	E co	A R M	F P E	A H		M A t	T A m	S T A T
FC&RI, Mettupalayam	Professor	6	-	1	1															8
	Asst. Professor		-			1		-	1											2
	Asst. Professor	6	2	1	-	1	1	1	-	1	1	1	1	1	1	1	1	1	1	22
Out stations																				
AC&RI, Coimbatore	Professor	1																		1
AC&RI, Madurai	Asst. Professor	1																		1
AC&RI, Kudumiyamalai	Asst. Professor	1																		1
AC&RI Killikulam	Asst. Professor	1																		1
AC&RI, Vazhavachanallur	Asst. Professor	1																		1
AC&RI, Echenkottai	Asst. Professor	1																		1
AC&RI, Athianthal	Asst. Professor	1																		1
DARS, Chettinad	Asst. Professor	1																		1
Total																			40	

Staff Pattern of Sericulture

Station	Designation	ENT	PAT	ECO	SER	AGR	SS	CRP	EX T	Total
FC&RI, Mettupalayam	Professor	2	1	1	-	-	-	-		4
	Asst. Professor	-	-	-	1	-	-	-		1
	Asst. Professor	-	-	-	4	1	1	1	1	8
Total										13

I. DEPARTMENT OF TREE BREEDING

1. Staff Pattern

S. No.	Name	Designation
1	Dr.K.Kumaran	Professor and Head
2	Dr. M.K.Shivaa	Professor (Forestry)
3	Dr. P.R. Renganayaki	Professor (Seed Science and Technology)
4	Dr. P.S.Devanand	Assistant Professor (Plant Breeding and Genetics)
5	Tmt. S.Sridevy	Assistant Professor (Computer Science)
6	Dr. M.Umadevi	Assistant Professor (Plant Breeding and Genetics)
7	Dr.P.G.Kavitha	Assistant Professor (Plant Nematology)
8	Dr. S.Venilla	Assistant Professor (Forestry)

II. Remarks on the ongoing University Research Project

S. No.	Project Number	Remarks
Externally Funded Projects		
1.	TANII/ FCRI/ MTP/DTB/ 2016/ R004 Promotion, commercialization, post-harvest processing and industrial application of Annatto (<i>Bixa orellena</i> L.) as a source of natural dye (PI: Dr.K.Kumaran)	The Project may be continued
2.	EID/FCRI/MTP/DTB/2017/R005 Screening of neem genetic resource for higher azadirachtin content, establishment of field gene bank and industrial plantations (PI: Dr.K.Kumaran)	The Project may be continued
University Research Projects		
3.	SEED/MTP/SST/2016/001: Studies on seed germination enhancement in <i>Pterocarpus santalinus</i> – red sanders (Dr.P.R.Renganayaki)	The project is completed and the completion report to be sent to the Director of Research, TNAU, Coimbatore for approval. New project may be proposed

4.	FCRI/MTP/FOR/2015/002: Establishment of an arboretum of rare and characteristic species of Western Ghats	The project may be continued. As the existing project leader Dr.S.UmeshKanna was transferred, the new project leader will be identified
5.	CPBG/MTP/PBG/2016/001: Evolving and genetic characterization of thorn less <i>Caesalpinia sappan</i> through mutation breeding (Dr.P.S.Devanand)	The project may be closed as the M ₁ progenies expressed thorns. A new project may be proposed for assemblage and evaluation of <i>Caesalpinia sappan</i>
6.	CPBG/MTP/PBG/2017/001: Studies on reproductive biology of Annatto (<i>Bixa orellana</i> L.) (Dr. M.Umadevi)	The project may be continued
7.	CPPS/MTP/NEM/2017/001: Characterization of host suitability of Annatto, (<i>Bixa orallana</i> L.) to plant-parasitic nematodes (Dr.P.G.Kavitha)	The project may be continued
8.	AECRI/MTP/COM/2016/001 Forest College and Research Institute Education Management Information System (Tmt.S.Sridevy)	The project may be continued

II. Entries for variety release/ ART/ MLT evaluation: MTP Bixa 1 (KABi 8)

III. Theme wise future action plan (from 2017 – 2019)

Theme 1: Collection and Assemblage of the germplasm of prioritized tree species

Theme 2: Reproductive biology studies in the identified tree species

Theme 3: Genetic Improvement and Varietal Development in *Bixa orellana*

Theme 4: Development of minimum certification standards and propagation protocol for mass multiplication

Theme 1		Collection and Assemblage of the germplasm of prioritized tree species			
Theme Leader		Dr.K.Kumaran, Professor and Head, Department of Tree Breeding, FC&RI, Mettupalayam			
Ongoing projects		1. FCRI/MTP/FOR/2015/002 (URP) 2. TANII/ FCRI/ MTP/DTB/ 2016/ R004 (Externally funded) 3. EID/FCRI/MTP/DTB/2017/R005 (Externally funded) 4. CPBG/MTP/PBG/2016/001 (URP) 5. AICRP/FOR/MTP/FOR/002			
S. No.	Activity	Name of the Scientist and Centre	2017 - 18	2018 - 19	Expected outcome
1	Collection and Assemblage of germplasm	Dr.K.Kumaran FC & RI, Mettupalayam	Collection and assemblage of germplasm of <i>1.Bixa orellana</i> <i>2. Azadirachta indica</i>	Establishment of Progeny Evaluation Trials in <i>1.Bixa orellana</i> <i>2. Azadirachta indica</i>	Field gene bank of Annatto with high bixin Field gene bank of Neem with high oil and azadirachtin
2		Dr.P.S.Devanand FC & RI, Mettupalayam	Collection and assemblage of germplasm of <i>1.Caesalpinia sappan</i> <i>2. Amaranthus spp</i>	Establishment of Progeny Evaluation Trials in <i>1.Caesalpinia sappan</i> <i>2. Amaranthus spp</i>	Field Gene Bank of <i>Caesalpinia sappan</i> and seed bank of <i>Amaranthus spp.</i>
3		Dr.S.Umeshkanna AC&RI, Madurai	Collection and assemblage of germplasm of <i>1.Azadirachta indica</i> <i>2. Caesalpinia sappan</i>	Collection and assemblage of germplasm of <i>1.Azadirachta indica</i> <i>2. Caesalpiniasappan</i>	Contribution to the collection of germplasm in the identified species
4		Dr.P.Rajendran AC&RI, Kudumiyamalai	Collection and assemblage of germplasm of <i>1.Azadirachta indica</i>	Collection and assemblage of germplasm of <i>1. Pterocarpus marsupium</i>	Contribution to the collection of germplasm in the identified species

5		Dr.P.Kumar AC&RI Killikulam	Collection and assemblage of germplasm of <i>1.Azadirachta indica</i> <i>2. Pterocarpus marsupium</i>	Establishment of Progeny Evaluation Trials in <i>1.Bixa orellana</i> <i>2. Pterocarpus marsupium</i>	Establishment of field gene bank of <i>Bixa orellana</i> & <i>Pterocarpus smarsupium</i>
6		Dr.M.Kiruba AC&RI Vzhavachanallur	Collection and assemblage of germplasm of <i>1.Bixa orellana</i> <i>2. Azadirachta indica</i>	Establishment of Progeny Evaluation Trials in <i>Bixa orellana</i>	Field gene bank of Annatto with high bixin
7		Dr.P.G.Kavitha FC & RI, Mettupalayam	Screening of assembled germplasm for nematodes	Development of management practices for the dominant nematodes	Nematode free germplasm of assembled species
8		S.Sridevy FC & RI, Mettupalayam	Development database modules for documentation of the assembled germplasm	Development web/mobile app for database of assembled germplasm	Digital documentation of all the assembled germplasm

Theme 2		Reproductive biology studies in the identified tree species			
Theme Leader		Dr.M.Umadevi			
Project No.		CPBG/MTP/PBG/2017/001(URP)			
S. No.	Activity	Name of the Scientist and Centre	2017 - 2018	2018 - 2019	Expected outcome
1.	Floral and reproductive biology of <i>Bixa orellana</i> , <i>Kigelia pinnata</i> and <i>Azadirachta indica</i>	Dr.M.Umadevi FC&RI, Mettupalayam	Observation on different floral and reproductive characters	Phenological and maturation studies	Basic information of the reproductive behavior of the identified species

2.	E-documentation of the phenology and reproductive systems of the identified species	Tmt. S.Sridevy FC & RI, Mettupalayam	Development database modules for documentation of the floral and reproductive characters	Development web/mobile app for database of floral and reproductive characters	E-documentation of all the floral and reproductive characters
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Theme 3		Genetic Improvement and Varietal Development in <i>Bixa orellana</i>			
Theme Leader		Dr.K.Kumaran			
Project No.		TANII/ FCRI/ MTP/DTB/ 2016/ R004 (Externally funded)			
S. No.	Activity	Name of the Scientist and centre	2017 - 18	2018 - 19	Expected outcome
1.	Varietal development in Annatto(<i>Bixa orellana</i>)	Dr.K.Kumaran FC & RI, Mettupalayam	Establishing Multi Location Trials for progeny evaluation	Continuation of Multi Location Trials for varietal identification	A promising variety with higher bixin content will be screened and released
		Dr.S.Umeshkanna AC & RI, Madurai	Establishing Multi Location Trials for progeny evaluation	Continuation of Multi Location Trials for varietal identification	
		Dr. P. Kumar AC & RI, Killikulam	Progeny Evaluation of already established annatto germplasm	Continuation of Multi Location Trials for varietal identification	
		Dr. M. Kiruba AC & RI, Thanjavur	Establishing Multi Location Trials for progeny evaluation	Continuation of Multi Location Trials for varietal identification	
		Dr.P.G.Kavitha FC & RI, Mettupalayam	Screening of annatto for nematodes	Development of management practices for the dominant nematodes	Nematode free annatto variety

Theme 4	Development of minimum certification standards and propagation protocol for mass multiplication				
Theme Leader	Dr.P.R.Renganayaki				
Project No.	TANII/ FCRI/ MTP/DTB/ 2016/ R004 (Externally funded) EID/FCRI/MTP/DTB/2017/R005 (Externally funded)				
S. No.	Activity	Name of the Scientist and Centre	2017 - 18	2018 - 19	Expected outcome
1.	Development of seed and seedling standards for the identified species	Dr.P.R.Renganayaki FCRI, Mettupalayam	Developing Seed and seedling standards for <i>Bixa orellana</i> <i>Azadirachta indica</i> <i>Santalum album</i>	Developing Seed and seedling standards for <i>Bixa orellana</i> <i>Azadirachta indica</i> <i>Santalum album</i>	Minimum seed and seedlings certification standards for four species
2	Standardizing the clonal propagation protocol	Dr.S.Vennila FCRI, Mettupalayam	Standardizing vegetative (miniclinal) propagation for neem annatto	Standardizing vegetative (miniclinal) propagation for Red sanders and Sandal	Clonal propagation technique for mass multiplication

Theme wise work load (research) of the scientist and individual scientist work load (Teaching, Research, Student guidance and other activities)

Theme 1: Collection and Assemblage of the germplasm of prioritized tree species

Theme 2: Reproductive biology studies in the identified tree species

Theme 3: Genetic Improvement and Varietal Development in *Bixa orellana*

Theme 4: Development of minimum certification standards and propagation protocol for mass multiplication

S.No.	Name of the Scientist	Themes (man hours/ week)				Total
		1	2	3	4	
1	Dr.K.Kumaran	10	-	10	-	20
2	Dr. P.R. Renganayaki	-	-	-	15	15
3	Dr. Devanand	10	-	-	-	10
4	Dr. M.Umadevi	-	20	-	-	20
5	Dr.P.G.Kavitha	10	-	10	-	20
6	Dr. S.Vennilla	-	-	-	20	20
7.	Dr. S.Sridevy	10	10	-	-	20

Work load of individual scientists for 2017 – 18

S.No.	Scientists	% of time
1.	Dr. K.Kumaran	
	University Research Project (Theme area)	20
	Externally Funded Project (PI)	20
	Venture Capital Scheme	-
	Teaching	20
	Students guide	10
	Administration	20
	Additional Responsibility	10
2	Dr. P.R.Renganayaki	
	University Research Project and theme area	20
	Externally Funded Project (Co-PI)	15
	Venture Capital Scheme	-
	Teaching	20
	Students guide	20
	Administration	-
	Additional Responsibility	25

4	Dr. P.S.Devanand	
	University Research Project and Theme area	25
	Externally Funded Project – 3	30
	Venture Capital Scheme	20
	Teaching	20
	Students guide	5
	Administration	-
	Additional Responsibility	-
5	Dr. M.Umadevi	
	University Research Project and theme area	30
	Externally Funded Project – 2 (Co-PI)	20
	Venture Capital Scheme	-
	Teaching	25
	Students guide	5
	Administration	-
	Additional Responsibility	20
6	Dr. P.G.Kavitha	
	University Research Project – 1 and theme area	30
	Externally Funded Project – 2 (Co-PI)	30
	Venture Capital Scheme	-
	Teaching	10
	Students guide	5
	Administration	-
	Additional Responsibility	25
7	Dr. S.Vennilla	
	University Research Project – 1 and theme area	30
	Externally Funded Project	10
	Venture Capital Scheme	-
	Teaching	30
	Students guide	5
	Administration	-
	Additional Responsibility	25
8	Dr. S.Sridevy	
	University Research Project and theme area	30
	Externally Funded Project -1 (Co-PI)	10
	Venture Capital Scheme/Self supporting	20
	Teaching	10
	Students guide	5
	Administration	-
	Additional Responsibility	25

II. DEPARTMENT OF SILVICULTURE

1. Staff pattern of the Department

S. No.	Name	Designation
1	Dr. A. Balasubramanian	Professor and Head
2	Dr. K.K. Suresh	Professor (Forestry)
3	Dr. M. Suganthy	Associate Professor (Agrl.Entomology)
4	Dr. M. Prasanthrajan	Associate Professor (Envi. Sciences)
5	Dr. S. Radhakrishnan	Assistant Professor (Forestry)
6	Mrs. M. Vijayabhama	Assistant Professor (Statistics)
7	Dr. S. Manivasakan,	Assistant Professor (Forestry)
8	Dr. P. Chitra	Assistant Professor (V&AS)

2. Remarks on the ongoing Externally Funded Projects / University Research Project

a) Externally Funded Projects

S. No.	Title of the Externally Funded Projects	Project Leader	Remarks
1	Vision carbon neutral: A joint initiative for promotion of carbon neutral schools/institutions CII/FCRI/MTP/DOS/2013/R001	Dr. A. Balasubramanian	To project may be continued
2	ICAR fully funded project on harvesting, processing and value addition of natural resins and gums – Tamarind seed gum IINRG/FCRI/MTP/DOS/2014/R002	Dr. A. Balasubramanian	To project may be continued
3	Developing yield table for few fast growing tree species grown in farm settings TNFD/FCRI/MTP/DOS/2016/F36NF	Dr. A. Balasubramanian	To project may be continued
4	Utilization of treated domestic sewage water for wood production by afforesting fast growing species DoETN/FCRI/MTP/DOS/2014/R003	Dr. S. Radhakrishnan	To project may be continued

b) University Research Project

S. No.	Title of the URP	Project Leader	Remarks
1	Fertigation Scheduling - A Research Initiative for Commercial Cultivation of Trees NRM/MTP/SAC/2015/001	Dr.R.K.Kaleeswari	To project may be continued
2	Development of biofloating technology for the odour management in sewage water NRM/MTP/ENS/2016/001	Dr.M.Prasanthrajan	To project may be continued
3	Studies of water requirement of Red sanders (<i>Pterocarpus santalinus</i>) at early stages of growth FCRI/MTP/FOR/2017/001	Dr. S. Radhakrishnan	To project may be continued
4	Effect of different pruning intensities on growth performance of <i>Dalbergia sissoo</i> FCRI/MTP/FOR/2017/002	Dr.S.Manivasakan	To project may be continued

3. Entries for variety release/ART/MLT evaluation : Nil

4. Action plan for 2017-2019 on the identified themes :

Theme No. 1		Production Silviculture			
Projects		TNFD/FCRI/MTP/DOS/2016/F36NF NRM/MTP/SAC/2015/001 FCRI/MTP/FOR/2017/002			
Theme Leader		Dr. A.Balasubramanian			
S.No.	Activity	Name of the Scientist and centre along with man hours	Year 2017-18	Year 2018-19	Deliverables/ expected out come
1	Developing certification standards for producing quality planting stock	Dr. K.K.Suresh (15 h / week) Dr. P.R.Renganayagi (3 h / week) Dr. M.Sivaprakash (3 h / week) Dr. S.Manivasakan (5 h / week) Dr. B.Siva Kumar (3 h / week)	Seed standards Seedling and clonal standards	Standards for nursery	Certification standards for seeds, seedlings, clones and nursery will be developed for production of quality planting stocks
2	Developing micro irrigation and fertilizer schedule	Dr. R.K.Kaleeswari (3 h / week) Dr. S.Radhakrishnan (2 h / week) Dr. K.Sivakumar (3 h / week) Dr. M.Tilak (3 h / week)	Scheduling water requirement 100 % PE, 125 % PE and 150 % PE Biofertilizers and productivity assessment	Standardization of site specific fertigation schedule Soil test based fertigation levels Developing	Fertigation and irrigation schedules for intensive tree farming suitable to fast growing trees will be developed under high density and high input plantation for

				biofertilizers including liquid fertilizers for trees	higher productivity
3	Standardization of silvicultural operations	Dr. S.Manivasakan (5 h / week) Dr. M.Sivaprakash (3 h / week) Dr. R.Ravi (3 h / week) Dr.P.Chitra (15 h / week)	Spacing (HDSR techniques) Canopy management Root management	Thinning and Pruning	Silvicultural management practices suitable for intensive tree farming will be developed
4	Pest and disease management	Dr. K.Angappan (3 h / week) Dr. M.Suganthy (15 h / week) Dr. P.Rajendran (3 h / week) Dr. P.Pretheep Kumar (5 h / week) Dr. P.G.Kavitha (3 h / week)	Assessment of pest and disease surveillance Biological control of pest and diseases Promotion of entomophilous pollination in plantations	Integrated pest and disease management	Pest and disease surveillance monitoring system will be developed. Pest and disease management practices including IPM techniques will be standardized for tree plantations developed with precision silvicultural farming.
5	Yield assessment and developing yield tables	Dr. A.Balasubramanian	Growth assessment	Developing local yield tables and	Locality and species specific

		(10 h / week) Dr. S.Radhakrishnan (3 h / week) Tmt.M.Vijayabhama (5 h / week) Dr. S.Manivasakan (5 h / week) Dr. R.Ravikumar (3 h / week)	Volume estimation Yield assessment	yield models	yield table and yield model will be developed for common farm grown tree species.
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Theme No. 2	Conservation Silviculture				
Projects	FCRI/MTP/FOR/2017/001 IINRG/FCRI/MTP/DOS/2014/R002				
Theme Leader	Dr. S.Radhakrishnan				
S.No.	Activity	Name of the Scientist and centre along with man hours	Year 2017-18	Year 2018-19	Deliverables/ expected out come
1	Developing silvicultural practices for threatened and endangered species for mass planting	Dr.S.Radhakrishnan (3 h / week) Dr.M.Sivaprakash (3 h / week) Dr.P. Kumar (3 h / week)	Silvicultural practices for red sanders	Silvicultural practices for sandal	Silvicultural techniques will be standardized for important trees like sandal and red sanders
2	Documenting native species erosion in farm lands and community lands	Dr.S.Radhakrishnan (2 h / week) Dr.M.Sivaprakash (2 h / week)	Survey and Documentation of trees grown in farm lands of Tamil Nadu	Developing silvicultural techniques useful for species recovery and	Tree species that are being over exploited will be documented and specific

		Dr.R.Ravi (3 h / week)	Assessing the exploitation level of different farm grown trees	protection with respect to trees that are over exploited	management practices for the promotion of such species will be developed
3	Promoting mass planting through development of modern silvicultural practices	Dr.S.Umesh Kanna (3 h / week) Dr.S.Radhakrishnan (2 h / week) Dr.S.Manivasakan (5 h / week) Dr.R.Ravi (2 h / week)	Creating awareness on protection of over exploited and endangered species	Promoting mass planting of over exploited and endangered species by involving government and non governmental agencies	Mass planting programme will be effected through Government programme, Private - Public partnership approach
4	Developing tree gum garden	Dr.S.Radhakrishnan (3 h / week) Dr.M.Sivaprakash (3 h / week) Dr. M. Kiruba (3 h / week) Dr. B. Sivakumar (3 h / week)	Assembling trees of local importance having potential for gum yield	Tree gum garden will be developed	Potential trees that are suitable for gum extraction on commercial scale will be promoted

Theme No. 3	Trees and Pollution Abatement
Projects	CII/FCRI/MTP/DOS/2013/R001 DoETN/FCRI/MTP/DOS/2014/R003 NRM/MTP/ENS/2016/001
Theme Leader	Dr. M. Prasanthrajan

S.No.	Activity	Name of the Scientist and centre along with man hours	Year 2017-18	Year 2018-19	Deliverables/ expected out come
1	Screening of trees for pollution abatement	Dr. M. Prasanthrajan (15 h / week) Dr. S. Radhakrishnan (5 h / week) Dr. M.P. Sugumaran (3 h / week)	Screening of trees for pollution tolerance Real-time ambient air quality monitoring	Evaluation of trees for high carbon sequestration potential	Trees that are suitable for different pollution will be screened and recommended for planting at field level.

5. Workload of each Scientist (Theme wise)

Theme 1: Production Silviculture

Theme 2: Conservation Silviculture

Theme 3: Trees and pollution abatement

S. No.	Name of the scientist	Man hours / Week			
		Theme 1	Theme 2	Theme 3	Total
1	Dr. A. Balasubramanian	10	5	5	20
2	Dr. K.K. Suresh	15	-	-	15
3	Dr. M. Suganthi	15	-	-	15
4	Dr. M. Prasanthrajan	-	-	15	15
5	Dr. S. Radhakrishnan	5	10	5	20
6	Mrs. M. Vijayabhama	5	-	-	5
7	Dr. S. Manivasakan	10	5	-	15
8	Dr. P. Chitra	15	-	-	15

WORKLOAD OF SCIENTISTS - DEPARTMENT OF SILVICULTURE (2017-18)

S. No.	Scientists	Percentage of time
1	Dr. A. Balasubramanian	
	University Research Projects	-
	Teaching	25
	Students guidance	25
	Administration	30
	Other activities	20
2	Dr. K.K. Suresh	
	University Research Projects	20
	Teaching	30
	Students guidance	30
	Administration	-
	Other activities	20
3	Dr. M. Suganthi	
	University Research Projects	20
	Teaching	40
	Students guidance	20
	Administration	-
	Other activities	20
	Dr. M. Prasanthrajan	

4	University Research Projects	20
	Teaching	40
	Students guidance	20
	Administration	-
	Other activities	20
5	Dr. S. Radhakrishnan	
	University Research Projects	20
	Teaching	40
	Students guidance	20
	Administration	-
	Other activities	20
6	Mrs. M. Vijayabhama	
	University Research Projects	20
	Teaching	50
	Students guidance	20
	Administration	-
	Other activities	10
7	Dr. S. Manivasakan	
	University Research Projects	20
	Teaching	30
	Students guidance	20
	Administration	-
	Other activities	30
8	Dr. P. Chitra	
	University Research Projects	20
	Teaching	20
	Students guidance	10
	Administration	-
	Other activities	50

III. DEPARTMENT OF AGROFORESTRY

1. Staff pattern

S. No.	Name	Designation
1	Dr.K.T.Parthiban,	Professor and Head
2	Dr.P.Shanthi	Professor (Agronomy)
3	Dr.R.Jude Sudhagar	Assistant Professor (Forestry)
4	Dr.C.Cynthia Fernandaz	Assistant Professor (Agricultural Extension)
5	Dr. K.Sivakumar	Assistant Professor (SS&AC)
6	Dr.K.Ramah	Assistant Professor (Agronomy)
7	Dr.R.Ravikumar	Assistant Professor (Mathematics)
8	Dr.S.Sengottaiyan	Assistant Professor (Tamil)

2. Remarks on the ongoing externally funded / university research projects

Department of Agroforestry

S. No.	Scheme	Remarks
Externally funded projects		
1.	Ambiply - Inventory, Evaluation and Promotion of Genetic Resources of Tree Species amenable for plywood making in Tamil Nadu	The project may be continued
2.	TNPL - Screening evaluation and improvement of indigenous tree species for Coastal Agroforestry	The project may be continued
3.	ICAR Extramural - Development of High Yielding Short Rotation (HYSR) clones for Industrial Agroforestry	The project is completed and the completion report sent to the sponsoring agency. However the research trials may be continued by utilizing funds from other schemes to identify potential genotypes The already identified culture on <i>Melia</i> (MD 26) may be proposed for release during 2018 The miniclonal technology developed for <i>Melia</i> , <i>Kadam</i> and other species need to be documented through Technology Disclosure Application
4	AICRP on Agroforestry	The project may be continued

University Sub projects		
5.	Screening and evaluation of shade tolerant fodder crops in <i>Melia dubia</i> based silvipastoral system	The project may be continued
6.	Development of tree based farmer producer organization in the western zone of Tamil Nadu	The project may be continued
7.	Prediction and validation of <i>Melia dubia</i> using non linear mixed effect.	The project may be continued
8.	Consortium of Industrial Agroforestry	The project may be continued

3. Action plan (2017 – 2019)

Theme1 Development of High Yielding Short Rotation (HYSR) clones amenable for multifunctional agroforestry systems					
Theme Leader		Dr.K.T.Parthiban, Professor (Forestry)			
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2019	Deliverables / Expected outcome
1	Development of HYSR clones amenable for multifunctional Agroforestry systems	Dr.K.T.Parthiban, Professor (Forestry) (6 hr/week) Dr.P.S.Devanand AP (PBG) (4 hr/week) Dr.S.Vennila, AP (Forestry) (4 hr/week) Centre :FC&RI, MTP Dr.P.Rajendran ASP (Forestry) (4 hr/week) Centre : AC&RI, Kudumiyamalai	Inventory of new tree species Development of HYSR clones Development of mass multiplication technologies	Characterization for wood quality- Utility Development of DUS traits	Promising genotypes

Theme2	Design and development of agroforestry models				
Theme Leader	Dr.R.Jude Sudhagar, AP(Forestry)				
1	Design and development of Agroforestry models	<p>Dr.R.Jude Sudhagar, AP(Forestry) (6 hr/week)</p> <p>Dr.M.Murugesh Professor (Forestry) (4 hr/week) Centre : ADAC&RI, Trichy</p> <p>Dr.K.Ramah, AP (Agronomy) (6 hr/week) Centre : FC&RI, Mtp</p> <p>Dr.P.Kumar AP (Forestry) (4 hr/week) Centre : AC&RI, Killikulam</p> <p>Dr. M.Sivaprakash AP (Forestry) (4 hr/week) Centre : AC&RI, Kudumiyamalai</p>	<p>Timber based Agroforestry model</p> <p>Pulpwood based Agroforestry model</p> <p>Plywood based Agroforestry model</p> <p>Dendro biomass based Agroforestry model</p> <p>Non timber based Agroforestry model</p>	To be continued	Sustainable models suitable for farm lands
Theme 3	Tree fodder studies and development of concentrate feed				
Theme Leader	Dr.K.Sivakumar, AP(SS&AC)				
1	Tree fodder studies and development of concentrated feed	<p>Dr.K.Sivakumar AP(SS&AC) (6 hr/week) Centre : FCRI, Mettupalayam</p> <p>Dr.B.Siva Kumar, AP (Forestry)</p>	<p>Productivity studies</p> <p>Nutritional quality factors</p> <p>Anti-nutritional</p>	Development of feed concentrate	Identification of tree fodder species with high fodder productivity and quality suitable for

		(4 hr/week) Centre: CEM, Thiruvannamalai Dr.S.Umesh Kanna, ASP (Forestry) (4 hr/week) Centre : AC&RI, Madurai Dr.R.Jude Sudhagar, AP(Forestry) (4 hr/week) Dr.K.R.Ramesh, AP (Forestry) (4 hr/week) Centre : DARS, Chettinad Dr. Chitra, AP (Animal Husbandry) (4 hr/week) Centre : FCRI, Mettupalayam	factors Palatability studies		integration in agroforestry systems
Theme 4	Design and development of climate resilient agroforestry models				
Theme Leader	Dr.P.Shanthi, Professor (Agronomy)				
1	Design and developmen t of climate resilient agroforestry models	Dr.P.Shanthi, Professor (Agronomy) (6 hr/week) Dr.K.Ramah AP (Agronomy) (3 hr/week) Dr.M.Prasanthraja n, ASP (Env. Science) (3 hr/week)	Agrisilvicultur e model Silvihorticultu re model Silvipasture model Carbon sequestration studies Impact studies- soil and	Studies to be continued	Climate resilient agroforestry models will be developed

		Dr. K.Sivakumar AP (SS & AC) (4 hr/week) Dr.R.Ravi Kumar, AP(Maths) (4 hr/week) Centre : FCRI,Mtp	environment		
Theme 5	Impact studies (Productivity, Profitability, Socio-economic and Environmental impacts)				
Theme Leader	Dr.C.Cinthia Fernandez, AP (Agrl. Extension)				
1	Impact studies	Dr.C.Cinthia Fernandez, AP (Agrl. Extension) (6 hr/week) Dr. V.Karthick, AP (Agrl. Economics) (3 hr/week) Dr. P. Balaji, AP (ARM) (3 hr/week) Dr.S.Sengottaiyan AP (Tamil) FC&RI,MTP (3 hrs/week)	Productivity impact Profitability impact Socio-economic impact Environmental and social safeguard	To be continued	Agroforestry models with high impact on the profitability and socio-economic fronts

Load of each scientist (Themewise)

S.no	Name of the scientist	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Total
Manhours/week							
1	Dr.K.T.Parthiban, Professor (Forestry)	6	-	-	-	-	6
2	Dr.P.Shanthi, Professor (Agronomy)	-	-	-	6	-	6
3	Dr.R.Jude Sudhagar, AP(Forestry)	-	6	4	-	-	10
4	Dr.C.Cinthia Fernandez,	-	-	-	-	6	6

	AP (Agrl. Extension)						
5	Dr. K.Sivakumar AP (SS & AC)	-	-	6-	4	-	10
6	Dr.K.Ramah, AP (Agronomy)	-	6	-	3	-	9
7	Dr.R.Ravi kumar, AP(Maths)	-	-	-	4	-	4
8	Dr.S.Sengottayan, AP (Tamil)	-	-	-	-	3	3
9	Dr.P.Rajendran ASP (Forestry)	4	-	-	-	-	4
10	Dr.P.S.Devanand AP (PBG)	4	-	-	-	-	4
11	Dr.S.Vennila, AP (Forestry)	4	-	-	-	-	4
12	Dr.M.Murugesh Professor (Forestry)	-	4	-	-	-	4
13	Dr.P.Kumar AP (Forestry)	-	4	-	-	-	4
14	Dr. M.Sivaprakash, AP (Forestry)	-	4	-	-	-	4
15	Dr.S.Umesh Kanna, ASP (Forestry)	-	-	4	-	-	4
16	Dr.B.Siva Kumar, AP (Forestry)	-	-	4	--	-	4
17	Dr.K.R.Ramesh, AP (Forestry)	-	-	4	-	-	4
18	Dr.P.Chitra, AP (Animal Husbandry)	-	-	4	-	-	4
19	Dr.M.Prasanthrajan, ASP (Env. Science)	-	-	-	3	-	3
20	Dr. V.Karthick, AP (Agrl. Economics)	-	-	-	-	3	3
21	Dr. P. Balaji, AP (ARM)	-	-	-	-	3	3
22	Dr.S.Sengottaiyan, AP (Tamil)	-	-	-	-	3	3

WORK LOAD OF SCIENTISTS (AGROFORESTRY) FOR THE YEAR 2017-18

S.No	Name of the Scientist	% of time
1	Dr.K.T.Parthiban, Professor and Head (Forestry)	
	Projects	30
	Teaching	25
	Students guide	15

	Administration	20
	Other activities	10
2	Dr.P.Shanthi, Professor (Agronomy)	
	Teaching	50
	Students guide	-
	Administration	-
	Other activities	50
3	Dr.R.Jude Sudhagar, AP(Forestry)	
	AICRP	30
	Projects	20
	Teaching	30
	Students guide	15
	Administration	-
	Other activities	5
4	Dr.C.Cinthia Fernandez, AP (Agrl. Extension)	
	Projects	30
	Teaching	40
	Administration	-
	Other activities	30
5	Dr. K.Sivakumar AP (SS & AC)	
	AICRP	30
	Projects	-
	Teaching	45
	Administration	-
	Other activities	25
6	Dr.K.Ramah, AP (Agronomy)	
	AICRP	30
	Projects	-
	Teaching	40
	Administration	-
	Other activities	30
7	Dr.R.Ravi kumar, AP(Maths)	
	Projects	30
	Teaching	60
	Administration	
	Other activities	10
8	Dr.S.Sengottaiyan, AP (Tamil)	
	Teaching	70
	Administration	-
	Other activities	30

IV. DEPARTMENT OF FOREST PRODUCTS AND UTILIZATION

1. Staff pattern

S. No.	Name	Designation
1	Dr. R. Revathi	Professor and Head
2	Dr. K. Baranidharan	Assistant Professor (Forestry)
3	Dr. P. Pretheep Kumar	Assistant Professor (Agricultural Entomology)
4	Dr. M. Tilak	Assistant Professor (Agricultural Microbiology)
5	Dr. A. Sudha	Assistant Professor (Plant Pathology)
6	Dr. V. Karthick	Assistant Professor (Agricultural Economics)
7	Dr. R. Ravi	Assistant Professor (Forestry)

2. Remarks on the ongoing Externally Funded / University Research Projects

S. No.	Scheme	Remarks
1.	ICFRE/FCRI/MTP/DFU/2012/R002 Survey Documentation and value addition studies in selected NTFP's of Tamil Nadu" (Dr.R.Revathi)	The project is completed and the completion report may be sent to the sponsoring agency
2.	DFO/FCRI/MTP/DFV/2016/R003 Monitoring biodiversity and impact in critical habitats after removal and maintenance of invasive alien species and efficacy of maintenance works in Sathyamangalam Tiger Reserve (Dr.K.Baranidharan)	The project may be continued
3.	FCRI/MTP/FOR/2015/001 Baseline Survey on Biodiversity and Non wood Forest Products of Chitheri Hills of Eastern Ghats (Dr.K.Baranidharan)	The project may be continued
4	NRM/MTP/AGM/2015/001 Studies on the diversity of Ectomycorrhizal fungal flora in Forest College and Research Institute, Mettupalayam (Dr.M.Tilak)	The project may be continued
5.	CARDS / MTP / AEC / 2016 / 001 Value Chain Analysis of Selected NWFP's in Salem Forest Circle (Dr.V.Karthick)	The project may be continued
6.	CPPS/MTP/PAT/2017/001 Documentation, loss assessment due to wood decay fungi & management	The project may be continued

3. Action plan (2017 – 2019)

Theme1		Post-harvest Technology of Timber and Non-Timber Forest Products			
Theme Leader		Dr. R. Revathi, Professor & Head (Dept of Forest Products & Utilization)			
Projects		NRM/MTP/AGM/2015/001 FCRI/MTP/FOR/2015/001 CARDS/MTP/AEC/2016/001 CARDS/MTP/ARM/2016/001 CPPS/MTP/PAT/2017/001 CPPS/MTP/ENT/2017/001			
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2019	Deliverables / Expected outcome
1	Wood characterization of lesser known tree species for commercial utility	Dr.R.Revathi (4 h / week) Dr.R.Ravi (4 h / week) Dr.A. Sudha (11 h / week) Dr. P.Pretheep Kumar (9 h / week) Centre: FC&RI Dr. I.Sekar (5 h / week) Centre: HC&RI, Periyakulam	Wood physical properties. Documentation of wood degradation (Physical/Chemical /Biological)	Wood anatomical studies. Loss assessment due to wood degradation	Suitability for timber, plywood, pulp and matchwood.
2	Value addition of NTFP	Dr. P. Sudha (4 h / week) Dr. R. Revathi (3 h / week) Dr. M. Tilak (8 h / week) Dr. K. Baranidharan (4 h / week)	Utility standardization of the product developed from Dept of FPU	Assessment of market potential of developed products	Eco-friendly consumer product will be made available for the public

		Dr. R. Ravi (4 h / week) Centre: FC&RI			
3	Value Chain Analysis of Forest products	Dr. P. Balaji (4 h / week) Dr. V. Karthick (7 h / week) Centre: FC&RI	Market survey in NTFP and plywood	Assessing the profitability for the tree growers	Identification of commercially viable marketing channel
Theme2	Wildlife Habitat Analysis				
Theme Leader	Dr. K. Baranidharan, Assistant Professor (Forestry)				
Projects	DFO/FCRI/MTP/DFV/2016/R003				
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2019	Deliverables / Expected outcome
1	Corridor assessment of Nilgiri Biosphere	Dr. K. Baranidharan (5 h / week) Dr. S. Radhakrishnan (2 h / week) Centre: FC&RI	Migratory Path analysis in Moyar valley	Corridor assessment in Thengumaragada & Thalamalai area	Existing and New Corridor in Sathyamangalam Tiger Reserve will be identified
2	Habitat Analysis and Evaluation	Dr. K. Baranidharan (7 h / week) Dr. S. Radhakrishnan (2 h / week) Dr. M.Tilak (1 h / week) Mrs.M.Vijayabhama (2 h / week) Centre: FC&RI	Survey of floral and faunal diversity in Thalamalai range	Habitat analysis in Thengumaragada & Thalamalai area	Status of flora & fauna in Thengumaragada & Thalamalai area

Load of each scientist (Theme wise)

Theme 1: Post-harvest Technology of Timber and Non-Timber Forest Products

Theme 2: Wildlife Habitat Analysis

S. No.	Name of the Scientist	Theme 1	Theme 2	Total
(man hours / week)				
1	Dr. R. Revathi	7	-	7
2	Dr. I.Sekar	5	-	5
3	Dr. K. Baranidharan	4	12	16
4	Dr. P. Balaji	4	-	4
5	Dr. P. Pretheep Kumar	9	-	9
6	Dr. M. Tilak	8	1	9
7	Dr. A. Sudha	11	-	11
8	Dr. V. Karthick	7	-	7
9	Dr. R. Ravi	5	-	5
10	Dr. P. Sudha	3	-	3
11	Dr. S. Radhakrishnan	-	4	4
12	Mrs. M. Vijayabhama	-	2	2

WORK LOAD OF SCIENTISTS

S. No.	Scientists	% of time
1	Dr. R. Revathi	
	University Research Project – 1	10
	Externally Funded Project – 2	10
	Venture Capital Scheme	20
	Teaching	25
	Students guide	15
	Administration	10
	Additional Responsibility	10
2	Dr. K. Baranidharan	
	University Research Project – 1	10
	Externally Funded Project – 3	20
	Venture Capital Scheme	10
	Teaching	30
	Students guide	20
	Additional Responsibility	10

3	Dr. P. Pretheep Kumar	
	University Research Project – 1	25
	Teaching	30
	Students guide	15
	Additional Responsibility	30
4	Dr. M. Tilak	
	University Research Project – 1	25
	Venture Capital Scheme	15
	Teaching	25
	Students guide	15
	Additional Responsibility	20
5	Dr. A. Sudha	
	University Research Project – 1	30
	Teaching	30
	Students guide	20
	Additional Responsibility	20
6	Dr. V. Karthick	
	University Research Project – 1	20
	Externally Funded Project – 3	20
	Teaching	25
	Students guide	10
	Additional Responsibility	25
7	Dr. R. Ravi	
	University Research Project – 1	15
	Teaching	25
	Students guide	10
	Additional Responsibility	50

V. CENTRE OF EXCELLENCE IN BIOFUELS

1. Staff Pattern

S. No.	Name	Designation
1	Dr. K.T.Parthiban	Professor and Nodal Officer (i/c)
2	Dr. P.Balaji	Assistant Professor (ARM)
3	Dr.G.Thangamani	Assistant Professor (Microbiology)
4	Dr. P. Sudha	Assistant Professor (Food & Agri. Process Engineering)

2. Remarks on the ongoing externally Funded / University Research Projects

S. No.	Scheme	Remarks
1.	CPBG/MTP/PBG/2016/002 Selection of high yielding and high oil content lines from interpecific cross of <i>Jatropha curcas</i> X <i>J. integerrima</i> (Dr.P.Jeyamani)	As the PI has been transferred, breeding material with high yield and oil content may be brought from Coimbatore to FC & RI and work may be continued with the Co PI
2.	SFB/FCRI/MTP/AGF/2015/R002 Fruit Yield and Economic Analysis of selected tree species (STS) under agro Forestry system in Tamil Nadu (Dr. P.Balaji)	The project may be continued
3.	CARDS/MTP/ARM/2016/001 Value chain Analysis of plywood in Coimbatore District (Dr. P.Balaji)	The project may be continued
4.	AECRI/MTP/FAP/2016/001 Optmisation of process parameters and pretreatments for extraction of <i>Cassia fistula</i> seed gum for use as hydrocolloid (P.Sudha)	Project approved. Work initiated

3. Action plan (2017 – 2019)

Theme1 TBO'S Based Biofuels Production					
Theme Leader	Dr. K.T.Parthiban, Professor and Nodal Officer (i/c)				
Projects	CPBG/MTP/PBG/2016/002				
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2019	Deliverables /Expected outcome
1	Identification of high yielding variety suitable for TBO's production	Dr.K.T.Parthiban (4 h / week) Dr.P.S.Devanand (2 h / week) Dr.S.Vennila (2 h / week) Dr.M.Umadevi (1 h / week) Centre: FC&RI Dr. P.Jeyamani (2 h / week) Centre: Dept. of Pulses, TNAU, Coimbatore	Inventory of TBO's	Improvement and deployment of TBO's	High yielding variety suitable for biofuels production
2	Assessment of TBO's production in Tamil Nadu	Dr.P.Balaji (4h / week) Dr.M.Shanthasheela (2h / week) Centre: FC&RI Dr. V.Karthik (1h / week)	Survey of TBO's production in Tamil Nadu	Market potential of TBO's	Exploring the marketing opportunities of oil yielding tree species

Theme2		Lignocellulosic biomass based ethanol production			
Theme Leader		Dr. U.Sivakumar, Professor (Microbiology) & Dr.K.T.Parthiban Professor (Forestry)			
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2019	Deliverables / Expected outcome
1	Inventory and prioritization of wood lignocellulosic biomass	Dr. S.Radhakrishnan (2 h / week) Dr. S. Vennila (2 h / week) Dr. R.Ravikumar (1 h / week) Centre: FC&RI Dr. S.Umeshkanna (5 h / week) Centre: AC&RI, Madurai	Inventory of wood lignocellulosic biomass Prioritization of wood lignocellulosic biomass	Improvement and deployment for high cellulose and low lignin content	High cellulose and low lignin content wood lignocellulosic biomass
2	Development of protocol for species specific delignification process	Dr.G.Thangamani (6 h / week) Dr.M.Tilak (2 h / week) Centre: FC&RI	Screening of efficient lignocellulolytic micro organism	Development of protocol for species specific delignification	Standard protocol for biomass delignification process
3	Value addition of lignocellulosic biomass and value chain management	Dr.P.Balaji (2 h / week) Dr.P.Sudha (6 h / week) Dr. V.Karthik (1h / week) Dr.M.Shanthasheela (2 h / week) Centre: FC&RI	Value addition of lignocellulosic biomass Value chain management of lignocellulosic biomass	To establish industrial linkage	To develop organized value chain system for biofuel industry

Load of each scientist (Theme wise)

Theme 1: TBO'S Based Biofuels Production

Theme 2: Lignocellulosic biomass based ethanol production

S. No.	Name of the Scientist	Theme 1	Theme 2	Total
(man hours / week)				
1.	Dr. K.T.Parthiban	4	-	4
2.	Dr.U.Sivakumar	-	2	2
3.	Dr.P.Balaji	4	2	6
4.	Dr.S.Radhakrishnan	-	2	2
5.	Dr.G.Thangamani	-	6	6
6.	Dr. P. Sudha	-	6	6
7.	Dr. P.Jeyamani	2	-	2
8.	Dr.S.Umeshkanna	-	5	5
9.	Dr.P.S.Devanand	2	-	2
10.	Dr.S.Vennila	2	2	4
11.	Dr.M.Umadevi	1	-	1
12.	Dr.M.Shantha Sheela	2	2	4
13.	Dr. M. Tilak	-	2	2
14.	Dr.R.Ravikumar	-	1	1
15.	Dr. V. Karthick	1	1	2

WORK LOAD OF SCIENTISTS

S. No.	Scientists	% of time
1	Dr. P.Balaji	
	University Research Project – 2	20
	Externally Funded Project – 2	20
	Teaching	35
	Students guide	10
	Additional Responsibility	15
3	Dr. G.Thangamani	
	Research	40
	Teaching	35
	Students guide	15
	Additional Responsibility	10
4	Dr. P.Sudha	
	University Research Project – 1	20
	Externally Funded Project – 2	25
	Teaching	35
	Students guide	10
	Additional Responsibility	10

VI. DEPARTMENT OF SERICULTURE

1. Staff Pattern

S. No.	Name	Designation
1	Dr.G.Umapathy	Professor and Head
2	Dr.S.V.Krishnamoorthy	Professor (Agricultural Entomology)
3	Dr.K.Uma	Professor (Agricultural Economics)
4	Dr.K.Angappan	Professor (Plant Pathology)
5	Dr.D.Vijayalakshmi	Assistant Professor (Plant Physiology)
6	Dr.K.A.Muruges	Assistant Professor (Sericulture)
7	Dr.M.ShanthaSheela	Assistant Professor (Agrl.Extension)
8	Dr.R.Jayaramsoundari	Assistant Professor (Agronomy)
9	Dr.P.Priyadharshini	Assistant Professor (Sericulture)
10	Dr.S.Susikaran	Assistant Professor (Sericulture)
11	Dr.R.Shanmugam	Assistant Professor (Sericulture)
12	Dr.P.Mangammal	Assistant Professor (Sericulture)
13	Dr.R.Rajeswari	Assistant Professor (SS&AC)

2. Remarks on the ongoing University Research Projects

Department of Sericulture

S. No.	Scheme	Remarks
1.	CPPS/MTP/SER/2016/001 (URP: 296) An economic analysis of cocoon production in traditional and non traditional sericulture areas of Tamil Nadu ” (Dr.S.Susikaran)	The project may be continued
2.	CPPS/MTP/SER/2017/001 (URP: 428) Value addition to Mulberry Silkworm Rearing Waste and their impact on both Mulberry and Silkworm (Dr.R.Shanmugam)	The project may be continued
3.	CPPS/MTP/SER/2017/001 (URP: 429) Effect of probiotics on growth and development of silkworm, <i>Bombyx mori L.</i> (Dr.P.Priyadharshini)	The project may be continued
4	CPPS/MTP/SER/2017/001 (URP: 497) Effect of minerals on growth and development of silkworm, <i>Bombyx mori L.</i> and their impact influence on cocoon economic traits (Dr.K.A.Muruges)	The project may be continued

Theme 1	Host plant production and management				
Theme Leaders	Dr.S.V.Krishnamoorthy Dr.K.Angappan				
S. No.	Activity	Name of the Scientist and centre along with man hours	2017 – 2018	2018 – 2020	Deliverables / Expected outcome
1	Evaluation and assessment of genetic variability and genetic diversity of mulberry clones planted at FC & RI, Mettupalayam	R.Shanmugam (6 h / week) P.Mangammal (6 h / week)	To evaluate the mulberry clones. To assess the genetic variability and genetic diversity.	To determine the feed quality of assembled mulberry clones. To characterize the mulberry clones through biochemical and molecular markers.	Suitability of mulberry clones under Tamil Nadu condition for silkworm hybrids will be identified.
	Integrated Plant protection in mulberry through non chemical methods	Dr. S.Susikaran (6 h / week) Dr.K.A.Murugesh (6 h / week) Dr.P.Priyadharshini (6 h / week)	Survey to collect and documentation of root rot infected specimens from sericulture practicing areas of Tamil Nadu. Isolation, Identification and documentation of different root rot pathogen. To study the factors (soil, water, irrigation system etc.) inducing	Screening of nutrients botanicals, biocontrol agents, organic amendments and fungicides against root rot pathogen under <i>in vitro</i> condition. Screening of selected nutrients, botanicals,	Integrated disease management package for mulberry root rot will be developed

			<p>root rot disease in mulberry.</p>	<p>biocontrol agents, organic amendments and fungicides against root rot pathogen under pot culture condition.</p> <p>Developing Integrated Disease Management (IDM) for managing root rot disease in mulberry and evaluation of IDM techniques <i>in vivo</i>.</p>	
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Theme 2: Silkworm production and management

1.	An economic analysis of cocoon production in traditional and non traditional sericulture areas of Tamil Nadu	Dr.S. Susikaran	<p>To analyse the economic viability of mulberry leaf production and silkworm cocoon production in traditional and non traditional districts.</p> <p>Analysis of data collected from State Sericulture Department revealed marginal decrease of mulberry acreage and cocoon production during 2015-16 by 5.99 % and 5.01 % respectively.</p>	<p>To study the marketing and price behaviour of cocoon in markets of selected districts.</p> <p>To identify the major constraints in silkworm rearing and marketing of cocoon.</p>	Minimizing the cost of cocoon production
2	Effect of probiotics on growth and development of silkworm, <i>Bombyx mori L.</i> “	Dr.P.Priyadharshini	Screening and application of commercially available probiotics on different silkworm races.	<p>To study the impact of probiotics on enzyme activity of silkworm races.</p> <p>To enumerate and</p>	Economic traits of silkworm will be improved

				<p>identify the indigenous gut microbial population.</p> <p>To study the economic traits of silkworm races.</p>	
3.	<p>Effect of minerals on growth and development of silkworm, <i>Bombyx mori L.</i> and their impact influence on cocoon economic traits</p>	Dr.K.A.Muruges	<p>Studying the influence of minerals on growth and development of silkworm larvae.</p>	<p>Assessing the effects of combination of selected minerals on biological characters of silkworm.</p> <p>Studying the effects of mineral combination on cocoon and silk related traits.</p> <p>Analysing the protein content in silk gland and cocoon</p>	<p>Increase in cocoon quality and yield</p>

Theme 3: Value addition in Sericulture

1.	Value addition to Mulberry Silkworm Rearing Waste and their impact on both Mulberry and Silkworm	Dr.R.Shanmugam	<p>To study the soil conditions of the experimental field.</p> <p>To prepare enriched seriwaste-compost.</p> <p>Collection of silkworm rearing wastes.</p>	<p>To analyse the nutritive value of seriwaste-compost.</p> <p>To study the impact of seriwaste-compost on mulberry leaf yield and silkworm economic traits.</p> <p>To assess the physio-chemical and biological properties of seriwaste applied soil</p>	
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Load of each scientist (Theme wise)**Department of Sericulture**

Theme 1: Host plant production and management

Theme 2: Silkworm production and management

Theme 3: Value addition in Sericulture

Sl. No.	Name of the scientist	Theme 1	Theme 2	Theme 3	Total
(Man hours / week)					
1	Dr.G.Umapathy	5			5
2	Dr.S.V.Krishnamoorthy	10			10
3	Dr.K.Uma		8		8
4	Dr.K.Angappan	10			10
5	Dr.D.Vijayalakshmi	5			5
6	Dr.K.A.Muruges		12		12
7	Dr.M.ShanthaSheela		5		5
8	Dr.R.Jayaramsoundari	5			5
9	Dr.P.Priyadharshini		8	4	12
10	Dr.S.Susikaran		12		12
11	Dr.R.Shanmugam			12	12
12	Dr.P.Mangammal		12		12
13	Dr.R.Rajeswari	3			3

WORK LOAD OF SCIENTISTS

S. No.	Scientists	% of time
1	Dr.G.Umapathy	
	Teaching	15
	Students guide	25
	Administration	50
	Other Activities	10
2.	Dr.S.V.Krishnamoorthy	
	Teaching	30
	Research & Student's guidance	30
	Additional Responsibilities	20
	Administration	20
3.	Dr.K.Uma	
	Teaching	30
	Students guide	40
	Additional Responsibilities	15
	Other Activities	15
4.	Dr.K.Angappan	
	Teaching	30
	Research & Student's guidance	40
	Additional Responsibilities	25
	Other Activities	5
5.	Dr.D.Vijayalakshmi	
	Ext. funded projects	50
	Teaching	15
	Students guide	20
	Additional Responsibilities	15
6.	Dr.K.A.Muruges	
	Univ. Sub Project-1	25
	Teaching	30
	Students guide	20
	Additional Responsibilities	25
7	Dr.M.ShanthaSheela	
	Teaching	30
	Students guidance	30
	Additional Responsibilities	15
	Other activities	25
8.	Dr.R.Jayaramsoundari	
	Teaching	50
	Other activities	50

9.	Dr.P.Priyadharshini	
	Univ. Sub Project-1	25
	Teaching	50
	Additional Responsibilities	25
10.	Dr.S.Susikaran	
	Univ. Sub Project-1	25
	Teaching	50
	Additional Responsibilities	25
11.	Dr.R.Shanmugam	
	Univ. Sub Project-1	25
	Teaching	50
	Additional Responsibilities	25
12.	Dr.P.Mangammal	
	Univ. Sub Project-1	25
	Teaching	50
	Additional Responsibilities	25
13.	Dr.R.Rajeswari	
	Ext.funded projects	45
	Teaching	45
	Additional Responsibilities	10