

MAJOR ACTIVITIES

- Teaching: UG and PG level
- Research: Different aspects of Silviculture (Nursery, Plantation) and Agroforestry
- Extension activities: Krishi Mahotsava, Vanamahotsava, and interaction with farmers and imparting training on different aspects of forestry as well as agroforestry

FACILITIES:

1. Arboretum, Biodiversity Park, Instructional and Research Farm: An Arboretum of around 150 species from South Gujarat is established and the trees are around 20 years of age. Biodiversity park comprised of 170 species of plants. For day to day teaching of forestry it is very useful. An evaluation trial of 16 species from South Gujarat is also undertaken on the Instructional farm.
2. Laboratory & Instrumentation Centre: Different instruments like Microscope, Tree Calliper, Digital calliper, Ravi Altimeter & Multimeter, Relaskop, GRS densitometer, Electronic clinometers, TruPulse range finder, Bark gauge, Increment borer, Seed germinator, Silva clinometers, Penta-prism, Muffle furnace, Quartz distillation unit, Kjedal distillation unit, Electric balance, Hot air oven, Infra Red moisture meter, Digital moisture meter, Spectrophotometer, Chlorophyll content meter, Tree canopy analyzer, Leaf area meter, Dendrometer, Vertex Laser Hypsometer, Digitech Professional Calliper and with green gater eyes, Tree Canopy Analyser and other instruments are available.

EDUCATION

COURSES OFFERED AT UG LEVEL (6th Dean Committee)

Course Code	Course Title	Credits
SAF 1.1	Silviculture - Principles and Practices	3 (2+1)
SAF 3.1	Silviculture of Trees	2 (2+0)
SAF 5.1	Plantation Forestry	3 (2+1)
SAF 1.2	Agroforestry Systems and Management	3 (2+1)
SAF 5.2	Industrial Agroforestry	2 (1+1)
SAF 3.2	Arboriculture	2 (1+1)
SAF 6.1	Trees Outside Forests	2 (2+0)

EDUCATION

COURSES OFFERED AT UG LEVEL (5th Dean Committee)

Course Code	Course Title	Credits
SAF 5.9	Practices of Silviculture	3(2+1)
SAF 6.10	Forest Extension & Community Forestry	3(2+1)
SAF 6.11	Recreation & Urban Forestry	2(1+1)
SAF 6.12	Plantation Forestry	3(2+1)
SAF 8.13	Agroforestry Systems and Management	2(1+1)

COURSES OFFERED AT PG LEVEL

COURSE NUMBER	TITLE OF THE COURSE	CREDITS
M. Sc. FORESTRY (SILVICULTURE & AGROFORESTRY)		
MAJOR COURSES		
SAF 501*	Silviculture	2 + 1
SAF 502*	Forest Biometry	1 + 1
SAF 503*	Silvicultural Practices	1 + 1
SAF 504*	Agroforestry Systems	2 + 1
SAF 505*	Interactions in Agroforestry Systems	1 + 1
SAF 506	Modern Nursery Technologies	1 + 1
SAF 507	Plantation Forestry	2 + 1
SAF 508	Industrial Agroforestry	1 + 1
SAF 509	Climate Change and Conservation Silviculture	2 + 0
SAF 510	Trees and Shrubs for Agroforestry	1 + 1
SAF 511	Economics of Agroforestry Systems	2 + 1
SAF 512	Tree Seed Technology	2 + 1
SAF 513	Nutrient and Weed Management in Production Forestry	1 + 1
SAF 514	Crops and Live Stock Management in Agroforestry	2 + 0

*Compulsory Core Courses

COURSES OFFERED AT PG LEVEL

COURSE NUMBER	TITLE OF THE COURSE	CREDITS
Ph.D. FORESTRY (SILVICULTURE & AGROFORESTRY)		
MAJOR COURSES		
SAF 601*	Quantitative Silviculture	2 + 1
SAF 602*	Agroforestry Research and Management	2 + 1
SAF 603	Forest Stand Dynamics	1 + 0
SAF 604	Productivity and Evaluation of Agroforestry Systems	2 + 1
SAF 605	Forest Stand Management Techniques	1 + 1
SAF 606	Agroforestry for Ecosystem Services and Environmental Benefits	2 + 0
SAF 607	Plantation Forest Productivity	1 + 1
SAF 608	Restoration Forestry	1 + 0
SAF 609	Regeneration Silviculture	2 + 1
SAF 610	Forest Soil Management	1 + 1
SAF 611	Agroforestry for Sustainable Agriculture	1 + 0

*Compulsory Core Courses

RESEARCH

A. RECOMMENDATIONS

1. **Evaluation of different forest species:** Jadeja, D. B.; Patel, N. B; Kukadia, M. U.; Vashi, B. G.; Patil, N. S.; Patel, D. P; Parmar M. R and Prajapati, V. M.

Recommendation: The tree growers and farmers of South Gujarat heavy rainfall zone-I, Southern moist mixed deciduous forest-3B/C2 and agricultural situation-III are advised to grow block plantations of *Albizzia procera* (Kilai, White Siris) or *Terminalia arjuna* (Arjun Sadad) at 4 m x 4 m spacing and long rotation (20 years) for better volume, improvement of soil pH, EC, Organic carbon, N, P, K and higher economic return (BCR after 20 years = 44.93 and 36.45 respectively). [Agresco-2011].

2. **To study the growth and yield of *Acacia mangium* in South Gujarat:** Jadeja, D. B.; Patel, N. B; Kukadia, M. U.; Vashi, B. G.; Patel, M. M.; Patel, D. P; Parmar M. R and Prajapati, V. M.

Recommendation: The tree growers and farmers of South Gujarat heavy rainfall zone-1, Southern moist mixed deciduous forest-3B/C2 and agricultural situation-III are advised to grow *Acacia mangium* (Mangium) in block plantation at the spacing of 2.5 m x 2.5 m for higher girth, crown diameter, number of branches and economic return (BCR after 5 year 13.99). [Agresco-2011].

3. **Growth and yield of *Tannia* (*Xanthosoma sagittifolium* L. Schott.) as affected by different pruning intensities of tree crops-** Sandip. M. Patel *et al.*

Recommendation-The farmers of South Gujarat heavy rainfall zone (AES- III) growing *Terminalia arjuna*- Arjun Sadad, *Mitragyna parvifolia* -Kalam and *Adina cordifolia*- Haldu at 10 X 2.5 m spacing and growing *Tannia* as an intercrop are advised to remove side branches up to 1/3 height of trees from ground level which is helpful in maximum utilization of land with additional income. [Agresco-2015]

4. Collection and evaluation of *Mucuna* germplasm from South Gujarat for L-DOPA and protein content - N.S. Thakur *et al.*
Recommendation- For higher L-DOPA (L-3, 4-dihydroxyphenylalanine) it is advisable to collect *Mucuna* from Valsad, Chikhali, Budhakeshwar village (Navsari Mahuva road), Bardoli and Vyara. Breeders willing to enhance L-DOPA content in *Mucuna pruriens* may incorporate accessions namely 29, 10, 14 and 13 in breeding stock. [Agresco-2015]
5. Rapid multiplication of *Dendrocalamus strictus* Nees. through in vitro regeneration techniques from juvenile explants- Jayesh Pathak *et al.*
Recommendation- It is recommend to scientific community and tissue culture industries involved bamboo tissue culture that to get rapid multiplication of *Dendrocalamus srtictus* L. through in vitro regeneration from juvenile explants using tissue culture technique for large scale multiplication of the plantlets in which farmers can get true to type plants with all the advantages of vegetative propagation (clonal propagation). it is recommended to use auxiliary bud as explants source and absolute alcohol (100%) for 30 Sec + mercuric chloride (0.1%) for 4 min. for contamination control and maximum establishment. Whereas, for culture establishment and for shoot multiplication it is advise to use MS liquid media with 2.0 mg/lit BAP. However, for rooting it is advice to use MS + 1.5mg/l NAA + 3mg/l IBA and for acclimatization it is advice to use FYM+ Soil + Cocopeat (1:1:1). [Agresco-2015]
6. Rapid multiplication of *Bambusa vulgaris* through in vitro regeneration techniques from juvenile explants- Jayesh Pathak *et al.*
Recommendation- It is recommend to scientific community and tissue culture industries involved bamboo tissue culture that to get rapid multiplication of *Bamboosa vulgaris* L. through in vitro regeneration from juvenile explants using tissue culture technique to use auxiliary bud as explants source and absolute alcohol (100%) for 30 Sec + mercuric chloride (0.1%) for 4 min. for contamination control and maximum establishment. Whereas, for shoot multiplication, culture established on simple MS media followed MS + 1mg/l BAP + 0.25 Kin. However, for rooting it is advice to use MS + 20mg/l IBA which gives highest rooting percentage and for acclimatization FYM + Soil + Cocopeat (1:1:1). [Agresco-2015]

7. Performance of turmeric (*Curcuma longa*) grown as an intercrop under different tree species in South Gujarat conditions:

Mahesh K. Desai et al.

Recommendation: The farmers of South Gujarat heavy rainfall zone - I (AES- III) growing *Mitragyna parvifolia* (Kalam), *Adina cordifolia* (Haldu) and *Gmelina arborea* (Sevan) at 10 X 2.5 m spacing are advised to grow Turmeric Variety - Sugandham planted at 30 x 15 cm spacing 55 having 19 rows as an intercrop in plantation of *Gmelina arborea* (Sevan) for additional income. [Agresco-2016]

8. Effect of different tree species leaf leachate on germination and seedling growth of some vegetable crops:

Mukesh R. Parmar et al.

Recommendation: The leaf leachates of various tree species reduced germination and growth parameters of different vegetable crops in laboratory as well as in nursery condition. The percentage of inhibition was maximum in Eucalyptus as compared to other tree species leaf leachates in laboratory as well as in nursery condition. Moreover the percentage of inhibition was minimum in Teak. The different vegetable crops have different mode of inhibition during the study. In both the growing conditions Brinjal (*Solanum melongena*), Okra (*Abelmoschus esculentus*) and Tomato (*Lycopersicon esculentum*) performed better for all parameters under study for the respective years of investigation while, V5: Chilli (*Capsicum anum*) performed poor for all the parameters under study. In case of leachates concentration, all the parameters under study were decreased as the concentration of leaf leachates increased in both the growing conditions. This response showed concentration dependent phenomenon as highest inhibitory effects were observed with 20 % leaf leachate concentration of all the tree species. [Agresco-2016]

9. Evaluation of carbon sequestration potential of different bamboo species in South Gujarat: Dr. Jayesh Pathak et al

Recommendation: The farmers of South Gujarat heavy rainfall zone-I are advised to grow plantation of *Bambusa vulgaris* (green) for higher biomass and carbon sequestration. The thin walled and long internode bamboo species *Schizostachym pergracile* and *Schizostachym dullooa* are recommended for kite industry [Agresco-2017]

10. Growth and productivity of *Melia composita* Willd. under different spatial geometries:

Dr. N.S. Thakur *et al*

Recommendation: Farmers of South Gujarat heavy rain fall Zone-I are recommended to grow *M. composita* Syn. *M. dubia* (Malabar neem, Burma neem, nimbaro) at 2 x 2 m spacing for getting higher wood biomass and economic returns. [Agresco-2018]

11. Malabar Neem: Gujarat Navsari Melia Dubia 1 (GNMD-1)

N.S. Thakur *et al*

Recommendation: Malabar Neem (*Melia dubia* Cav.) tree variety GNMD-1 has performed very well in South Gujarat. After four years, the GNMD-1 has attained 10.90 m height with girth at breast height (GBH) of 49.50 cm. The volume at four years of age has been estimated 224.41 m³ /ha with good biomass of 103.23 tonnes/ha. It has clear bole up to 3.70 m free from knots. Its bole is round and clean. The GNMD-1 showed superiority of 9.0, 105.6 and 47.3 % in height; 7.84, 35.6 and 17.9 % in girth at breast height, and 26.77, 278.24 and 104.60 % in volume and biomass, over checks Kshitiz (NC), Ritu (NC) and Bahumukhi (NC), respectively. No incidence of insect pest was observed in GNMD-1. The variety GNMD-1 is recommended for farmers of South Gujarat for plantation. [Agresco-2018]

12. Progeny trials of *Melia composita* Willd. : N. S. Thakur *et al*.

Recommendation: Farmers of South Gujarat, heavy rain fall Zone-I, are recommended to grow plantation of *M. composita* Syn. *M. dubia* (Malabar neem, Burma neem, nimbaro) using seed source from families GJ (NAU-9) for getting higher biomass and economic returns. [Agresco-2018]

13. Seed germination and seedling emergence study in Dev shower (*Bombax insigne*): **Vijay M. Prajapati *et al.*** **Recommendation:** Farmers, conservationists and nursery entrepreneurs are recommended to treat *Bombax insigne* (Dev shower) seeds with 50 ppm GA₃ for 15 min before sowing for better germination in order to propagate and conserve this endangered tree. [Agresco-2019]

14. Performance of cucurbitaceous vegetable crops under Teak based Silvi-Horticultural system in South Gujarat: **Sandip. M. Patel *et al.***

Recommendation: Farmers of south Gujarat heavy rainfall zone-I, AES-III, growing teak at 3m X 2m spacing are advised to grow Smooth gourd and Bottle gourd (Cucurbitaceous vegetable crop) as an intercrop in Rabi season under teak based silvi-horticultural system to get additional income as compared to sole plantation of mature teak crop. [Agresco-2019]

15. Development of volumetric equation for Teak (*Tectona grandis* Linn. f.) in South Gujarat:

L. K. Behera *et al.*

Recommendation : Teak growers and wood merchants are recommended to use volumetric equation, $V = 0.00004D^2H + 0.014$ and local volume table (given below) for estimation of volume of standing teak trees grown under plantation and natural forest of South Gujarat (D = Diameter at breast height; H = Tree height). [Agresco-2019]

Table showing local volume table developed for teak trees grown in south Gujarat condition

		Height (m)													
		5	8	11	14	17	20	23	26	29	32	35	38	41	42
Diameter at breast height (cm)	10	0.055	0.073	0.092	0.111	0.130	0.148						Volume (m ³)		
	15	0.094	0.130	0.167	0.204	0.241	0.277								
	20		0.206	0.267	0.328	0.389	0.449	0.510							
	25		0.301	0.392	0.483	0.574	0.664	0.755	0.846						
	30		0.415	0.542	0.669	0.796	0.922	1.049	1.176						
	35		0.548	0.717	0.886	1.055	1.223	1.392	1.561	1.730	1.898				
	40		0.700	0.917	1.134	1.351	1.567	1.784	2.001	2.218	2.434	2.651			
	45			1.142	1.413	1.684	1.954	2.225	2.496	2.767	3.037	3.308			
	50			1.392	1.723	2.054	2.384	2.715	3.046	3.377	3.707	4.038			
	55			1.667	2.064	2.461	2.857	3.254	3.651	4.048	4.444	4.841			
	60				2.436	2.905	3.373	3.842	4.311	4.780	5.248	5.717	6.186		
	65				2.839	3.386	3.932	4.479	5.026	5.573	6.119	6.666	7.213	7.760	8.306
	70					3.904	4.534	5.165	5.796	6.427	7.057	7.688	8.319	8.950	9.580
	75					4.459	5.179	5.900	6.621	7.342	8.062	8.783	9.504	10.225	10.945
	80							6.684	7.501	8.318	9.134	9.951	10.768	11.585	12.401

16. Study of Carbon Sequestration Potential of Important Tree Species: L. K. Behera *et al.*

Recommendation : Farmers are recommended to grow tree species such as Casuarina, Eucalyptus and Bijasal for obtaining higher biomass and carbon sequestration under South Gujarat. [Agresco-2019]

17. Effect of gibberellic acid (GA₃) and nitrogen on the growth of *Tectona grandis* Linn. f. for production of stumps for planting: Dr. L. K. Behera

Recommendation : The farmers and nursery entrepreneurs of South Gujarat are recommended to apply 100 mg N/kg soil (225 kg N/ha) in four equal splits *i.e.* at the time of sowing, 60, 120 and 180 days after sowing to produce the quality teak seedlings for stump preparation within 7-8 months. [Agresco-2019]

18. Integrated nutrient management of Brinjal (*Solanum melongena* L.) under Teak (*Tectona grandis* L.) based Silvi-horticultural system in South Gujarat region: M. B. Tandel *et al.*

Recommendation: Farmers of South Gujarat growing Brinjal (*Solanum melongena* L.) var. GNRB-1 as an intercrop under Teak having spacing of 3 x 2 m are recommended to apply 100 % RDF (100:50:50 NPK/ha) or 75 % RDN + 25 % Neem cake on the basis of cultivated area (6670 m²) in teak based silvi-horticultural system to get additional income and higher production. It also increased fertility status of soil as well as growth of teak. [Agresco-2021]

19. Annual biomass, volume and carbon stock estimation of *Melia dubia* Cav. through destructive method: N. S. Thakur et al.

Recommendation: Farmers of South Gujarat, cultivating Malabar Neem, and forester and timber traders are recommended to use the below given table to estimate fresh biomass and volume of standing Malabar Neem tree. [Agresco-2021]

Table - Estimated *M. dubia* fresh biomass (kg/tree) based on regression equations

		DBH (cm)													
Tree height (m)		4	5	6	7	8	9	10	11	12	13	14	15	16	17
	4	5.75	8.02	10.79	14.07										
	5	6.76	9.60	13.06	17.16										
	6				11.94	16.44	21.54	27.24	33.54						
	7				14.39	19.64	25.59	32.24	39.59	47.64					
	8					22.84	26.78	31.19	36.06	41.40	47.20	53.46			
	9					24.69	29.13	34.09	39.57	45.57	52.10	59.14	66.71		
	10							36.99	43.08	49.75	57.00	64.83	73.24	82.23	
	11										53.92	61.90	70.51	79.76	89.65

Table - Estimated *M. dubia* over bark volume (m³/tree) based on regression equation

		DBH (cm)													
Tree height (m)		4	5	6	7	8	9	10	11	12	13	14	15	16	17
	4	0.005	0.006	0.007	0.009										
	5	0.005	0.007	0.008	0.010										
	6				0.012	0.015	0.018	0.021	0.025						
	7				0.013	0.016	0.020	0.024	0.028	0.033					
	8					0.018	0.022	0.027	0.032	0.038	0.044	0.050			
	9					0.020	0.025	0.030	0.036	0.042	0.049	0.056	0.064		
	10							0.033	0.039	0.046	0.054	0.062	0.071	0.080	
	11									0.051	0.059	0.068	0.077	0.088	0.098

DBH=Di
ameter
at
breast
height

20. Development of local volume table for Saru (*Casuarina equisetifolia*): Rajesh P. Gunaga et al.

Recommendation: It is recommended that farmers, foresters and wood merchants of South Gujarat can use volumetric equations, $V_1 = 0.00005 \times HD^2 + 0.0196$ (trees with DBH of 10 to 45 cm) and volumetric equation, $V_2 = 0.00003 \times HD^2 + 0.6874$ (trees with DBH of 45 to 70 cm) and below given local volume table for estimation of volume of standing trees of *Casuarina equisetifolia*. [Agresco-2021]

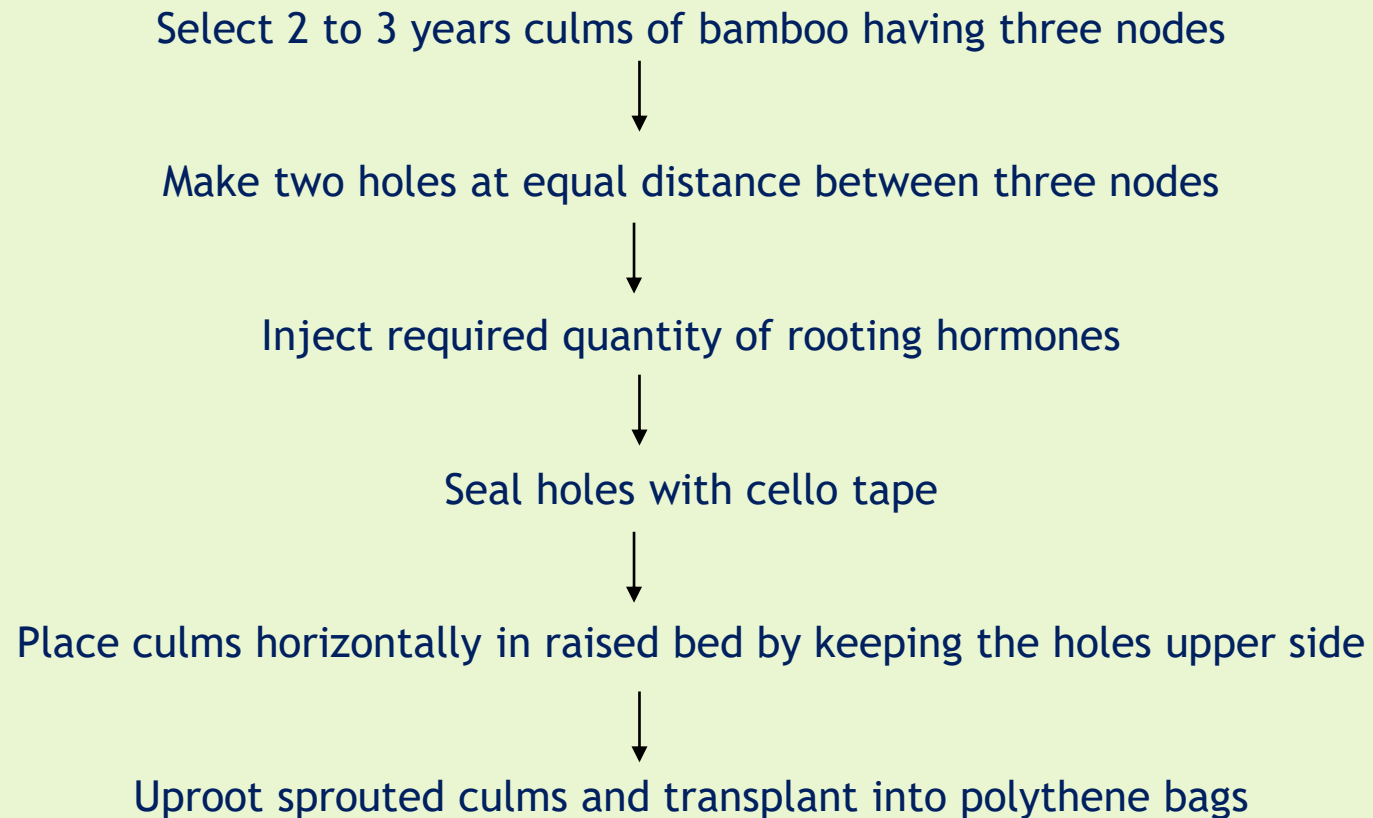
Table : Local volume table developed for Saru (*Casuarina equisetifolia*) trees grown in south Gujarat condition (m³/tree)

			Height in m (Height range and mid value)											
Diameter/ Height range			8-11	11-14	14-17	17-20	20-23	23-26	26-32	32-35	35-38	38-41	41-44	44-47
	Mid diameter / Height		9.5 m	12.5 m	15.5 m	18.5 m	21.5 m	24.5 m	27.5 m	33.5 m	36.5 m	39.5 m	42.5 m	45.5 m
DBH (cm) (Dia range and value)	10-15	12.5 cm	0.094	0.117	0.141	0.164	0.188	0.211	0.234					
	15-20	17.5 cm	0.165	0.211	0.257	0.303	0.349	0.395	0.441					
	20-25	22.5 cm		0.336	0.412	0.488	0.564	0.640	0.716	0.868				
	25-30	27.5 cm			0.606	0.719	0.833	0.946	1.059	1.286				
	30-35	32.5 cm				0.997	1.155	1.314	1.472	1.789	1.947	2.106	2.264	2.423
	35-40	37.5 cm				1.320	1.531	1.742	1.953	2.375	2.586	2.797	3.008	3.219
	40-45	42.5 cm				1.690	1.961	2.232	2.503	3.045	3.316	3.587	3.858	4.129
	45-50	47.5 cm						2.346	2.549	2.955	3.158	3.361	3.564	3.767
	50-55	52.5 cm						2.713	2.961	3.457	3.705	3.954	4.202	4.450
	55-60	57.5 cm							3.415	4.010	4.308	4.605	4.903	5.200
	60-65	62.5 cm							3.910	4.613	4.965	5.316	5.668	6.019
	65-70	67.5 cm								5.266	5.676	6.087	6.497	6.907

21. Macro propagation of different bamboo species by Culm Cutting with different root hormone treatments: Jayesh Pathak *et al.*

Recommendation: Farmers/nursery entrepreneurs of Gujarat are recommended to use 2 to 3 years culms of bamboo in the month of February-March by making two holes between two nodes and inject 120 ml (60 ml + 60 ml) NAA 500 ppm in *Bambusa balcooa*, 120 ml (60 ml + 60 ml) IBA 500 ppm in *Bambusa bambos* and *Dendrocalamus stocksii* and 120 ml (60 ml + 60 ml) IBA 200 ppm in *Bambusa vulgaris* var. *vulgaris* followed by sealing of holes for large scale propagation by culm cutting technique in the following manner.. [Agresco-2022]

Culm cutting process:



22. Development of volumetric equation for Eucalyptus (*Eucalyptus* spp.): L. K. Behera et al.

Recommendation: It is recommended that farmers, foresters and wood merchants of South Gujarat can use volumetric equation, $V = 0.0621 + 0.000037 D^2H - 0.0003D^2 + 0.0009DH - 0.0104 H$ ($R^2=0.951$) (V = Volume in m^3 , D = Diameter at Breast Height in cm, H = Height in m) for 10-60 cm DBH and below given local volume table for estimation of volume of standing Eucalyptus trees. [Agresco-2022]

Table: Local volume table developed for Eucalyptus (*Eucalyptus* spp.) trees grown in south Gujarat condition (m^3 /tree)

			Height in m (Height range and mid value)											
Diameter/ Height range			8-11	11-14	14-17	17-20	20-23	23-26	26-29	29-32	32-35	35-38	38-41	41-44
		Mid diameter/ Height	9.5 m	12.5m	15.5 m	18.5 m	21.5 m	24.5 m	27.5 m	30.5 m	33.5 m	36.5 m	39.5 m	42.5 m
DBH (cm) (Dia. range and mid value)	10-15	12.5 cm	0.078	0.098	0.118	0.138	0.158	0.178						
	15-20	17.5 cm	0.129	0.179	0.229	0.279	0.329	0.379	0.429					
	20-25	22.5 cm	0.182	0.267	0.353	0.439	0.525	0.610	0.696	0.705				
	25-30	27.5 cm		0.364	0.491	0.618	0.745	0.872	0.999	1.126	1.253			
	30-35	32.5 cm		0.469	0.643	0.817	0.991	1.165	1.338	1.512	1.686			
	35-40	37.5 cm			0.809	1.035	1.261	1.487	1.713	1.939	2.165	2.392		
	40-45	42.5 cm			0.988	1.272	1.556	1.840	2.124	2.408	2.692	2.976		
	45-50	47.5 cm			1.181	1.528	1.876	2.223	2.571	2.918	3.266	3.613	3.961	
	50-55	52.5 cm				1.804	2.220	2.637	3.053	3.470	3.886	4.303	4.719	5.136
	55-60	57.5 cm					2.589	3.080	3.571	4.063	4.554	5.045	5.536	6.027

Table: Local volume table developed for Eucalyptus (*Eucalyptus* spp.) trees grown in south Gujarat condition (ft³/tree)

			Height in ft (Height range and mid value)											
	Diameter/ Height range		26.25-36.09	36.09-45.93	45.93-55.77	55.77-65.62	65.62-75.46	75.46-85.30	85.30-95.14	95.14-104.99	104.99-114.83	114.83-124.67	124.67-134.51	134.51-144.36
		Mid diameter/ Height	31.17 ft	41.01 ft	50.85 ft	60.70 ft	70.54 ft	80.38 ft	90.22 ft	100.07 ft	109.91 ft	119.75 ft	129.59 ft	139.4 ft
DBH (inch) (Dia. range and mid value)	4-6	5 inch	2.762	3.465	4.167	4.870	5.573	6.275						
	6-8	7 inch	4.545	6.312	8.079	9.847	11.614	13.381	15.149					
	8-10	9 inch	6.418	9.446	12.474	15.502	18.530	21.558	24.586	24.886				
	10-12	11 inch		12.867	17.352	21.837	26.322	30.806	35.291	39.776	44.261			
	12-14	13 inch		16.576	22.713	28.850	34.988	41.125	47.263	53.400	59.538			
	14-16	15 inch			28.557	36.543	44.529	52.515	60.501	68.488	76.474	84.460		
	16-18	17 inch			34.883	44.914	54.945	64.976	75.007	85.038	95.069	105.100		
	18-20	19 inch			41.693	53.965	66.236	78.508	90.779	103.051	115.323	127.594	139.866	
	20-22	21 inch				63.694	78.402	93.110	107.819	122.527	137.235	151.944	166.652	181.361
	22-24	23 inch					91.443	108.784	126.125	143.466	160.807	178.148	195.489	212.830

23. Effect of different pre-sowing treatments on germination of Red Sanders (*Pterocarpus santalinus* L. f.): M. B. Tandel et al.

Recommendation: Nurseryman and forest dwellers/ farmers are recommended to soak pods of Red Sanders (*Pterocarpus santalinus* L. f.) in GA₃ @ 500 mg/l for 1 day followed by sowing in the month of March in sand bed for sprouting and then after transplanting at two leaves stage in to growing media of Soil: Sand: FYM (2:1:2) to enhance seed germination and seedling growth. [Agresco-2022]

Note: Dilute 500 mg of GA₃ in 100 ml of water along with 5-10 ml of alcohol. Mix it properly till GA₃ dissolved and make final volume up to 1 litre.

24. Effect of Eucalyptus plantation on soil fertility in South Gujarat:

V. M. Prajapati et al.

Recommendation: It is recommended to farmers of Gujarat that under Eucalyptus plantation, Soil pH is reduced whereas organic carbon, available P₂O₅, available K₂O, soil bacterial and fungal population are increased. Moreover, soil EC and available nitrogen are not affected due to Eucalyptus plantation. [Agresco-2022]

25. Evaluation of nutritive value of Leaves of different bamboo species: Jayesh Pathak *et al.*

Scientific Information: Bamboo leaves are rich in nutritive value in terms of dry matter, crude protein, calcium, phosphorus, fat, carbohydrate, crude fibre, nitrogen free extract and total ash content. Therefore, it can be used for further palatability and digestibility experiments. Top five species with respect to nutritive parameters are as under. [Agresco-2022]

Sr. No.	Nutritive Parameters	Bamboo species
1.	Moisture Content (%) and Dry Matter Content (%)	<i>Thyrsostachys oliveri</i> , <i>Bambusa multiplex</i> , <i>Ochlandra travancorica</i> , <i>Schizostachyum pergracile</i> and <i>Bambusa pallida</i> .
2.	Crude Protein (%)	<i>Dendrocalamus hamiltonii</i> , <i>Dendrocalamus giganteus</i> , <i>Dendrocalamus sikkimensis</i> , <i>Bambusa wamin</i> and <i>Gigantochloa atrovioleacea</i> .
3.	Calcium (%)	<i>Ochlandra travancorica</i> , <i>Bambusa pallida</i> , <i>Bambusa balcooa</i> , <i>Bambusa vulgaris</i> var. <i>vittata</i> and <i>Dendrocalamus hamiltonii</i> .
4.	Phosphorus (%)	<i>Gigantochloa atrovioleacea</i> , <i>Bambusa nutans</i> , <i>Thyrsostachys oliveri</i> , <i>Dendrocalamus sikkimensis</i> and <i>Bambusa vulgaris</i> var. <i>vulgaris</i> .
5.	Ether extract or Fat (%)	<i>Bambusa multiplex</i> , <i>Dendrocalamus giganteus</i> , <i>Thyrsostachys oliveri</i> , <i>Bambusa wamin</i> and <i>Bambusa vulgaris</i> var. <i>vittata</i> .
6.	Carbohydrate (%)	<i>Bambusa vulgaris</i> var. <i>vulgaris</i> , <i>Dendrocalamus strictus</i> , <i>Schizostachyum pergracile</i> , <i>Dendrocalamus stocksii</i> and <i>Bambusa nutans</i> .
7.	Crude Fibre (%)	<i>Bambusa polymorpha</i> , <i>Ochlandra travancorica</i> , <i>Dendrocalamus stocksii</i> , <i>Bambusa vulgaris</i> var. <i>vittata</i> and <i>Bambusa nutans</i> .
8.	Nitrogen Free Extract (%)	<i>Bambusa vulgaris</i> var. <i>vulgaris</i> , <i>Dendrocalamus stocksii</i> , <i>Bambusa nutans</i> , <i>Dendrocalamus strictus</i> and <i>Bambusa vulgaris</i> var. <i>vittata</i> .
9.	Total Ash Content (%)	<i>Bambusa wamin</i> , <i>Dendrocalamus giganteus</i> , <i>Dendrocalamus strictus</i> , <i>Bambusa vulgaris</i> var. <i>vittata</i> , <i>Gigantochloa atrovioleacea</i> and <i>Bambusa vulgaris</i> var. <i>vulgaris</i> .

26. Effect of windbreak (*Casuarina equisetifolia* L.) on productivity of paddy in South Gujarat: V. M. Prajapati *et al.*

Recommendation: The Farmers of South Gujarat heavy rainfall zone-I are recommended that paddy grown under single line windbreak of *Casuarina* (*Casuarina equisetifolia* L.) planted at 1 m spacing in north-south direction having average of height of 20 m and DBH of 28 cm on the farm boundary reduced the lodging damage and improved the paddy yield as well as soil quality as compared to paddy grown in open plot (without any windbreak). [Agresco-2023]

27. Phenological study of Lesser known and Threatened tree species of South Gujarat: L. K. Behera *et al.*

Scientific Information: Among 15 tree species studied, nine tree species such as *Sterculia urens*, *Sterculia villosa*, *Dalbergia lanceolaria*, *Oroxylum indicum*, *Soymida febrifuga*, *Dalbergia latifolia*, *Stereospermum chelonoides* and *Albizia procera* are deciduous in nature; however, species such as *Bauhinia malabarica*, *Pterocarpus marsupium*, *Ougeinia dalbergioides* and *Miliusa tomentosa* showed leaf fall and leaf renewal events but not shown leafless condition. Further, *Mallotus philippensis* found to be typical evergreen species. Vegetative phenology and reproductive phenology like flowering, fruiting and fruit/ seed fall information can be used for collection of seeds for nursery practice (as in the given table). This information can also be useful for conservation and management of these species. [Agresco-2023]

Sr. No.	Tree Name	Nature of Tree species	Leaf fall period	Leaf renewal period	Leafless period	Flowering period	Fruiting period	Fruit fall period
1.	<i>Semicarpus anacardium</i>	Deciduous	Nov-Apr	May-Jul	Apr-May	Jun-Sept	Sept-Feb	Feb-Mar
2.	<i>Sterculia urens</i>	Deciduous	Sept-Dec	May-Jul	Jan-Apr	Dec-Feb	Jan-Mar	Mar-May
3.	<i>Sterculia villosa</i>	Deciduous	Nov-Feb	May-Jul	Feb-May	Jan-Mar	Mar-Apr	Apr-May
4.	<i>Dalbergia lanceolaria</i>	Deciduous	Nov-Mar	May-Jul	Apr	Apr-May	May-Jul	Jan-Mar
5.	<i>Oroxylum indicum</i>	Deciduous	Nov-Mar	May-Jul	Apr	Jul-Oct	Nov-Feb	Mar-Apr
6.	<i>Soymida febrifuga</i>	Deciduous	Jan-Mar	May-Jul	Apr	Mar-Apr	Apr-May	Jun
7.	<i>Dalbergia latifolia</i>	Deciduous	Nov-Mar	May-Jun	Apr	Apr-May	Apr-Jun	Dec-Mar
8.	<i>Stereospermum chelonoides</i>	Deciduous	Nov-Mar	Apr-Jun	April	Mar-May	May-Aug	Nov-Dec
9.	<i>Albizia procera</i>	Deciduous	Nov-Mar	Apr-July	Mar-Apr	Jul-Aug	Sept-Oct	Mar-May
10.	<i>Bauhinia malabarica</i>	Nearly evergreen	Nov-Mar	Apr-Jun	-	Sept-Oct	Nov-Feb	Mar-May
11.	<i>Pterocarpus marsupium</i>	Nearly evergreen	Nov-Apr	Apr-Jun	-	Oct-Dec	Nov-Feb	Feb-Apr
12.	<i>Ougeinia dalbergioides</i>	Nearly evergreen	Jan-Mar	Apr-Jun	-	Feb-Apr	Apr-May	May
13.	<i>Milusa tomentosa</i>	Nearly evergreen	Jan-Mar	Mar-Jun	-	Apr-May	May-Jun	Jun-Jul
14.	<i>Hardwickia binata</i>	Nearly evergreen	Nov-May	Dec-Jul	-	-	-	-
15.	<i>Mallotus philippensis</i>	Evergreen	Aug-May	Feb-July	-	Nov-Jan	Jan-Mar	Mar-May

28. Study of growth and bark biomass potential of Ashok [*Saraca asoca* (Roxb.) Willd.)] under different spacing: R. P. Gunaga *et al.*

Recommendation: Nurserymen are recommended to use bold seeds (single seed weight of 9.9 to 13 g) followed by soaking seeds in normal water for 24 hrs to obtain higher seed germination (>85%) and seedling growth in Ashok. Farmers are suggested to raise Ashok plantation at 1m x 2m spacing for bark harvesting and plantation can be managed under coppice system after bark harvesting at the age of 5½ years by maintaining 2 to 3 coppice shoots per stem for higher growth and bark yield. [Agresco-2024]

29. Influence of pre-sowing treatments on germination and early growth in Khatichamol (*Bauhinia malabarica* Roxb.): L. K. Behera *et al.*

Recommendation: Farmers, foresters and nurserymen are recommended to use pre-sowing treatment by soaking seeds in 98 per cent concentrated sulphuric acid (H₂SO₄) for 30 min followed by soaking in normal water for 24 hrs for achieving higher seed germination and seedling growth in Khati chamol (*Bauhinia malabarica*). [Agresco-2024]

30. Influence of pre-sowing treatments on germination and early growth in Rapid multiplication of *Dendrocalamus hamiltonii* through in vitro regeneration techniques from nodal explant: Jayesh Pathak *et al.*

Scientific Information: In bamboo species *Dendrocalamus hamiltonii*, contamination control by Absolute Alcohol (70 %) for 30 Sec + Mercuric Chloride (0.1 %) for 5 Min followed by shoot multiplication in MS + 4.0 mg/l BAP and rooting in 3mg/l IBA + 3mg/l IAA + 2 % Sucrose and final acclimatization in Soil + sand + Vermicompost (1:1:1) media results in rapid multiplication through in vitro regeneration techniques from nodal explant. [Agresco-2024]

31. Development of volumetric equation for Bangali baval (*Acacia auriculiformis* A. Cunn. ex Benth.): Guanaga *et al.*

Recommendation: The farmers, foresters and wood merchants of Gujarat can use volumetric equations: $V = [0.000559 \times D^2.050]$ ($R^2 = 0.861$ and $RMSE = 0.244$) (where V = Volume, m^3 and D = DBH -Diameter at Breast Height, cm) for estimating volume of Bangali baval (*Acacia auriculiformis*) using tree diameter from 10 to 80 cm. The following local volume and carbon tables developed using equation $V = [-0.143 + (0.001 \times D \times H) + (0.0000113 \times D^2 \times H) + (0.0000092 \times D \times H^2)]$ ($R^2 = 0.956$ and $RMSE = 0.149$) (V =Volume, m^3 , D = DBH, cm and H =Height, m) can directly be used to find out stem volume and carbon content of Bangali baval standing trees. [Agresco-2025]

Local volume table of Bangali Baval (*Acacia auriculiformis*) for South Gujarat condition

DBH (cm)	DBH range	Height Range Mean Height/ Mean DBH	Tree Height (m)									
			5-8 m	8-11 m	11-14 m	14-17 m	17-20 m	20-23 m	23-26 m	26-29 m	29-32 m	32-35 m
			6.5 m	9.5 m	12.5 m	15.5 m	18.5 m	21.5 m	24.5 m	27.5 m	30.5 m	33.5 m
	10-15 cm	12.5 cm		0.003	0.053	0.106	0.160	0.217				
	15-20 cm	17.5 cm		0.071	0.144	0.221	0.300	0.382	0.467			
	20-25 cm	22.5 cm	0.049	0.144	0.242	0.344	0.450	0.559	0.673	Volume in cubic meter (m ³)		
	25-30 cm	27.5 cm	0.102	0.222	0.347	0.476	0.610	0.749	0.892			
	30-35 cm	32.5 cm		0.306	0.459	0.618	0.781	0.951	1.125			
	35-40 cm	37.5 cm		0.395	0.578	0.767	0.963	1.164	1.372			
	40-45 cm	42.5 cm			0.704	0.926	1.155	1.390	1.633	1.883	2.140	2.403
	45-50 cm	47.5 cm			0.838	1.093	1.357	1.628	1.908	2.195	2.490	2.793
	50-55 cm	52.5 cm				1.270	1.570	1.879	2.196	2.523	2.858	3.201
	55-60 cm	57.5 cm				1.454	1.793	2.141	2.499	2.866	3.242	3.629
	60-65 cm	62.5 cm				1.648	2.027	2.416	2.815	3.224	3.644	4.075
	65-70 cm	67.5 cm					2.271	2.702	3.145	3.599	4.064	4.540
	70-75 cm	72.5 cm					2.525	3.001	3.489	3.989	4.500	5.024
	75-80 cm	77.5 cm						3.312	3.847	4.394	4.954	5.527

Note: Volume table was constructed using the formula $V = a + bDH + cD^2H + dDH^2$; where $a = -0.143$, $b = +0.001$, $c = 0.0000113$ and $d = 0.0000092$

Local volume table of Bangali Baval (*Acacia auriculiformis*) for South Gujarat condition

DBH (cm)	DBH range	Height Range Mean Height/ Mean DBH	Tree Height (m)									
			5-8 m	8-11 m	11-14 m	14-17 m	17-20 m	20-23 m	23-26 m	26-29 m	29-32 m	32-35 m
			6.5 m	9.5 m	12.5 m	15.5 m	18.5 m	21.5 m	24.5 m	27.5 m	30.5 m	33.5 m
	10-15 cm	12.5 cm		0.10	1.88	3.73	5.66	7.66				
	15-20 cm	17.5 cm		2.50	5.09	7.79	10.59	13.49	16.50			
	20-25 cm	22.5 cm	1.74	5.08	8.55	12.15	15.89	19.76	23.75	Volume in cubic feet (ft ³)		
	25-30 cm	27.5 cm	3.60	7.85	12.26	16.83	21.56	26.45	31.50			
	30-35 cm	32.5 cm		10.81	16.22	21.81	27.59	33.57	39.73			
	35-40 cm	37.5 cm		13.96	20.42	27.10	34.00	41.12	48.46			
	40-45 cm	42.5 cm			24.88	32.70	40.78	49.10	57.67	66.49	75.56	84.87
	45-50 cm	47.5 cm			29.58	38.61	47.92	57.51	67.37	77.51	87.93	98.63
	50-55 cm	52.5 cm				44.83	55.44	66.34	77.56	89.08	100.91	113.05
	55-60 cm	57.5 cm				51.36	63.32	75.61	88.24	101.20	114.50	128.14
	60-65 cm	62.5 cm				58.20	71.57	85.31	99.41	113.87	128.70	143.90
	65-70 cm	67.5 cm					80.19	95.43	111.06	127.09	143.51	160.33
	70-75 cm	72.5 cm					89.18	105.98	123.21	140.85	158.93	177.42
	75-80 cm	77.5 cm						116.96	135.84	155.17	174.95	195.19

Note: Volume table was constructed using the formula $V = a + bDH + cD^2H + dDH^2$; where $a = -0.143$, $b = 0.001$, $c = 0.0000113$ and $d = 0.0000092$

Carbon table of Bangali Baval (*Acacia auriculiformis*) for South Gujarat condition

DBH (cm)	DBH range	Height Range Mean Height/ Mean DBH	Tree Height (m)									
			5-8 m	8-11 m	11-14 m	14-17 m	17-20 m	20-23 m	23-26 m	26-29 m	29-32 m	32-35 m
			6.5 m	9.5 m	12.5 m	15.5 m	18.5 m	21.5 m	24.5 m	27.5 m	30.5 m	33.5 m
	10-15 cm	12.5 cm		0.75	13.75	27.28	41.35	55.96				
	15-20 cm	17.5 cm		18.23	37.20	56.91	77.37	98.58	120.54			
	20-25 cm	22.5 cm	12.69	37.10	62.47	88.80	116.09	144.34	173.56			
	25-30 cm	27.5 cm	26.31	57.35	89.56	122.94	157.50	193.23	230.14	Carbon content (kg per tree)		
	30-35 cm	32.5 cm		78.98	118.47	159.35	201.61	245.26	290.30			
	35-40 cm	37.5 cm		102.01	149.21	198.01	248.42	300.43	354.04			
	40-45 cm	42.5 cm			181.77	238.93	297.92	358.72	421.34	485.77	552.02	620.09
	45-50 cm	47.5 cm			216.15	282.12	350.12	420.15	492.21	566.31	642.43	720.58
	50-55 cm	52.5 cm				327.56	405.02	484.72	566.66	650.85	737.28	825.95
	55-60 cm	57.5 cm				375.26	462.61	552.42	644.68	739.40	836.57	936.21
	60-65 cm	62.5 cm				425.23	522.90	623.25	726.27	831.96	940.32	1051.35
	65-70 cm	67.5 cm					585.89	697.22	811.43	928.53	1048.51	1171.37
	70-75 cm	72.5 cm					651.58	774.32	900.16	1029.10	1161.14	1296.28
	75-80 cm	77.5 cm						854.56	992.47	1133.69	1278.22	1426.07

32. Influence of pre-sowing treatments on germination and growth of seedlings of Biyo (*Pterocarpus marsupium* Roxb.): Behera *et al.*

Recommendation: Farmers, foresters and nursery men are recommended to soak biyo fruits in GA₃ at 0.75 g/liter for 12 hrs before sowing for achieving higher seed germination and seedling growth in Biyo (*Pterocarpus marsupium*). [Agresco-2025]

33. Study of natural regeneration and stand structure of Khati chamol (*Bauhinia malabarica* Roxb.): Behera *et al.*

Scientific Information: In Vyara forest of south Gujarat, *Bauhinia malabarica* trees are closely associated with *Tectona grandis*, *Terminalia tomentosa*, *Miliusa tomentosa* and *Madhuca indica* with average density of 2.06 ha⁻¹, basal area of 27.94 m² ha⁻¹ and Importance value index of 34.65; however, the natural regeneration of *B. malabarica* was very poor. [Agresco-2025]

B. COMPLETED PROJECTS

Sr. No.	Title of Project	Name of PI	Funding Agency	Duration
1.	Establishment of Model Nursery and Popularizing planting of superior quality planting material of economically important Agroforestry Tree Species.	Dr. D. B. Jadeja	RKVY, MoAC, New Delhi	3 year
2.	Forest Resource Survey of Vyara Forest Division	Dr. N. S. Thakur	Gujarat Forest Department	2 Year
3.	Developing Aqua Agroforestry base model for Dandi Village	Dr. M. B. Tandel	RKVY, MoAC, New Delhi	2012
4.	Promotion of Scientific management of Palmyra palm	Dr. Jayesh Pathak	RKVY, MoAC, New Delhi	2012

C. ONGOING PROJECTS

Sr. No.	Title of the Project	Name of PI	Funding Agency	Year of start
1.	Research in Agroforestry Systems	Dr. M. R. Parmar	Govt. of Gujarat	1998
2.	A Pilot Project for development of Aqua Agroforestry based model for coastal areas of south Gujarat- Dandi	Dr. M. B. Tandel	Govt. of Gujarat	2014
3.	Development of Bamboo Resource Centre	Dr. Jayesh Pathak	Govt. of Gujarat	2014
4.	Carbon Sequestration Potential of forest trees species of South Gujarat	Dr. R. P. Gunaga	Govt. of Gujarat	2014
5.	Popularizing Melia composita based agroforestry system in South Gujarat through production of quality planting material	Dr. N. S. Thakur	Govt. of Gujarat	2016
6.	Development of Industrial Agroforestry Model for South Gujarat Region	Dr. V. M. Prajapati	Govt. of Gujarat	2018
7.	Regeneration Techniques for Lesser Known and Threatened species of South Gujarat	Dr. L. K. Behera	Govt. of Gujarat	2019
8.	Strengthening of Bamboo Resource Centre	Dr. Jayesh Pathak	Govt. of Gujarat	2023

D. SEMINAR/SYMPOSIUM/WORKSHOP ORGANIZED

Sr. No.	Title of the Seminar/Symposia/Workshop	Organising Secretary	Date & Venue
1.	National Seminar on “Interventions for Environmental Moderation”	Dr. D.B. Jadeja	8-10 th Jan. 2008, NAU, Navsari ,
2.	National Seminar on “Agroforestry: An evergreen agriculture for food security and environmental resilience”	Dr. D.B. Jadeja	2-4 th Feb. 2012, NAU, Navsari ,
3.	One day Workshop on “Bamboo for Rural Gujarat” & World Bamboo Day celebration	Dr. Jayesh Pathak	18 th Sept., 2013 NAU, Navsari
4.	Bamboo for Rural Farmers	Dr. Jayesh Pathak	18 th Sept., 2014 NAU, Navsari
5.	Bamboo Cultivation and Management	Dr. Jayesh Pathak	18 th Sept., 2015 NAU, Navsari
6.	National Seminar on Palmyra Palm	Dr. Jayesh Pathak	7-8 Jan., 2016 NAU, Navsari
7.	National Seminar on “Forest and Tree- Based Land Use Systems for Livelihood, Nutritional and Environmental Security”	Dr. N.S. Thakur	21-23 Dec., 2016 NAU, Navsari

Sr. No.	Title of the Seminar/Symposia/Workshop	Organising Secretary	Date & Venue
8.	Bamboo Farming and Its Management	Dr. Jayesh Pathak	18 th Sept., 2017 NAU, Navsari
9.	Bamboo Farming and Its Management	Dr. Jayesh Pathak	18 th Sept., 2019 NAU, Navsari
10.	Bamboo Farming and Its Management	Dr. Jayesh Pathak	18 th Sept., 2020 NAU, Navsari
11.	Bamboo Farming and Its Management	Dr. Jayesh Pathak	18 th Sept., 2021 NAU, Navsari
12.	Bamboo Farming and Its Management & Bamboo Products Exhibition	Dr. Jayesh Pathak	12 th to 18 th Sept., 2022 NAU, Navsari
13.	NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth”	Dr. N. S. Thakur	15 th to 17 th February, 2023 NAU, Navsari
14.	One Week Hands on Training Programme and Workshop on “Bamboo Farming and Products”	Dr. Jayesh Pathak	11 th to 18 th Sept., 2023 NAU, Navsari
15.	One Week Training Programme and Workshop on “Bamboo Farming, Propagation, Innovative Furniture and Product Crafting”	Dr. Jayesh Pathak	13 th to 18 th Sept., 2024 NAU, Navsari

E. TRAINING ORGANIZED

Sr. No.	Title of the Training Programme	Organising Secretary	Date & Venue
1.	Three Days Training Programme on Sustainable Development of Agroforestry and Bamboo Farming (For RFO)	Dr. M. B. Tandel Dr. R. P. Gunaga	9 to 11, January 2025 College of Forestry, NAU, Navsari
2.	Three Days Training Programme on Sustainable Development of Agroforestry and Bamboo Farming (For ACF)	Dr. M. B. Tandel Dr. R. P. Gunaga	27 to 29, January 2025 College of Forestry, NAU, Navsari
3.	Two Days Training Programme on Sustainable Development of Agroforestry and Bamboo Farming (For Foresters and Forest Guard)	Dr. N. S. Thakur Dr. V. B. Patel	4 & 5, March 2025 College of Forestry, NAU, Navsari
4.	One Day Farmer Training Programme on “Cultivation of Forest Tree Crops” (ખેડૂત તાલીમ : વન્ય પાકોની ખેતી) (For Farmers)	Dr. M. B. Tandel Dr. R. P. Gunaga	12 & 13, March 2025 College of Forestry, NAU, Navsari
5.	Three Days Training Programme on Sustainable Development of Agroforestry and Bamboo Farming (For Forest Guard)	Dr. M. B. Tandel Dr. R. P. Gunaga	19 & 21, March 2025 College of Forestry, NAU, Navsari

F. PUBLICATIONS:

(A) PAPER PUBLISHED IN NATIONAL AND INTERNATIONAL JOURNALS

1. Bansude, A.A., R.P. Gunaga, A.B Mirgal, S.S. Narkhede, A.D. Rane, S.G. Bhawe and A.P. Rewale (2013). Variation in Seed Traits and Germination among different Seed Sources of *Garcinia talbotii* in Maharashtra. *Journal of Tree Sciences*, **32** (1&2): 27-31.
2. Behera, L. K, Nayak, M. R., Gunaga, R. P., Dobriyal, M. J. R. and Jadeja, D. B. (2015). Potentiality of planted forest towards carbon sequestration and climate change mitigation. *International Journal of Forest Usufructs Management*, **16**(1): 82-91.
3. Behera, L. K., Nayak, M. R., Gunaga, R. P., Dobriyal, M. J. and Patel, D. P. (2015). A Land Use System Agroforestry for Biodiversity Conservation of Native Species, *Multilogic in Science*, **4**(12): 125-130.
4. Behera, L. K., Nayak, M. R., Mehta, A. A., Patel, S. M. and Jadeja, D. B. (2015). Optimization of *in vitro* culture conditions for multiplication of physic nut (*Jatropha curcas* L.). *International Journal of Usufructs Management*, **16**(2): 66-75.
5. Behera, L. K., Nayak, M. R., Patel, D., Mehta, A., Sinha, S. K. and Gunaga, R. (2015). Agroforestry practices for physiological amelioration of salt affected soils. *Journal of Plant Stress Physiology*, **1**(1): 13-18.
6. Behera, L. K., Patel, D. P., Sinha, S. K., Gunaga, R. P. and Jadeja, D. B. (2016). Variation in Physical Properties of Wood Among Twenty Clones of *Eucalyptus* in South Gujarat. *Advances in Life Sciences*, **5**(5): 1704-1708.
7. Behera, L.K., M. R. Nayak, D. Nayak and D.B. Jadeja (2014). *In vitro* mass multiplication of *Jatropha* (*Jatropha curcas* L.) through axillary bud culture. *Journal of Applied and Natural Science*, **6**(1): 189-192.
8. Bhalawe, S., Jadeja, D. B., Tandel, M. B., Gayakwad, P., Parmar, M. R., Prajapati, V. and Behera, L. K. (2015). Non-Destructive Approach for Biomass Estimation and Carbon Mitigation in Different Land Use Systems. *Trends in Biosciences*, **8**(15): 3785-3790.
9. Bhalawe, S., M. U. Kukadia and Dileswar Nayak (2013). Nutrient release pattern of decomposed leaf litter in different multipurpose trees. *Indian Forester*, **139** (3): 212-217.
10. Bhalawe, S., D. Nayak, M.U. Kukadia and Paresh Gaykwad (2013). Leaf litter decomposition pattern of trees. *Bioscan*, **8**(4): 1135-1140.
11. Bhalawe, S., D.B. Jadeja, M.B. Tandel, P. Gayakwad and D. Nayak (2014). Atmospheric carbon capturing potential of block plantations. *Res. Environ. Life Sci.* **7**(1): 31-36.

12. Bhardwaj, S. K., Verma, K. S. and Thakur, N. S. (2009). Impact of exceptionally high rain and snowfall on chir pine plantations in Chamba district of Himachal Pradesh. *Indian Forester*, **135**(12): 1737-1742.
13. Bhatnagar, P., J. Singh, M.C. Jain, Bhim Singh, Manmohan J. R. and L.K. Dashora (2012). Studies on seasonal variations in developing fruits of Nagpur Mandarin (*Citrus reticulata* Blanco) under Jhalawar condition. *Asian Journal of Horticulture*, **7**(2): 263-265.
14. Bhatnagar, P., M.K. Kaul, J. Singh, Manmohan J. R. and P. S. Chauhan (2011). Effect of micro irrigations on growth of *Kinnow mandarin* under Silvi-horti system. *Indian Forester*, **137**(12): 1391-1395.
15. Bhusara, J. B., Thakur, N. S. and Hegde, H. T. (2016). Biological yield and carbon sequestration in prominent traditional agroforestry systems in Valsad District, Gujarat, India. *Indian Journal of Ecology*, **43**(Special Issue-1): 318-320.
16. Bijalwan, A. and Dobriyal, M. J. R. (2015). Agroforestry and Horticulture: An Employable and Eco-Friendly Option. *Int. J. Curr. Res. Biosci. Plant Biol.*, **2**(8): 81-86.
17. Bijalwan, A. and Dobriyal, M. J. R. (2016). Geometry, distribution and regeneration pattern of trees in agroforestry systems along altitude and aspect in upper Yamuna region of Uttarakhand, India. *Applied Ecology and Environmental Science*, **4**(1): 15-25.
18. Bijalwan, Arvind; Manmohan J. R. Dobriyal, Tarun Kumar Thakur (2016). Carbon sequestration Potential of agroforestry trees (Agroforests) in India. *New York Science Journal*, **9**(7): 76-81.
19. Bijalwan, Arvind; Manmohan J. R. Dobriyal and Pradeep Chaudhry (2017). e-Working Environment: A Present Way of Life. *Int. J. Curr. Res. Biosci. Plant Biol.*, **4**(1): 102-104.
20. Bijalwan, Arvind, Manmohan J. R. Dobriyal, Tarun Kumar Thakur, Pooja Verma and Shalini Singh (2017). Scaling-up of Neem (*Azadirachta indica* A. Juss) Cultivation in Agroforestry for Entrepreneurship and Economic Strengthening of Rural Community of India. *Int. J. Curr. Res. Biosci. Plant Biol.*, **4**(1): 113-118.
21. Bijalwan, A., Dobriyal, Manmohan. J. R., (2017). Legacy of Botany over Forestry. *Int. J. Curr. Res. Biosci. Plant Biol.*, **4**(5), 74- 76.
22. Chavan, S. M., Kabade, K. H., Kumar Sushil and Prajapati, V. M. (2012). *Glyphodes negatalis* Walker (Lepidoptera: Pyralidae): A new pest on Karanj, *Pongamia pinnata* (L.) Pierre in South Gujarat. *Insect Environment*, **17**(4): 176-177.
23. Chavda, J. R., Desai, B. S., Jha, S. K., Tandel, M. B. and Patel, D. P. (2015). Effect of PGR on clonal propagation of Madhunashini (*Gymnema sylvestre* R. BR.) through rooted cutting. *The Bioscan*, **10**(4): 1645-1648.

24. Dobriyal, Manmohan J. R. and Ranjana Dobriyal (2014). Non wood forest produce: an option for ethnic food and nutritional security in India. *International Journal of Forest Usufructs Management*, **15**(1): 17-37.
25. Devendra Kumar, Arvind Bijalwan, Alok Kalra, and Manmohan J.R. Dobriyal (2016). Effect of shade and organic manure on growth and yield of Patchouli [*Pogostemon Cablin* (Blanco) Benth.] under Teak (*Tectona grandis* L. F.) based Agroforestry system. *The Indian Forester*, **142**(11): 1121-1129
26. Gayakvad, P., Tandel, M. B., Bhalawe, S., Nayak, D. and Jadeja, D. B. (2015). Carbon Credit Accrued Under Different Land Use Systems in Dangs District. *Trends in Biosciences*, **18**(7): 4548-4551.
27. Gunaga, R. P. (2011). Influence of seed size on seed germination and seedling vigour in *Calophyllum inophyllum*: an important multipurpose tree of coastal region. *Jour. Indi. Soc. Coastal Agril. Res.*, **29**(2): 35-38.
28. Gunaga, R. P. (2011). Status of fruit yield in seed production areas of teak (*Tectona grandis* Linn.) in India: Implications for management. *Teaknet Bulletin*, **4**: 1-8.
29. Gunaga, R. P. and R. Vasudeva (2009). Overlap index: a measure to assess flowering synchrony among teak (*Tectona grandis* Linn. f) clones in seed orchards. *Current Science*, **97**(6): 941-946.
30. Gunaga, R. P. and Vasudeva, R. (2008). Double seeds in *Mammea suriga* (Buch.-Ham. Ex Roxb.): an important Aromatic tree species of the Western Ghats. *Journal of Non-Timber Forest Products*, **15**(3): 207-210.
31. Gunaga, R. P. and Vasudeva, R. (2009). Seed traits and half-sib family variation for seed germination and early seedling vigour in Suragi (*Mammea suriga*), an important aromatic tree species of the Western Ghats. *Journal of Non-Timber Forest Products*, **16**(4): 285-290.
32. Gunaga, R. P., A. M. Kanfade, R. Vasudeva (2011). Soil fertility status of 20 seed production areas of *Tectona grandis* Linn. f. in Karnataka, India. *Journal of Forest Science*, **57**(11): 483-490.
33. Gunaga, R. P., Hareesh, T.S. and Vasudeva, R. (2007). Effect of fruit size on early seedling vigour and Biomass in White Dammer (*Vateria indica*): a vulnerable and economically important tree species of the Western Ghats. *Journal of Non-Timber Forest Products*, **14**: 197-200.
34. Gunaga, R. P., Hareesh, T.S. and Vasudeva, R. (2008). A new report on Double embryo and Double locules in *Nothapodytes nimmoniana* Graham, an important medicinal plant of the Western Ghats. *Journal of Non-Timber Forest Products*, **15**(4): 285-286.

35. Gunaga, R. P., Kiran Kumar, A.K. and Vasudeva, R. (2006). Albino seedlings in *Sapindus trifoliatu*s L. *Journal of Non-Timber Forest Products*, **13**(1): 63-65.
36. Gunaga, R. P., R.V. Ganiger, D.A. Smita, Panjabrao Shinde and A.D. Rane (2012). Poly-embryony in *Calophyllum inophyllum*. *The Indian Forester*, **138**: 305-306.
37. Gunaga, R. P., S.S. Wanage, S.S. Raut, A.D. Rane, S.S. Narkhede and S.G. Bhav (2012). Seed developmental variation in fruits of *Mimusops elengii* L.: A Preliminary Report. *Life sciences Leaflets*, **6**: 78-81.
38. Gunaga, R. P., Suraj, P. G., Tambat, B. S. and Vasudeva, R. (2006). Double embryony in *Vateria indica* Linn. (Dipterocarpaceae): a vulnerable and economically important tree species of the Western Ghats. *Indian Journal of Forestry*, **13**(4): 265-266.
39. Gunaga, R. P., T. Surendran and Nagesh H. Prabhu (2013). Morphological variation and delineation of teak (*Tectona grandis* Linn. f) clones of Kerala through leaf characters: Implication for seed orchard management. *Mysore Journal of Agricultural Sciences*, **47**: 202-205.
40. Gunaga, R. P., Vasudeva, R. and Avinash M. Kanfade (2008). Germination of Fresh and One year stored fruits of teak (*Tectona grandis* Linn.f) Collected from several seed production areas in Karnataka, South India. *Seed Technology*, **30**(1): 70-75.
41. Gunaga, R.P. and Vasudeva, R. (2002). Genetic variation for fruiting phenology among teak clones of different provenances of Karnataka. *Indian Journal of Forestry*, **25**(2): 215-220.
42. Gunaga, R.P. and Vasudeva, R. (2002). Variation in flowering phenology in a clonal seed orchard of teak. *Journal of Tree Science*, **21**(1&2): 1-10.
43. Gunaga, R.P. and Vasudeva, R. (2004). Effect of *Khaya senegalensis* leaf litter on germination and seedling growth of finger millet. *Allelopathy Journal*, **13**(1): 83-88.
44. Gunaga, R.P. and Vasudeva, R. (2011). Effect of vermicompost and habitat soil on seedling growth of White Cedar (*Dysoxylum malabaricum* Bedd. Ex Hiern): an endangered timber species of Western Ghats. *Indian. J. Forestry*, **34**(4): 489-490.
45. Gunaga, R.P. and Vasudeva, R. (2011). Albino wildlings in *Dysoxylum malabaricum* Bedd., a critically endangered tree species of Western Ghats. *Journal of Non-Timber Forest Products*, **18**(4): 337-340.
46. Gunaga, R.P., A.D. Rane, S.S. Wanage, M.M. Naik and S.G. Bhav (2012). Natural regeneration in *Terminalia chebula*: A commercially important medicinal plant of the western Ghats. *Journal of NTFPs*, **19**(1): 55-58.
47. Gunaga, R.P., A.M. Kanfade and R. Vasudeva (2012). Patterns of seed emptiness among Seed Production Areas of Teak (*Tectona grandis* L.F.) in Karnataka, India. *Mysore Journal of Agricultural Sciences*, **46**: 164-167.

48. Gunaga, R.P., Doddabasav and Vasudeva, R. (2011). Enhancement of seed germination through proper pre-sowing treatment in *Calophyllum inophyllum*. *Karnataka Journal of Agricultural Sciences*, **24**(3): 413-414.
49. Gunaga, R.P., Doddabasav and Vasudeva, R. (2011). Influence of seed size on germination and seedling growth in *Mammea suriga*. *Karnataka Journal of Agricultural Sciences*, **24**(3): 415-416.
50. Gunaga, R.P., H. Nagesh Prabhu and T. Surendran (2010). Variation in seedling characteristics among five seed sources of teak (*Tectona grandis* L.f) in Kerala. *Indian Forester*, **136**(11): 1478-1485.
51. Gunaga, R.P., Hanumantha, M., Roopa, S. Patil., Doddabasawa and Suma S. Biradar. (2010). Infestation Status of Teak Plantation against Stem Borer, *Alcterogystia Cadambae* Moore (Lepidoptera: Cossidae): A Case Study from Dandeli Province of Karnataka. *Environment and Ecology*, **28**: 1341-1344.
52. Gunaga, R.P., Hanumantha, M., Siddappa Kannur, A.M. Kanfade and R.Vasudeva (2012). Pattern of vegetative phenology and its influence on fruit yield among different seed sources of teak (*Tectona grandis* L.) in Karnataka, South India. *Mysore Journal of Agricultural Sciences*, **46**: 20-25.
53. Gunaga, R.P., M. Hanumantha, Girish Shahapurmath and R. Vasudeva (2011). Clonal variation for Loranthus infestation in teak (*Tectona grandis* L.f.). *Indian Journal of Forestry*, **34**(2): 203-208.
54. Gunaga, R.P., Nagesh Prabhu, H. and Surendran, T. (2004). Variation in cotyledon number and phyllotaxy in seedling of teak - Research Note. *The Indian Forester*, **130**: 235-236.
55. Gunaga, R.P., Nagesh Prabhu, H. and Surendran, T. (2005). Root Trainer Technology in Forest Nurseries: An overview. *My Forest*, **41**(1): 7-14.
56. Gunaga, R.P., T. Surendran and Nagesh H. Prabhu (2013). Morphological variation and delineation of teak (*Tectona grandis* Linn. f) clones of Kerala through leaf characters: Implication for seed orchard management. *Mysore Journal of Agricultural Sciences*, **47**: 202-205.
57. Gunaga, R.P., Vasav, V.P. and Narkhede, S.S. (2012). Seed abortion in *Oroxylum indicum*: A commercial medicinal tree. *Jour. Agriculture and Allied Sciences*, **1**(1):1-3.
58. Gunaga, R.P., S.S.Wange, A.B.Mirgal, A.D. Rane, S.S.Narkhede and S. G. Bhawe. (2013). A Note on albinism in *Saraca asoca* (Roxb.) de Wild. *The Indian Forester*, **139**(5): 471-472.
59. Gupta, B., Thakur, N.S. and Bandana Chib (2012). Survival and growth of exotic grasses under plantations of *Eucalyptus tereticornis* in North West Himalaya. *Indian Journal of Forestry*, **35**(2): 181-186.

60. Gupta, B., Thakur, N.S. and Dass, B. (2007). Allelopathic effect of leaf leachates of *Pinus roxburghii* Sargent on seeds of some grasses. *Indian Forester*, **133**(7): 997-1000.
61. Gupta, B., Guleria, V., Thakur, N.S. and Singh, N. (2010). Variability studies among different seed sources of *Acacia catechu* Willd. *Journal of Non-Timber Forest Products*, **17**(4): 487-490.
62. Hanumantha, M., Patil, R. S., Gunaga, R. P., Biradar, S. S. and Garg, S. (2015). Plant Wealth of Forest Training Institute, Gungaragatti, Dharwad, Karnataka. *Int. J. of Usuf. Mngt.*, **16**(2): 82-99.
63. Hanumantha, M., Rajesh P. Gunaga, Roop Patil, Suma S. Biradar and Nagaraj (2013): Ternate leaves-an abnormal phyllotaxy in teak (*Tectona grandis* L.f). *The Indian Forester*, **139**(9): 851-852.
64. Hanumantha, M., Vasudeva, R. and R. P. Gunaga (2002). Effect of UV-irradiation on pollen germination and tube growth in *Butea monosperma* and *Glyricidia maculata*. *Journal of Tree Sciences*, **21**(1&2): 81-87.
65. Hareesh, T.S., Vigneshwara D. Hegde, Srikanth Gunaga, R. P. Gunaga and Vasudeva, R. (2009). Occurrence and Regeneration status of *Embelia ribes* Burm. F.: An endangered and Medicinally important Liana of Central Western Ghats. *Journal of Non-Timber Forest Products*, **16**(1): 5-10.
66. Hegde, H. T., Kalkoor, M. A., Jha, S. K. and Thakur, N. S. (2014). Evaluation of variation in Physical properties of wood among some Tropical Tree Species of South India. *Indian Forester*, **140**(1): 70-75.
67. Hegde, H. T., Singh, S. K., Hegde, N., Thakur, N. S. and Jha, S. K. (2011). People's participation in forest management. *Indian Forester*, **137**(8a): 70-75.
68. Jha, S. K., Hegde, H. T. and Thakur, N. S. (2011). Community Forestry: A viable option for forest management. *Indian Forester*, **137**(8a): 100-104.
69. Joshi, D.N., P. P. Bhojvaid and Manmohan J. R. Dobriyal (2003). Effect of chemical fertilizer (NPK) on seed production of *Ammi majus* linn. and cultivation cost analysis. *International J. of Forest Usufructs Management*, **4**: 249-262.
70. Kambale, P. D., Narkhede, S. S., Mhaiske, V. M., Rane, A. D. and Gunaga, R. P. (2015). Variation in seed quality seed parameters of teak clones (*Tectona grandis* L. F.). *Journal of Tree Sciences*, **34**(1): 17-22.
71. Kumar, D., Bijalwan, A., Dobriyal, M. J. R. and Kalra, A. (2015). Response of growth hormone IBA on morphological attributes of patchouli cuttings. *Int. Journal of Forest Usufructs Management*, **16**(2): 22-31.

72. Kumar, M., Thakur, N. S. and Hegde, H. T. (2015). Growth, herb yield and financial flows from *Ocimum* spp. intercropped under teak (*Tectona grandis* L. f.)-*Ocimum* spp. based silvi-medicinal system in Gujarat, India. *International Journal of Innovative Horticulture*, 4(2):113-118.
73. Kumar, M., Thakur, N. S. and Hegde, H. T. (2016). Fresh herb, essential oil yield and net returns from *Ocimum* spp. grown under teak (*Tectona grandis* L.f.) based silvi-medicinal systems in south Gujarat, India. *Indian Journal of Ecology*, 43 (Special Issue-1): 306-311.
74. Kumar, S, Prajapati, V. M. and Pastagia, J. J. (2011). Distribution and seasonal abundance of Teak Defoliator, *Hyblaea puera* Cramer. *J. Appl. Zool. Res.*, 22 (1): 79-85.
75. Kumar, S., Behera, L. K., Patil, N. S. and Jadeja, D. B. (2015). Growth and yield of *Vigna radiata* L. under *Terminalia arjuna* and *Mitragyna parviflora* based agrisilvicultural system. *Journal of Applied and Natural Science*, 7(2): 758- 762.
76. L. K. Behera, D. P. Patel, R. P. Gunaga, A. A. Mehta and D.B. Jadeja (2016). Clonal evaluation for early growth performance of *Eucalyptus* in South Gujarat, India. *Journal of Applied and Natural Science*, 8(4): 2066-2069 (ISSN: 2231-5209).
77. L.K. Behera, D.P. Patel, S.K. Sinha, R.P. Gunaga and D.B. Jadeja (2016). Variation in Physical Properties of Wood Among Twenty Clones of *Eucalyptus* in South Gujarat. *Advances in Life Sciences*, 5(5): 1704-1708 (ISSN 2278-3849).
78. L.K. Behera, M.R. Nayak, A.A. Mehta, R.L. Sondarva and D.B. Jadeja (2016). Fibre Parameters Variation Among Twenty Clones Of *Eucalyptus* In South Gujarat. *International Journal of Usufructs Management*, 17(1): 55-62 (ISSN 0972- 3927).
79. Luna, R K., N.S. Thakur and Kumar, V. (2014). Prediction models for biomass, volume, carbon stock and carbon dioxide removal for *Eucalyptus* hybrid plantations in Punjab. *Journal of Tree Sciences*, 33(1): 49-53.
80. Luna, R. K., Kamboj, S. K. and Thakur, N. S. (2009). Source variation in katha and cutch content in Khair (*Acacia catechu* Willd.) in Shiwalik hills of Punjab. *Annals of Forestry*, 17(1): 86-96.
81. Luna, R. K., Thakur, N. S. and Vijay Kumar. (2009). Performance of clonal *Eucalyptus* in different agro-climatic zones in Punjab, India. *Indian Forester*, 135(11): 1455-1464.
82. Luna, R. K., Thakur, N. S. and Vijay Kumar. (2011). Growth performance of twelve new clones of poplar in Punjab, India. *Indian J. Ecol.*, 38: 107-109.
83. Luna, R. K., Thakur, N. S., Dogra, A. S. and Vijay Kumar. (2011). Effect of irrigation and chemical fertilizer on growth and productivity of teak (*Tectona grandis* L.) in Punjab. *Indian Forester*, 137(12): 1357-1362.

84. Lyngdoh, N., R. P. Gunaga, Geeta Joshi, R. Vasudeva, G. Ravikanth and R. Uma Shaanker (2012). Influence of geographic distance and genetic dissimilarity among clones on flowering synchrony in a Teak (*Tectona grandis* Linn. f) clonal seed orchard. *Silvae Genetica*, **61**(1-2): 10-17.
85. M. R. Nayak, D. P. Patel, K. H. Patel, L. K. Behera and D. B. Jadeja (2016). Response of Sodicity Levels on Vegetative Growth and Nutrient Contents of Eucalyptus Clones. *Advances in Life Sciences*, **5**(19): 8522-8531 (ISSN 2278-3849).
86. M. R. Nayak, D. P. Patel, L.K. Behera and D.B.Jadeja (2016). Growth Performance of Eucalyptus Clones Under Various Level of Soil Sodicity in Nursery Stage. *Advances in Life Sciences*, **5**(18): 7458-7465 (ISSN 2278-3849).
87. Manmohan J.R. Dobriyal, P. P. Bhojvaid and Mahender Singh Gusain (2003). Medicinal Orchids- An important Non wood forest products. *International J. of Forest Usufructs Management*, **4**: 49-62.
88. Manmohan J.R., P. P. Bhojvaid and H. B. Vasishtha (2011). Propagation and Storage Techniques for Medicinal Orchids - *Habenaria intermedia* (Virdhii) and *Microstylis wallichii* (Jeevak) of Asthavarga group. *Journal of Forest Usufructs Management*, **12**(1): 19-36.
89. Manmohan Jagatram and C. Surendran (2002). Conservation of medicinal plants by production of secondary metabolite through plant cell culture. *International J. of Forest Usufructs Management*, **4**(2): 15-25.
90. Manmohan Jagatram, C. Surendran, K. T. Parthiban and K. Sasikumar (2002). Macro propagation of *Madhuca latifolia*. *Indian J. of Forestry*, **125**(2): 180-184.
91. Manmohan Jagatram, P.P. Bhojvaid and Ranjana Dobriyal (2009). Revival of traditional system of medicine through information technology. *International Journal of Usufructs Management*, **10**(1): 81-91.
92. Manmohan J.R. Dobriyal, Arvind Bijalwan, H.B. Vasishth and Ranjana Dobriyal (2016). Significance of Banj Oak (*Quercus leucotricophora*) forests for conservation of Habitat of Medicinal Orchid *Microstylis wallichii* Lindl. in Uttarakhnad Himalaya, India. *International Journal of Forest Usufructs Management*, **17**(2): 19-29
93. Manmohan J. R. Dobriyal and A. Bijalwan (2016). Farming Quotient (FQ) or Framing Intelligence (FI) and Its Relevance in India. *Int. J. Curr. Res. Biosci. Plant Biol.*, **3**(5): 144-146.
94. Manmohan J.R. Dobriyal, Arvind Bijalwan, Ranjana Dobriyal (2016). Influence of Edapho-Physico-Chemical Properties along altitude and aspects on the density of Medicinal Orchids *Habenaria intermedia* D.Don. and *Microstylis wallichii* Lindl. in India. *New York Science Journal*, **9**(8): 56-66

95. Manmohan J.R. Dobriyal, Arvind Bijalwan and Tarun Kumar Thakur (2017). Shrinking Role of Silviculture in Tree Improvement in India. *International Journal of Current Research in Biosciences and Plant Biology*, 4(4): 104-106.
96. Manmohan J.R. Dobriyal and Arvind Bijalwan (2017). Forest fire in western Himalayas of India: A Review. *New York Science Journal*, 10(6): 39-46.
97. Mehta, A. A., Behera, L. K., Tandel, M. B., Jadeja, D. B. and. Vashi, B. G. (2015). Efficacy of different oils used for the extraction of annatto colour from the seeds of *Bixa orellana* L. *Journal of Applied and Natural Science*, 7(2): 828- 831.
98. Mirgal, A.B., A.D. Rane, Rajesh P. Gunaga, S.S. Narkhede and S.G. Bhawe (2013). A note on stand dynamics of *Antiaris toxicaria*, a rare plant of Konkan Region of Western Ghats. *The Indian Forester*, 139(12): 1161-1162.
99. Nayak, D., Behera, L. K., Prajapati, V. M. and Jadeja, D. B. (2012). Genetic variability in seed and seedling traits of *Jatropha curcas* L. *Journal of Non Timber Forest Products*, 19(2): 111-116.
100. Nayak, D., L.K. Behera and D.B. Jadeja (2010). Genetic diversity among different seed sources of *Jatropha curcas* Linn. *Green Farming*, 3(1): 16-19.
101. Nayak, D., Patil, N. S., Behera, L. K. and Jadeja, D. B. (2015). Effects of gamma rays on germination and growth in *Jatropha curcas* L. *J. Applied Natural Sci.*, 7(2): 964-969.
102. Nayak, D., Prajapati, V. M.; Shah, R. R. and Jadeja, D. B. (2011). Genetic variability in seed and seedling traits of *Jatropha curcas* L. *Journal of Non Timber Forest Products*, 18(4): 267-272.
103. Nayak, D., Saxena, S. P., Prajapati, V M. and Jadeja, D. B. (2008). Seasonal incidence of leaf and flower webber cum fruit borer, *Pempelia morosalis* (Saalam Uller) in *Jatropha curcas* Linn. *Insect Environment*, 14(1): 44-45.
104. Nayak, M. R., Behera, L.K., Patel, D. P., Prajapati, V. M. and Jadeja, D.B. (2015). Climate change mitigation and adaptation through sustainable agroforestry. *Multilogic in Science*, 5(14): 100- 108.
105. Nayak, M.R., L. K. Behera, P.J. Mishra and N. Bhola (2014). Economics and yield performance of some short duration fruit and medicinal crops under agrisilvicultural system in rainfed uplands of Odisha. *Journal of Applied and Natural Science*, 6(1): 274-278.
106. Nayak, M.R., L.K. Behera and B.B. Behera (2014). Assessment of soil fertility and moisture regime changes by some fruit and medicinal crops under agri-silvicultural system. *Green Farming*, 5(4): 631-633.
107. Nongmaithem, R. S., Gunaga, R. P., and Behera, L. (2015). Enhancement of Seed Germination in *Bridelia retusa* (L.) A. JUSS. *Int. J. of Usuf. Mngt.*, 16(2): 61-65.

108. Oraon, B.C.; M.S. Malik, Arvind Bijalwan and Manmohan J.R. Dobriyal (2016). Growth and Biomass of three important energy plantation tree species in Jharkhand state of India. *The Indian Forester*, **142**(9): 833-842
109. Padmanabha, B.V., Chandrashekar, M., Ramesh, B.T., Hombe Gowda, H.C., R. P Gunaga, Suhas, S., Vasudeva, R., Ganeshaiah, K.N. and Umashaanker, R. (2006). Patterns of accumulation of Camptothecin, an anti cancer alkaloid in *Nothapodytes nimmoniana*, Graham. Western Ghats, India- Implication for identifying high yielding sources of the alkaloid. *Current Science*, **90**(1): 95-100.
110. Paresh Gayakwad, D.B. Jadeja, B. Thakre, S. Bhalawe and D. Nayak (2014). Ethno-veterinary medicinal plants of mahal village of dang district, Gujarat, India. *Res. Environ. Life Sci.*, **7**(2): 99-100.
111. Parmar, M. R., M. B. Tandel, V. M. Prajapati and D. B. Jadeja (2013). Forests-their role in climate change. *Journal of Non-Timber Forest Products*, **20**(4): 271-272.
112. Parmar, M.R., D. B. Jadeja, M.B. Tandel, N.K. Patel, Kirti Bardhan and V.M. Prajapati (2014). Effect of pruning intensities and different levels of fertilizers on *Jatropha curcas* L. under irrigated condition. *Indian Forester*, **140**(1): 46-52.
113. Patel, R. M., M. B. Tandel, S. M. Patel, M. K. Desai and D. B. Jadeja. (2013). Influence of *Casurina equisetifolia* raised at different spacing on fertility status of soil and tree growth. *Journal of Non Timber Forest Products*, **20**(1): 43-45.
114. Patel, S. M., M. B. Tandel, M. K. Desai and J.G. Pathak (2013). Biomass and Nutrient Uptake of *Jatropha curcas* L. as affected by various bio-fertilizers. *Journal of Non-Timber Forest Products*, **20**(1): 33-35.
115. Patel, S. M., Tandel, M. B., Desai, M. K., Parmar, M. R. and Prajapati, V. M. (2016). Effect of Bio-fertilizers on growth of *Jatropha curcas* L. *Journal of Tropical Forestry*, **32**(1): 69-72.
116. Prabhu, N.H., R.P. Gunaga, T. Surendran, Jose Kallarakkal and J.K. Sharma (2013). Physiological variation measured using Chlorophyll Fluorescence Meter in seedlings of Teak (*Tectona grandis* L.F.) raised from 38 Seed Sources in Kerala. *Journal of Tree Sciences*, **32**(1&2): 43-49.
117. Prabhu, N.H., R.P. Gunaga, T. Surendran, K.C. Chacko and J.K. Sharma (2013). Variation in Seed traits and germination among Teak seed production areas in Kerala, India. *Seed Technology*, **35**(1): 23-34.
118. Prajapati, V. M., Nayak, D., Parmar, M.R., Tandel, M.B. and Patil, N. S. (2012). Performance of *Curcuma longa* L. grown as an intercrop under different tree species. *Journal of Non Timber Forest Products*, **19**(1): 5-8.

119. Prajapati, V. M., Patil, N. S., Vashi, B. G., Jadeja, D. B. and Nayak, D. (2011). Performance of *Curcuma longa* L. grown as an intercrop under different tree species. *Journal of Non Timber Forest Products*, **18**(4): 285-288.
120. Prajapati, V. M., Sushil Kumar and Nayak, D. (2009). Comparative toxicity of different doses of *Bacillus thuringiensis* (Bt.) vis-à-vis teak skeletonizer (*Eutectona machaeralis*). Proceeding of National Forestry Conference at Dehra Dun from November 9-11, pp. 260-262.
121. Prajapati, V. M., Sushil Kumar, Nayak, D and Parmar, M. R. (2012). Toxicity of various *Bacillus thuringiensis* (BT.) doses on Teak Defoliator (*Hyblaea puera*) under laboratory conditions. *Annals of Forestry*, **20**(2): 175-179.
122. Prajapati, V.M., Susil Kumar, D. Nayak and M.R. Parmar. (2012). Toxicity of various *Bacillus thuringiensis* (BT.) doses on teak defoliator (*Hyblea purea*) under laboratory conditions. *Annals of Forestry*, **20**(2): 175-179.
123. Ramesha, B.T., T. Amna, G. Ravikanthdup, R. P. Gunaga, R. Vasudeva, K.N. Ganeshaiah, R. Uma Shaanker, R.K. Khajuria, S.C. Puri, and G.N. Qazi. (2008). Prospecting for Camptothecines from *Nothapodytes nimmoniana* in the Western Ghats, South India: Identification of High-Yielding Sources of Camptothecin and New Families of Camptothecines. *Journal of Chromatographic Science*, **46**: 362-368.
124. Sasi Kumar, K., K. T. Parthiban, T. Kalaselvi and M. Jagatram (2002). Allelopathic effects of *Pathinium hystrophorus* on cow pea, pigeon pea, greenpea, blackgram and horsegram. *Allelopathy J.*, **10**(1): 45-52.
125. Shahapurmath, G.B., Hanumantha, M., R.P. Gunaga, Patil, S.K. and Shivanna, H. (2003). Effect of Gibberellic acid on seed germination of Sandal (*Santalum album*). *Journal of Tropical Forestry*, **19**(3-4): 19-23.
126. Shahapurmath, G.B., R. P. Gunaga, Kiran Kumar, A.K. and Ganiger, B.S. (2001). Effect of seed size and depth of sowing on seed germination in *Sapindus trifoliatus*. *My Forest*, **37**(2): 483-489.
127. Singh, J. P. Bhatnagar, Manmohan J. R. and R. R. Meena (2010). Evaluation of seedlings of different species of citrus under Hadauti region of Rajasthan. *Indian J. of Horticulture*, (67): 59-62.
128. Sinha, S.K., Pathak, J.G., Mehta, A.A. and L.K. Behera (2016). Tapping methods in Salai Guggal (*Boswellia serrata* Roxb.) for sustainable yield of oleo- gum resin: A case study. *International Journal of Usufructs Management*, **17**(2): 13-18 (ISSN 0972- 3927).
129. Smita D. A., Gunaga, R. P., Ganiger, R. V., Bhawe, S. G. and Patwardhan, A. (2015). Influence of Seed Age and Mechanical Treatments on Seed Germination in *Calophyllum inophyllum* Linn. *Journal of Tree Sciences*, **34**(1): 11-16.
130. Solanki V., Kukadia M.U., Patel S.R. and Tandel M.B. (2012). Effect of different plant growth regulators on rooting in cuttings of Khair (*Acacia catechu* Willd.). *Journal of Non-timber Forest Product*, **19**(2): 89-92.

131. Suhas, S., Ramesha, B.T., Ravikanth, G., R. P. Gunaga, Vasudeva, R., Ganeshaiah, K.N. and Uma Shaanker, R. (2007). Chemical profiling of *Nothapodytes nimmoniana* populations in the Western Ghats, India for anti-Cancer compound, Camptothecin. *Current Science*, **92**(8): 1142-1147.
132. Surywanshi, H., S.S. Narkhede, A.D. Rane, R.P. Gunaga and S.G. Bhawe (2013). Organic manure based potting mixture for quality seedling production in *Oroxylum indicum*. *PKV Research Journal*, **37**: 26-29.
133. Suvera, A. H., Thakur, N. S. and Jha, S. K. (2015). Herbage and essential oil yield of *Ocimum* spp. Intercropped under *Pongamia pinnata* based silvi-medicinal systems in Gujarat, India. *The Bioscan*, **10**(1): 81-85.
134. Tandel M. B., Kukadia M.U., Kolambe B. N. and Jadeja D. B. (2009). Influence of Tree Cover on Physical Properties of Soil. *Indian Forester*, **135**(3):420-424.
135. Thakur N S, Attar, S. K., Gupta, N. K. and Gupta, B. (2015). Fodder availability from traditional agri-silvi-horticulture systems: Requirement and deficit w.r.t. livestock status in mid hills of Western Himalayas-A case study. *Journal of Tree Sciences*, **34**(2): 22-27.
136. Thakur, N. S., Verma, K. S. and Attar, S. K. (2015). Fodder production from tree-legume-grass based agroforestry systems in sub tropical hills of Western Himalayas, India. *Journal of Tree Sciences*, **34**(1): 49-55.
137. Thakur, N.S. and Verma, K. S. (2012). Financial flows from sacred basil (*Ocimum sanctum*) based agroforestry land use systems in mid hills of Western Himalayas. *The Indian Forester*, **138**(7): 638-645.
138. Thakur, N.S. Gupta, B. and Gupta, N.K. (2012). Allometric estimations of biomass of important shrubs of Western Himalaya. *Indian Journal of Forestry*, **35**(2): 171-174.
139. Thakur, N.S., Gupta, N. K. and Gupta, B. (2004). Phytosociological analysis of woody and non-woody components under some agroforestry systems in Western Himalaya - A case study. *Indian Journal of Agroforestry*, **6**(1): 65-71.
140. Thakur, N.S., Gupta, N. K. and Gupta, B. (2005). An Appraisal of Biological Diversity in agroforestry systems in North-Western Himalaya. *Indian Journal of Ecology*, **32**(1): 7-12.
141. Thakur, N.S., Gupta, N. K. and Gupta, B. (2008). Volume and biomass prediction models for *Acacia catechu* Willd. in agroforestry systems of North-west Himalaya. *Journal of Non-Timber Forest Products*, **15**(1): 1-9.

142. Thakur, N.S., Gupta, N. K. and Gupta, B. (2011). Biomass, carbon Stocks and CO₂ removal by shrubs under different agroforestry systems in Western Himalaya. *Indian J. Ecol.*, **38**(1): 14-17.
143. Thakur, N.S., Verma, K. S. and Gupta, N. K. (2007). Structural difference *vis-à-vis* economic utility of shrubs and forage in different agroforestry systems in sub-tropical Himalayan region. *Journal of Tree Sciences*, **26**(2): 35-48.
144. Thakur, N.S., Verma, K. S. and Rana, R.C. (2009). Effect of tree-crop combinations and nitrogen levels on fresh herbage and oil yield of Sacred Basil (*Ocimum sanctum*) grown in Agrihorti-silvi-pasture system in mid hill Himalayas. *Indian Perfumer*, **53**: 39-44.
145. Thakur, N.S., Verma, K. S., Jha, S. K., Attar, S. K. and Hegde, H. T. (2011). Economics of herbage and oil yield of *Ocimum sanctum* grown under agroforestry systems under rain fed conditions in Western Himalayas. *Indian Perfumer*, **55**(4): 31-39.
146. Thakur, N.S., Verma, K.S. and Rana, R.C. (2011). Effect of tree crop combinations and nitrogen levels on velvet bean (*Mucuna pruriens* L) grown in agri-horti-silvi-pasture system of agroforestry in mid hill Himalayan region. *Journal of Non-Timber Forest Products*, **18**(4): 303-312.
147. Tarun Kumar Thakur, Yogesh Kumar, Arvind Bijalwan, Manmohan J. Dobriyal (2017). Traditional Uses and Sustainable Collection of Ethnobotanicals by Aboriginal Communities of the Achanakmaar Amarkantak Biosphere Reserve of India. *Frontiers in Environmental Microbiology*, **3**(3): 39-49.
148. Vasav, V. P., Narkhede, S. S., Rane, A. D., Gunaga, R.P., Rewale, A. P., Bhawe, S.G. (2011). Evaluation of progenies of Candidate plus trees of *Pongamia pinnata* (L.) Pie. for seed germination and seedling vigour. *Current Science*, **100**(4): 465-467.
149. Vasishth, A., Manmohan J.R., P.S. Chauhan and S.B.S. Pandey 2008. Bamboo-A vital Resource for prudent utilization. *The Indian Forester*, **134**(3): 435-440.
150. Vasishth, A., Vipin Guleria, J. Manmohan, Bhim Singh and Jitendra Singh (2013). Root Architecture in improving soil fertility. *International Journal of Agriculture and Environmental Biotechnology*, **6**(1): 173-180.
151. Vasudeva, R., Hanumantha, M., Rajesh P. Gunaga (2004). Genetic variation for floral traits in teak (*Tectona grandis* Linn. f.) clones: Implication for seed orchard fertility. *Current Science*, **87**(3): 358-362.
152. Verma, K.S. and Thakur, N.S. (2010). Economic analysis of ashwagandha (*Withania somnifera* L.) based agroforestry land use systems in mid hills Western Himalayas. *Indian Journal of Agroforestry*, **12**(1): 62-70.

153. Verma, K.S. and Thakur, N.S. (2011). Economic appraisal of Kewach (*Mucuna pruriens*) based agroforestry land-use systems in mid hills of Western Himalayas. *Journal of Non-Timber Forest Products*, **18**(1): 47-54.
154. Verma, K.S., Thakur, N.S. and Rana, R. C. (2010). Effect of tree crop combinations and nitrogen levels on herbage yield of sacred basil (*Ocimum sanctum* L.) grown in agri-horti-silvi-pasture system in mid hill Himalayas. *Indian Journal of Agroforestry*, **12**(1): 71-76.
155. Verma, Pooja; Arvind Bijalwan, Manmohan J. R. Dobriyal, S. L. Swamy and Tarun Kumar Thakur (2017). A paradigm shift in agroforestry practices in Uttar Pradesh. *Current Science*, **112**(3): 509-516.
156. Wanage, S.S., A.D. Rane, R.P. Gunaga, S.S. Narkhede and S.G. Bhawe (2013). Yield table of *Acacia catechu* for the Lateritic-Humid Tropics. *Journal of Tree Sciences*, **32**(1&2): 8-13.
157. Yadav, M. K., Patel, N. L., Patel, D. P., Bardhan K. and Parmar, M. R. (2015). Alphonso mango conservation through exposure to gamma radiation. *African Journal of Food Science*, **9**(3): 97-102.
158. Yogesh Limanpure, Rajiv Umrao, Arvind Bijalwan and Manmohan JR Dobriyal (2017). Effect of different levels of inorganic fertilizers on the growth and yield of Barley (*Hordeum vulgare*) under teak (*Tectona grandis*) based Agrisilviculture system. *New York Science Journal*, **10**(5): 34-38
159. Bammanahalli, S., K.R. Swamy, Mahantappa, S.S. and Aalok Yewale (2016). Fruit based agroforestry systems for food security and higher profitability. *International Journal of Farm Sciences*, **6**(2): 1-10.
160. Sharma, D., Thakur, S., and Jha, S.K. (2016). Characterization of population variation for fruit and pulp in *Terminalia chebula* (Gaertn.) Retz. *Agroforestry Systems*, **90**(2), 361-369.
161. Patel, S.M., Tandel, M. B., Desai, M.K., Parmar, M.R. and Prajapati, V.M. (2016). Effect of Bio-fertilizers on growth of *Jatropha curcas* L. *Journal of Tropical Forestry*, **32**(1): 69-72.
162. Kumar, M., Thakur, N.S. and Hegde, H.T. (2016). Fresh herb, essential oil yield and net returns from *Ocimum* spp. grown under teak (*Tectona grandis* L.f.) based silvi-medicinal systems in south Gujarat, India. *Indian Journal of Ecology*, **43**(Special Issue-1): 306-311.
163. Bijalwan, A. and Dobriyal, M.J.R. (2016). Geometry, distribution and regeneration pattern of trees in agroforestry systems along altitude and aspect in upper Yamuna region of Uttarakhand, India. *Applied Ecology and Environmental Science*, **4**(1): 15-25.
164. Bhusara, J. B., Thakur, N.S. and Hegde, H. T. (2016). Biological yield and carbon sequestration in prominent traditional agroforestry systems in Valsad District, Gujarat, India. *Indian Journal of Ecology*, **43**(Special Issue-1): 318-320.

165. Behera L.K., Nayak, M.R., Mehta, A.A., Sondarva, R.L. and Jadeja, D.B. (2016). Fibre Parameters Variation among Twenty Clones of *Eucalyptus* in South Gujarat. *International Journal of Usufructs Management*, **17**(1): 55-62.
166. Behera, L.K., Patel, D.P., Sinha, S.K., Gunaga, R.P. and Jadeja, D.B. (2016). Variation in Physical Properties of Wood Among Twenty Clones of *Eucalyptus* in South Gujarat. *Advances in Life Sciences*, **5**(5): 1704-1708.
167. Behera L.K., Patel, D.P., Gunaga, R.P., Mehta, A.A. and Jadeja, D.B. (2016). Clonal evaluation for early growth performance of *Eucalyptus* in South Gujarat, India. *Journal of Applied and Natural Science*, **8**(4): 2066-2069.
168. Sahoo, P.K., Nayak, S., Behera, L.K., Rout, S. and Biswal D. (2016). Influence of storage condition and duration on oil content of physic-nut seeds. *Multilogic in Science*, **6**(16):172-176.
169. Bijalwan A., Manmohan J.R.D. and Thakur, T.K. (2016). Carbon sequestration Potential of agroforestry trees (Agroforests) in India. *New York Science Journal*, **19**(7): 76-81.
170. Dobriyal, M.J., Bijalwan, A. and Dobriyal, R. (2016). Influence of Edapho-Physico-chemical properties along altitude and aspects on the density of Medicinal Orchids, *Habenaria intermedia* D.Don. and *Microstylis wallichii* Lindl. in India. *New York Science Journal*, **9**(8): 56-66.
171. Dobriyal, M.J., Arvind Bijalwan, H.B. Vasisht and Ranjana Dobriyal (2016). Significance of Banj Oak (*Quercus leucotricophora*) forests for conservation of Habitat of Medicinal Orchid, *Microstylis wallichii* Lindl. in Uttarakhand Himalaya, India. *International Journal of Forest Usufructs Management*, **17**(2): 19-29.
172. Dobriyal, M.J. and Bijalwan, A. (2016). Farming Quotient (FQ) or Framing Intelligence (FI) and Its Relevance in India. *International Journal of Current Research in Biosciences and Plant Biology*, **3**(5): 144-146.
173. Oraon B.C., Malik, M.S., Bijalwan, A. and Manmohan, J.R.D. (2016). Growth and biomass of three important energy plantation tree species in Jharkhand state of India. *The Indian Forester*, **142**(9): 833-842.
174. Kumar, D., Bijalwan, A., Kalra, A. and Manmohan, J.R. D.(2016). Effect of shade and organic manure on growth and yield of Patchouli [*Pogostemon cablin* (Blanco) Benth.] under Teak (*Tectona grandis* L.f.) based Agroforestry System. *The Indian Forester*, **142**(11): 1121-1129.
175. Nayak, M.R., Patel, D.P., Patel, K.H., Behera, L.K. and Jadeja, D.B. (2016). Response of sodicity levels on vegetative growth and nutrient contents of *Eucalyptus* clones. *Advances in Life Sciences*, **5**(19): 8522-8531.

176. Singh, N., Bhatt, B. K., Pathak, J., Shrivastava, P. K. and Leua, A. K. (2016). Economic analysis of production and marketing of Palmyra palm. *Pezottate Journal*, 5(1): 2067-2070.
177. Kumar, V. and Desai, B.S. (2016). Phyto-sociological study of Waghai forest range in Dangs district, South Gujarat. *Journal of Environment and Bio-Sciences*, 30(2): 549-553.
178. Kumar, V. and Desai, B.S. (2016). Biodiversity and Phyto sociological analysis of Plants around the Chikhali Taluka, Navsari District. Gujarat, India. *The Ecoscan*, (Special issue) 9 : 10-16.
179. Kumar, V. and Desai, B.S. (2016). Physico chemical characterization of forest soil of Dang's District, Gujarat, India. *The Ecoscan*, (Special issue) 9: 02-08.
180. Mirgal, A.B., Gunaga, R.P. and Salunkhe, C.B. (2016). Seed traits, germination pattern and seedling vigour in *Antiaris toxicaria* (Pers.) Lesch., a rare plant species of Western Ghats. *Journal of Applied and Natural Science*, 8(3): 1710-1713.
181. Mirgal, A.B., Gunaga, R.P. and Salunkhe, C.B. (2016). Seed size and its influence on germination, seedling growth and biomass in *Saraca asoca* (Roxb). De Wilde, critically endangered tree species of Western Ghats, India. *Journal of Applied and Natural Science*, 8(3): 1599-1602.
182. Shahapurmath, G., Hanumantha, M., Gunaga, R.P., Rashmi, V. and Koppad, A.G. (2016). Growth and productivity of *Tectona grandis* Linn. f. in plantations and farmlands in coastal zone of Karnataka (India). *Journal of Applied and Natural Science*, 8(4): 1919-1923.
183. Sinha, S.K., Pathak, J.G., Mehta, A.A. and Behera, L.K. (2016). Tapping methods in Salai Guggal (*Boswellia serrata* Roxb.) for sustainable yield of oleo- gum resin: A case study. *International Journal of Usufructs Management*, 17(2): 13-18.
184. Kumar, D., Thakur, N.S. and Gunaga, R.P. (2017). Effects of leaf aqueous extract and leaf litter of *Melia composite* wild on Black Gram (*Vigna mungo* (L.) Hepper). *Allelopathy Journal*, 41(1): 127-140.
185. Kumar D., Thakur, N.S. and Gunaga, R.P. (2017). Allelopathic influence of leaf aqueous extract and leaf litter of Indian lilac (*Melia azedarach*) on germination, growth, biomass and grain yield of Green Gram (*Vigna radiate*) and Black Chickpea (*Cicer arietinum*). *Journal of Current Microbiology and Applied Sciences*, 6(10): 2669-2683.
186. Kumar, D., Thakur, N.S., Gunaga, R.P. and Singh, S. (2017). Allelopathic propensity of the aqueous leaf extract and leaf litter of *Melia dubia* cav. on pulse crops. *Journal of Experimental Biology and Agricultural Sciences*, 5(5): 644-655.
187. Jilariya, D.J., Thakur, N.S. and Gunaga, R.P. (2017). Quantitative and qualitative attributes of *Aloe vera* linn. grown under *Melia composita* willd. and sole cropping systems. *Indian J. of Ecology*, 44(5): 451-455.
188. Behera, L.K., Mehta, A.A., Shrivastava, P.K., Patel, S.M., Prajapati, V.M. and Jadeja, D.B. (2017). Genetic divergence study for growth characters among clones of *Eucalyptus*. *International Journal of Chemical Studies*, 5(6): 1780-1782.
189. Behera, L.K., Patel, D.P., Dholariya, C.A., Sinha, S.K., Mehta, A.A., Dobriyal, M.J. and Jadeja, D.B. (2017). Vessel parameters variation among twenty clones of *Eucalyptus* in South Gujarat. *International Journal of Usufructs Management*, 18(1): 41-47.

190. Behera, L.K., Maheta, A.A., Dholariya, C.A., Sinha, S.K., Gunaga, R.P. and Patel, S.M. (2017). Bee foraging activity on MPTs by honeybee species during minor honey flow period in south Gujarat condition. *International Journal of Usufructs Management*, **18**(1): 47-53.
191. Behera, L.K., S. K. Jha, Gunaga, R.P., Nayak, D., Tandel, M.B. and Jadeja, D.B. (2017). Genetic variability and correlation study for growth characters among clones of *Eucalyptus*. *International Journal of Chemical Studies*, **5**(6): 763-765.
192. Thakur, N.S., Gunaga, R.P., Parmar, A.G. and Patel, D.P. (2017). Allelopathic influence of leaf and leaf litter of White Cedar (*Melia azedarach* L.) on Eggplant and Okra. *Allelopathy Journal*, **42**(2): 295-305.
193. Thakur, N.S., Dinesh Kumar and Gunaga, R.P. (2017). Transient allelopathic propensity of *Melia composita* Wild. leaf litter on Chickpea (*Cicer arietinum* L.). *Indian Journal of Ecology*, **44**(5): 443-450.
194. Panchal, J.S., Thakur, N.S., Jha, S.K. and Vikas Kumar. (2017). Productivity and carbon sequestration under prevalent agroforestry systems in Navsari district, Gujarat, India. *International Journal of Current Microbiology and Applied Sciences*, **6**(9): 3405-3422.
195. Raju Singh, N., Arunachalam, A., Dobriyal, M.J., Bhusaram J.B. and Gunaga, R.P. (2017). Crop biomass and yield patterns of dominant agroforestry systems of Navsari district Gujarat, India. *Indian Journal of Agroforestry*, **19**(2):72-78.
196. Mohanty, S., Thakur, N.S., Gunaga, R.P., Dobriyal, M.J. and Desai, B.S. (2017). Value addition in *Cymbopogon* Spp. to enhance the financial flows from *Cymbopogon* Spp.- *Melia dubia* cav. based silvi medicinal and sole cropping systems. *Indian Journal of Ecology*, **44**(6): 812-816.
197. Amlani, M.H., Tandel, M.B., Prajapati., V.M., Pathak., J. G. and L.K. Behera. (2017). Assessment of growth variation among different species of Bamboo. *International Journal of Chemical Studies*, **5**(6): 1436-1439.
198. Mali, S.C, Swati Shedage and Shrivastava, P.K. (2017). Economic evaluation of sugarcane based agro forestry systems. *Journal of Tree Sciences*, **36**(1): 34-37.
199. Mehta, A.A., Tandel, M.B., Patel, D.P., Behera, L.K., Prajapati, D.H. and Jadeja, D.B. (2017). Yield performance of *Chlorophytum borivilianum* Sant. & Fern and accessions in Moringa based agroforestry system. *International Journal of Agricultural Sciences*, **9**(10):3976-3979.
200. Mehta, A.A., Tandel, M.B., Behera, L.K., Patel, D.P., Dholariya, C.A. and Jadeja, D.B. (2017). Growth performance of *Chlorophytum borivilianum* Sant. & Fern and accessions in Moringa based agroforestry system. *Multilogic in Science*, **7**(23):60-63.
201. Huse, S.A., Gunaga, R.P, Sinha, S.K., Dobriyal, M.J., Jha, S.K. and Bhatt, B.K. (2018). Genetic variation in growth attributes and pulp yield in eucalypts clones. *International Journal of Chemical Studies*, **6**(4):2903-2906.
202. Hake, A.A., Jha, S., Jha, S.K. and Mahatma, M.K. (2018). Assessment of antioxidant and phenol related enzyme assays in Karanja (*Derris indica*). *International Journal of Chemical Studies*, **6**(2):954-957.
203. Chauhan, R.S., D.B. Jadeja, N.S. Thakur, S.K. Jha and Sankanur, M.S. (2018). Selection of Candidate Plus Trees (CPTs) of Malabar Neem (*Melia dubia* Cav.) for Enhancement of Farm Productivity in South Gujarat. *International Journal of Current Microbiology and Applied Sciences*, **7**(5): 3582-3592.

- 204.Huse, S.A., Gunaga, R.P, Sinha, S.K., Dobriyal, M.J, Jha, S.K. and Bhatt, B.K. (2018). Genetic variation in growth attributes and pulp yield in eucalypts clones. *International Journal of Chemical Studies*, **6**(4): 2903-2906.
- 205.Huse, S.A., Gunaga, R.P. and Sinha, S.K. (2018). Genetic estimates of growth and wood anatomical properties in eucalypts clones. *International Journal of Genetics*, **10**(9): 495-497.
- 206.Patel, S.M., Tandel, M.B., Desai, M.K., Pathak, J.G., Behera, L.K. and Parmar, M.R. (2018). Economics of cucurbitaceous vegetable crops under Teak (*Tectona grandis* L.f.) based Silvi horticultural System in South Gujarat. *International Journal of Chemical Studies*, **6**(2): 119-123.
- 207.Patel, H.S., Tandel, M.B., Prajapati, V.M., Amlani, M.H. and Prajapati, D.H. (2018). Effect of different pre-sowing treatments on germination of Red sanders (*Pterocarpus santalinus* L.f.) in Poly house condition. *International Journal of Chemical Studies*, **6**(4): 162-165.
208. Patel H.S., Tandel, M.B., Prajapati, V.M., Amlani, M.H. and Prajapati, D.H. (2018). Effect of different pre-sowing treatments on germination of Red sanders (*Pterocarpus santalinus* L.f.) in Net house condition. *International Journal of Chemical Studies*, **6**(2): 876-879.
- 209.Sondarva, R.L., Tandel M.B., Patel, N.K., Prajapati, V.M., Prajapati, D.H. and Bhusara, J.B. (2018). Effect of INM on growth and yield components of Brinjal (*Solanum melongena* L.) under Teak (*Tectona grandis* L.f.) based silvi-horticultural system in South Gujarat region. *International Journal of Chemical Studies*, **6**(3): 1224-1227.
- 210.Maharana, R., Dobriyal, M.J., Behera, L.K., Gunaga, R.P. and Thakur, N.S. (2018). Effect of pre-seed treatment and growing media on germination parameters of *Gmelina arborea* Roxb. *Indian Journal of Ecology*, **45**(3): 623-626.
- 211.Maharana, R., Dobriyal, M.J., Behera, L.K., and Sukhadiya, M. (2018). Enhancement of seedling vigour through biofertilizers application in Gamhar (*Gmelina arborea* Roxb.). *International Journal of Chemical Studies*, **6**(5): 54-60.
- 212.Behera, L.K., Mehta, A.A., Dholariya, C.A., Patel, S.M. and Gunaga, R.P. (2018). Foraging activity of Rockbee (*Apis dorsata*) on Eucalyptus: A promising MPTs in South Gujarat condition. *Journal of Entomology and Zoology Studies*, **6**(6): 550-553.
- 213.Dholariya, C.A., Behera, L.K., Patel, D.P., Mehta, A.A., Gunaga, A.A. and Viyol, S.V. (2018). Impact of different salinity levels on physiological attributes of *Leucaena leucocephala* Lam. in early growth stage. *International Journal of Chemical Studies*, **6**(4): 2606-2609.
- 214.Pathak, J., Tandel, M.B., Patel, S.M., Chavda, J.R. and Prajapati, D.H. (2018). Macro-propagation of long internode *Schizostachyum dulloa* (Gamble) R.B. Majumdar through culm cutting. *International Journal of Current Microbiology and Applied Sciences*, **7**(03): 2319-7706.
- 215.Pathak, J., Tandel, M.B., Desai, M., Chavda, J.R., Prajapati, D. and Amlani, M.H. (2018). Influence of rooting hormone on macro-propagation of *Schizostachyum pergracile* (Munro.) through culm cutting. *International Journal of Chemical Studies*, **6**(1): 1926-1928.
216. Desai, M.K., Dobriyal, M.J., Tandel, M.B., Patel, S.M., Pathak, J.G. and Prajapati, V.M. (2018). Effect of pruning and intercrops on Jatropha and Sapota under Sapota-Jatropha based Horti-Silvi system. *International Journal of Chemical Studies*, **6**(4): 519-522.
- 217.Modi, J.S., Tandel, M.B., Prajapati, V.M., Parekh, V.B. and Ahir, B.R. (2018). Molecular variations in teak (*Tectona grandis* L.f.) clones. *International Journal of Chemical Studies*, **6**(5):259-264.

218. Modi, J.S., Tandel, M.B., Prajapati, V.M. and Ahir, B.R. (2018). Morphological variations in teak (*Tectona grandis* L.f.) clones. *Journal of Pharmacognosy and Phytochemistry*, **7**(5):273-276.
219. Bhusara, J.B., Dobriyal, M.J., Thakur, N.S., Gunaga, R.P. and Tandel, M.B. (2018). Performance of Okra (*Abelmoschus esculentus* L. Moench) under different spatial arrangements of *Melia composita* based agroforestry system. *International Journal of Current Microbiology and Applied Sciences*, **7**(5):3533-3542.
220. Thakur, N.S., Jilariya, D.J., Gunaga, R.P. and Singh, S. (2018). Positive allelopathy of *Melia dubia* Cav. Spatial geometry improve quantitative and qualitative attributes of *Aloe vera* L. *Industrial Crops & Products*, **119**: 162-171.
221. Parmar, A.G., Thakur, N.S. and Gunaga, R.P. (2018) *Melia dubia* Cav. leaf litter allelochemicals have ephemeral allelopathic proclivity. *Agroforestry systems*. <https://doi.org/10.1007/s10457-018-0243-5>.
222. Behera, L.K., Patel, D.P., Dholariya, C.A., Nayak, M.R., Gunaga, R.P., Mehta, A.A. and Jadeja, D.B. (2018). Evaluation for chemical properties variation among clones of *Eucalyptus* in south Gujarat. *Multilogic in Science*, **7**(25): 21-24.
223. Shedage, S. and Shrivastava, P.K. (2018). Mangroves for protection of coastal areas from high tides, cyclone and Tsunami. *International Journal of Plants & Soil Science*, **23**(4): 1-11.
224. Fadadu, M.H., Shrivastava, P.K. and Dwivedi, D.K. (2018). Application of Horton's infiltration model for the soil of Dediapada (Gujarat), India. *Journal of Applied and Natural Science*, **10**(4):1254-1258.
225. Mevada, R.J., Nayak, D. and Patel, D.P. (2018). Impact of *Terminalia arjuna* (Roxb.) leaf litter and hosted Tasar silkworm excreta on quality of paddy and soil properties. *International Journal of Current Microbiology and Applied Sciences*, **7**(5): 3781-3789.
226. Hegde, H.T., Gunaga, R.P. and Thakur, N.S. (2018). Variations in seed oil content among 13 populations of Mahua (*Madhuca longifolia* var. *latifolia* (Roxb.) A. Chev.) in Gujarat. *International Journal of Chemical Studies*, **6**(5): 35-38.
227. Hegde, H.T., Gunaga, R.P. and Thakur, N.S. Jha, S.K. and Dobriyal M.J. (2018). Population structure and regeneration of Mahua (*Madhuca longifolia* var. *latifolia* (Roxb.) A. Chev.) in disturbed and undisturbed sites. *Indian Journal of Ecology*, **45**(4): 724-727.
228. Gunaga, R.P., Shirke, K.K., Wanage, S.S. and Rane, A.D. (2018). Albino seedlings in *Caesalpinia bonduc* (L.) Roxb. *eJournal of Applied Forest Ecology*, **6**(2): 1-2.
229. Prajapati, V., Patel, M.M., Jha, S.K. and Makwana, K. (2019). *De novo* organogenesis from leaf explants in *Piper longum* L. *Journal of Pharmacognosy and Phytochemistry*, **8**(3): 483-485.
230. Prajapati, V., Patel, M.M., Jha, S.K. and Makwana, K. (2019). Direct adventitious shoot regeneration in *Piper longum* L. from spike explants. *International Journal of Chemical Studies*, **2**(2): 1418-1420.
231. Chauhan, R.S., Thakur, N.S., Gunaga, R.P., Bhuva, D.C. and Jadeja, D.B. (2019). Assessment of germination attributes in Candidate Plus Tree (CPTs) of Malabar Neem (*Melia dubia* Cav.). *Indian Journal of Ecology*, **46**(2): 335-339.
232. Parmar A.G., Thakur N.S., and Gunaga, R.P. (2019). Effect of leaf aqueous extract and leaf litter of chinaberry tree as transient allelopathic influence on growth and yield of chilli and tomato. *Indian Journal of Horticulture*, **76**(1): 124-132.

233. Malek, S.S., Dobriyal, M.J. and Desai, B.S. (2019). Propagation of medicinal plant *Coleus forskohlii* (Poir) Briq. (Pathachur or Galbel). *ACTA Scientific Agriculture*, 3(3): 142-146.
234. Ahir, S.M., Tandel, M.B., Patel, S.M. and Desai, M.K. (2019). Feasibility of different pulse crops under *Jatropha curcas* L. *International Journal of Chemical Studies*, 7(3): 3625-3630.
235. Ahir, S.M., Tandel, M.B., Desai, M.K. and Patel, S.M. (2019). Potentiality of various pulse crops under *Jatropha curcas* L. based agrisilviculture system. *International Journal of Chemical Studies*, 7(3): 2994-2999.
236. Thakur, N.S., Mohanty, S., Gunaga, R.P. and Gajbhiye, N.A. (2020). *Melia dubia* Cav. spatial geometries influence the growth, yield and essential oil principles content of *Cymbopogon flexuosus* (Nees Ex Steud.) W. Watson. *Agroforestry Systems*, 94(3): 985-995.
237. Thakur, N.S., Mohanty, S., Hegde, H.T., Chauhan R.S., Gunaga, R.P. and Bhuva, D.C. (2019). Performance of *Melia dubia* under *Cymbopogon* spp. based agroforestry systems. *Journal of Tree Sciences*, 38(1): 28-34.
238. Mohanty, S., Thakur, N.S., Gunaga, R.P. and Gajbhiye, N. (2019). Influence of *Melia dubia* Cav. spatial geometries on growth, herbage yield and essential oil constituents of *Cymbopogon martinii* (Roxb.) Wats. *Journal of Essential Oil Bearing Plants*, 22(3): 630-648.
239. Parmar, A.G., Thakur, N.S. and Gunaga, R.P. (2019). *Melia dubia* Cav. leaf litter allelochemicals have ephemeral allelopathic proclivity. *Agroforestry System*, 93:1347-1360.
240. Thakur N.S., Kumar, D., Chauhan, R.S., Hegde, H.T. and Gunaga, R.P. (2019). Allelopathic effects of *Melia azedarach* L. on germination, growth and yield of black gram and chickpea. *Allelopathy Journal*, 46(1): 133-144.
241. Sukhadiya, M.L., Thakur, N.S., Gunaga, R.P., Patel, V.R., Bhuva, D.C. and Singh, S. (2019). *Melia dubia* Cav. drupe pulp: a new alternate livestock feed resource. *Range Management and Agroforestry*, 40(2): 299-305.
242. Zekeng, J.C., Sebego, R., Mphinyane, W.N., Mpalo, M., Nayak, D., Fobane, J.L., Onana, J.M., Funwi, F.P. and Mbollo, M.M.A. (2019). Land use and land cover changes in Doume Communal Forest in eastern Cameroon: implications for conservation and sustainable management. *Modeling Earth Systems and Environment*. <https://doi.org/10.1007/s40808-019-00637-4>.
243. Bhalawe, S., Nayak, D. and Jadeja, D.B. (2019). Carbon sequestration potential of agroforestry system in South Gujarat conditions. *Green Farming*, 1:35-40.
244. Damor, V.V., Patel, M.H., Desai, B.S., Prajapati, V.M. and Tandel, M.B. (2019). Seed source variation in *Aegle marmelos* (L) Correa. *Journal of Tree Sciences*, 38(1):6-14.
245. Mehta, A.A., Behera, L.K., Jha, S.K., Dholariya, C.A. and Jadeja, D.B. (2019). Genetic divergence study for growth characters among the accessions of Safed Musli. *International Journal of Chemical studies*, 7(1):2349-2351.
246. Mehta, A.A., Behera, L.K., Dholariya, C.A., Tandel, M.B. and Jadeja, D.B. (2019). Genetic variability and correlation study for growth characters among the accessions of Safed Musli. *International Journal of Chemical Studies*, 7(1): 409-411.
247. Sinha, S.K., Chaudhari, P.A., Thakur, N.S., Jha, S.K. Patel, D.P. and Dhaka, R.K. (2019). *Melia dubia* Cav. wood properties vary with age and influence the pulp and paper quality. *International Wood Products Journal*, 10(4): 139-148.

248. Bhuva, D.C., Gunaga, R.P., Thakur, N.S. and Bhusara, J.B. (2019). Seed and germination attributes in *Sterculia urens* Roxb. populations in South Gujarat. *Journal of Tree Science*, **38**(1), 23-27.
249. Hegde, H.T., Gunaga, R.P., Thakur, N.S., Bhusara, J.B. and Soundarva, R.L. (2019). Utilization of mahua resource: traditional knowledge as a tool for sustainable management. *Current Science*, **117**(10):1727-1730.
250. Deshmukh, H.K., Tandel, M.B., Gunaga, R.P., Thakur, N.S., Dobriyal, M.J., Singh, N., Chhatrola, H.N. and Mevada, R.J. (2020). Three decades of review on existing agroforestry systems and practices in South Gujarat. *International Journal of Current Microbiology and Applied Sciences*, **9**(8): 2973-2978.
251. Desai, M.K., Dobriyal, M.J., Tandel, M.B. and Patel, S.M. (2020). Performance and economics of medicinal crop (*Psoralea corylifolia* L.) under sapota-jatropha based horti-silviculture system. *Indian Journal of Agroforestry*, **22**(2): 80-85.
252. Mevada, R.J., Tandel, M.B., Prajapati, D.R., Deshmukh, H.K. and Prajapati, V.M. (2020). Plant diversity in North Gujarat. *Indian Forester*, **146**(9): 838-842.
253. Patel, M.M., Tandel, M.B., Prajapati, V.M., Patel, S.M. and Desai, M.K. (2020). Influence of various levels of growth hormones on rooting of cuttings of Casuarina (*Casuarina equisetifolia* L.). *International Journal of Chemical Studies* 2020, **8**(5): 2183-2186.
254. Mevada, R.J., Tandel, M.B., Prajapati, V.M., Patel, N.K., Pathak, J.G. and Deshmukh, H.K. (2020). Effect of INM on quality of Okra (*Abelmoschus esculentus* L.) under Teak (*Tectona grandis* L. f.) based agroforestry system. *International Journal of Chemical Studies*, **8**(6): 132-135.
255. Patel, Y.D., Tandel, M.B., Prajapati, V.M., Pathak, J. and Patel, S.M. (2020). Effect of growing media on seed germination of red sanders (*Pterocarpus santalinus* Linn.f.). *International Journal of Chemical Studies*, **8**(5): 2424-2427.
256. Behera, L.K., Ray Lala, I.P., Nayak, M.R., Mehta, A.A. and Patel, S.M. (2020). Carbon sequestration potential of *Eucalyptus* spp.: A review. *E-planet*, **18**(1): 79-84.
257. Behera, L.K., Mehta, A.A., Dholariya, C.A., Sukhadiya, M., Gunaga, R.P. and Patel, S.M. (2020). Vegetative propagation of Guggul [*Commiphora wightii* (Arn.) Bhan.]: A commercially important and threatened medicinal plant species. *E-planet*, **18**(2): 164-169.
258. Bhuva, D.C., Prajapati, V.M., Amlani, M.H. and Tandel, M.B. (2020). Effect of irrigation interval on growth and biomass of mahogany (*Swietenia macrophylla* King, Meliaceae) seedlings. *International Journal of Chemical Studies*, **8**(1): 260-263.
259. Sukhadiya, M.L., Thakur, N.S., Patel, V.R., Gunaga, R.P., Kharadi, V.B., Tyagi, K.K. and Singh, S. (2020). Provenance variations in proximate principles, mineral matter, total phenols and phytochemicals of *Melia dubia* drupes: an unexplored alternate livestock feed stock. *Journal of Forestry Research*. <https://doi.org/10.1007/s11676-019-01080-y>.
260. Mevada, R.J., Nayak, D., Patel, D.P. and Tandel, M.B. (2021). Potential of tasar silkworm (*Antheraea mylitta*) excreta as fertilizer on growth, yield and quality of rice. *J. Environ. Biol.*, **42**: 1070-1077.
261. Govind, Prajapati, V.M. and Tandel, M.B. (2021). Effect of Integrated Nutrient Management on Seedling Growth and Biomass of Sandalwood (*Santalum album* L.). *Indian Journal of Ecology*, **48**(4): 1047-1050.

262. Govind Bose, Prajapati, V.M., Tandel, M.B., Pathak, J.G. and Parmar, M.R. (2022). Seedling quality and growth of sandalwood in response to integrated nutrient management. *The Pharma Innovation*, **11**(1): 1220-24.
263. Yogesh Kumar, Prajapati, V.M. Tandel, M.B., Govind, Pathak, J.G., Parmar, M. R. and Aditya Pratap Singh (2022). Effect of nitrogen, Rhizobium and growing environments on the growth and biomass production of *Albizia procera* R. b. *The Pharma Innovation Journal*, **11**(2): 668-672.
264. Yogesh Kumar, Prajapati, V.M., Tandel, M.B. Manojkumar S., David Camus D. and Hafiss Mohammed (2022). Effect of Nitrogen, Rhizobium and Growing Environments on Nodulation, Nutrient Content and Uptake of *Albizia procera* R. B. *Biological Forum - An International Journal*, **14**(1): 549-553.
265. Ramesh, K.R., Devanand, P.S., Senthil K., Balasubramanian, P., Thiyagarajan, G., Thiru Selvan, Tandel, M.B., Sujatha, K.B., Hemaprabha, K., Nelson Navamani Raj, K., Utharasu, S. and Siva Kumar, K. (2022). Growth and yield performance of fodder trees and grasses under silvipastoral systems in dryland farming. *Agricultural Mechanization in Asia*, **53**(12): 11231-11238.
266. Mehfuza M. Patel Tandel, M.B., Prajapati, V.M., Patel, S.M. and Desai, M.K. (2022). Influence of various biofertilizers on growth and biomass of rooted cuttings of *Casuarina* (*Casuarina equisetifolia* L.). *Indian Forester*, **148**(11): 1112-1116.
267. Patel, Y.D., Tandel, M.B., Prajapati, V.M., Pathak, J. and Patel S. M. (2022). Effect of integrated nutrient management on seedling growth of red sanders (*Pterocarpus santalinus* Linn.f.). *Indian Forester*, **148**(11): 1165-1169.
268. Deshmukh, H., Dobriyal, M., Tandel, M.B., Gunaga, R., Sharma, O.P., Garde, Y.A., Thakare, U., Kunwar, R., Chavan, S., Salunkhe, S., Thakur, N.S., Singh, N., Chinchmalatpure, U. and Mevada, R. (2023). Development and standardization of an innovative scale for measuring the socio-economic status of agroforestry farmers in south Gujarat, India. *Sustainability*, **15**: 2691 (1-19).
269. Bose, G., Prajapati, V.M. and Tandel, M.B. (2023). Comparative performance of teak in agroforestry system and sole plantation. *The Pharma Innovation Journal*, **12**(6): 301-305.
270. Bose, G., Prajapati, V.M., Tandel, M.B., Patel, N.K., Patel, D.P., Garde, Y.N., Pathak, J.G., Chaudhari, V. and Behera, S. (2023). Impact of varieties and foliar spray of micronutrient on growth parameters of cluster bean under teak based agroforestry system. *International Journal of Plant & Soil Science*, **35**(18): 644-655.
271. Govind, Patel, D.P., Prajapati, V.M., Tandel, M.B., Behera, S. and Chaudhari, V. (2023). Soil properties and nutrient availability under teak based agroforestry system. *Journal of Plant Development Sciences*, **15**(5): 291-294.
272. Mevada, R.J., Tandel, M.B., Prajapati, V.M. and Patel, N.K. (2023). Effect of integrated nitrogen management on growth and yield of okra (*Abelmoschus esculentus* under teak (*Tectona grandis*) based silvi-horticulture system in south Gujarat. *Indian Journal of Agroforestry*, **25**(1): 28-33.
273. Sondarva, R.L., Tandel, M.B., Patel, N.K., Prajapati, V.M. and Gunaga, R.P. (2024). Influence of integrated nutrient management on economics of Brinjal (*Solanum melongena*) under Teak (*Tectona grandis*) based Silvi- horticultural system. *Indian Journal of Agroforestry*, **26**(1): 74-79.

(B) RESEARCH PAPER PUBLISHED IN PROCEEDING OF SEMINAR / SYMPOSIUM / WORKSHOP/ TRAINING MANUALS

1. A.A. Mehta, L.K. Behera, S.K. Sinha and J.G. Pathak (2016). Palmyra Palm and Beekeeping. National Conference on “Palmyra Palm” held at ACHF, NAU, Navsari during 7- 8 February, 2016. Pp- 32- 38.(ISBN-978-81-922823-1-2)
2. B. Dhaval, R. Sreekumar, R.P. Gunaga, L.K. Behera, M.J. Dobriyal and N.S. Thakur (2016). Ecological Characteristics of *Sterculia urens*. International Conference on “Natural Resource Management Ecological Perspectives” held at Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu during 18-20 February, 2016. Pp- 229. (ISBN-978-93-5254-337-3).
3. Balvant R. Ahir, Manmohan J.R. Dobriyal, R.P. Gunaga, D.P. Patel and L.K. Behera (2016). Above and below ground biomass and carbon sequestration estimation for *Acacia mangium* plantation in South Gujarat, India. National Symposium on “Agroforestry for environmental challenges, sustainable landuse, biodiversity conservation and rural livelihood options” held at ICAR-CAFRI, Jhansi (UP) during 3-5 December, 2016. Pp-186.
4. Behera, L. K. (2006). Biodiversity of Dang's: The Dandakaranya of Gujarat, *In: National Seminar on Biodiversity Conservation and Sustainable Development. 9-10 March, 2006 OUAT, Bhubaneswar.*
5. Behera, L. K., A. A. Mehta and S. K. Sinha (2011). Availability of suitable bee flora for commercial Apiculture during dearth period in Navsari Agricultural University of South Gujarat. In: International Conference on Non-Wood Forest Produce for Sustained Livelihood. 17-19 December, 2011, MPMFC and IIFM, Bhopal.
6. Hegde, H. T., Jha, S. K. and Thakur, N. S. (2012). Wetland ecosystems of Kachchh: Unique structure and varied function. *In: Proceedings of National Seminar on Tropical Ecosystems: Structure, Function and Services, B. Nagarajan, C. Kunhikannan, K. R. Sasidharan and N. Krishnakumar (Eds.), Institute of Forest Genetic and Tree Breeding (ICFRE), Coimbatore, Pp. 130-138.*
7. Huse, S. A., Jadeja, D. B., Rajpoot, R. S. and Kumar, V. (2012). Growth performance of twelve eucalyptus clones in South Gujarat. *In: National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 February, 2012. Pp. 304-310.*
8. Jadeja, D. B., Pathak, J. and Tandel, M. B. (2015). Climate smart agriculture through Agroforestry. *In: National workshop on Carbon Sequestration in Forest and Non Forest Ecosystem, 16-17 February, 2015. Pp. 65-83.*
9. Jadeja, D. B., Pathak, J., Meena, B., Tandel, M. B. and Parmar, M. R. (2012). Role of agroforestry systems in climate change. *In: National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 February, 2012. Pp. 219-233.*
10. Kukadia, M.U., Tandel, M. B., Patel, S. M., Desai, M. K. and Kazi, A. A. (2011). Feasibility of Taro (*Colacasia esculanta* L.) grown as an intercrop under tree species, *In: Seminar on Social Forestry, 8-9 Feb., 2011, Gandhinagar. Pp. 66-69.*

11. Kumar, S, Prajapati, V. M. and Pastagia, J. J. (2009). Seasonal abundance and population dynamics of teak skeletonizer (*Eutectona machaeralis*) in Humid Tropics of South Gujarat. *In: Proceeding of National Forestry Conference at Dehra Dun. November 9-11, 2009.* Pp. 290-294. Kumar, S., Chavan, S., Kabade, K. and Prajapati, V. M. (2012). Incidence of major defoliating insect pest in economically important forest tree species of Dangs. *In: National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 February, 2012.* Pp. 174-179.
12. M.R. Nayak, D.P. Patel, L.K. Behera, J.R. Chavda and D.B. Jadeja (2016). Current utilization and further development of the Palmyra Palm (*Borassus flabellifer* L.) in Odisha State, India. National Conference on “Palmyra Palm” held at ACHF, NAU, Navsari during 7- 8 February, 2016. Pp- 16- 21. (ISBN-978-81-922823-1-2)
13. Manmohan J.R., L. K. Dashora, S. R. Maloo and Deepak Sarolia (2012). Improvement in livelihoods and benefits of small and marginal farmers through Agroforestry interventions with carbon finance. *In: Proceedings of National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 Feb, 2012 at NAU, Navasari, Gujarat.* Pp. 201-211.
14. Manmohan, J.R. (2012). *Prosopis juliflora* (Vilayati babool/ Mesquite) a versatile raw material for the cottage and small scale industries in arid and semi arid zone. *In: Proceeding of NAIP all India workshop on Utilisation of Prosopis juliflora- Opportunities and Challenges, 12-13 March, 2012 at CAZRI, Jodhpur.* Pp.
15. Mehta, A.A., L.K. Behera, S.K. Sinha and J.G. Pathak (2016). Palmyra Palm and Beekeeping. National Conference on “Palmyra Palm” held at ACHF, NAU, Navsari during 7- 8 February, 2016. Pp- 32- 38. (ISBN-978-81-922823-1-2)
16. Nayak, M.R., D.P. Patel, L.K. Behera, J.R. Chavda and D.B. Jadeja (2016). Current utilization and further development of the Palmyra Palm (*Borassus flabellifer* L.) in Odisha State, India. National Conference on “Palmyra Palm” held at ACHF, NAU, Navsari during 7- 8 February, 2016. Pp- 16- 21. (ISBN-978-81-922823-1-2)
17. Parekh, V., Vardhan, K., Jha, S.K., Jha, S., Mahatma, M., Parmar, M. R. and Pathak, J. (2012). Forest Biotechnology: Current Status and Future Perspective. *In: National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 February, 2012.* Pp. 297-303.
18. Parekh, V.B.; V. R. Patil; Jayesh Pathak and Hardik Ghevariya (2016). Comparative Assessment of Genetic Diversity Among Palmyra Palm (*Borassus flabellifer*) Accessions from South Gujarat Using RAPD and ISSR Markers. *In National Conference on Palmyra Palm, 7-8 January, 2016.* Pp. 66-74

19. Patel B. N. and Pathak J. (2016). Impact of Scientific management of Palmyra Palm. *In National Conference on Palmyra Palm, 7-8 January, 2016.* Pp. 7-12
20. Prajapati, V. M., M. U. Kukadia and Sushil Kumar (2011). Screening of Teak (*Tectona grandis* L.) clones vis-a-vice Defoliator (*Hyblaea puera*) in Gujarat. *In. Proceeding of First Indian Forestry Congress, Nov-22-25, 2011 at ICFRE.* Vol II, Pp. 385-386.
21. Sharma, K. R. and Thakur, N. S. (2011). *Flacourtia indica* - A wild fruit source. *In: Compendium on 21 days Advanced Training Course on Wild and Underutilized Fruits, Parvinder Kaushal, Gupta, R and Dubey, J. K. (Eds), National Afforestation and Eco-development Board, Regional Centre, Dr. Y S Parmar UHF, Nauni, Solan (HP).* Pp. 32- 34.
22. Sharma, K. R. and Thakur, N. S. (2011). *Myrica esculenta* - A multipurpose wild fruit tree species. *In: Compendium on 21 days Advanced Training Course on Wild and Underutilized Fruits, Parvinder Kaushal, Gupta, R. and Dubey, J. K. (Eds), National Afforestation and Eco-development Board, Regional centre, Dr. Y S Parmar UHF, Nauni, Solan (HP).* Pp. 35-38.
23. Tandel, M. B., Kukadia, M. U., Parmar, M. R., Nayak, D. and Prajapati, V M. (2010). Important trees for environment moderation. *In: Proceedings of State level Seminar on Organic Farming for Environment Safety and Agriculture Sustainability, March 6-7, 2010,* pp. 175.
24. Thakur, N. S. (2011). Metha Jal, *Salvadora species*. *In: Compendium on 21 days Advanced Training Course on Wild and Underutilized Fruits, Parvinder Kaushal, Gupta, R. and Dubey, J. K. (Eds), National Afforestation and Eco-development Board, Regional centre, Dr. Y S Parmar UHF, Nauni, Solan (HP).* P. 171.
25. Thakur, N. S., Gupta, N. K. and Gupta, B. (2005). Biomass partitioning of khair trees (*Acacia catechu* willd.) under different Agroforestry systems in western Himalaya-A case study. *In: Proceedings International Conference on World Perspective on Short Rotation Forestry for Industrial and Rural Development, K. S. Verma, D. K. Khurana and Lars Christerson (Eds.), Indian Society of Tree Scientists, Nauni, Solan (HP)-India.* Pp. 208-214.
26. Thakur, N.S, Attar S K, Gunaga R.P, Chauhan R.S, Hegde H.T and Bhusara J.B. 2016. Anecdote about mythology and ethno-pharmacolgy of Asian palmyra palm (*Borassus flabellifer* L.). *In: Souvenir, National Conference on Palmyra Palm, held at Navsari Agricultural University, Navsari, Gujarat, 7-8, January, 2016.* pp. 80-93. ISBN: 978-81-922823-1-2.
27. Thakur, N.S. (2011). Chironji, *Buchanania lanzan*. *In: Compendium on 21 days Advanced Training Course on Wild and Underutilized Fruits, Parvinder Kaushal, Gupta, R. and Dubey, J. K. (Eds), National Afforestation and Eco-development Board, Regional centre, Dr. Y S Parmar UHF, Nauni, Solan (HP).* P. 170.
28. Vasishta A., Manmohan, J. R., Chauhan, P. S. and S. B. S. Pandey (2012). Role of Agroforestry interventions in increasing the status of natural gum yielding species in South east region of Rajasthan. *In: Proceedings of National Seminar on Agroforestry: An Evergreen Agriculture for Food Security and Environmental Resilience, 2-4 Feb, 2012 at NAU, Navasari, Gujarat.* Pp. 352-359.
29. Mehta A.A., Behera L.K., Sinha, S.K. and Pathak, J.G. (2016). Palmyra palm bee keeping. *Proceedings of National Conference on Palmyra Palm organized by ASPEE college of Horticulture and Forestry, Navsari Agricultural University, Navsari, January, 7-8* pp. 32-38.

30. Patel, S.M., Tandel, M.B., Patel, N.K., Behera, L. K. and Desai M.K. (2023). Cucurbitaceous vegetable crops growth and yield performance in teak (*Tectona grandis* L.f.) based silvi-horticultural system. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 146-147.
31. Mevada, R. J., Tandel, M. B., Prajapati, V. M., Deshmukh, H. K. and Patel, N. K. (2023). Effect of Integrated Nitrogen Management on Growth and Yield of Okra Under Teak (Based Silvi-Horticulture System in South Gujarat. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 148.
32. Patel, T.S., Pathak, J.G., Tandel, M.B., Desai, M.K., Patel, S.M., Parmar, M.R. and Prajapati, D.H. (2023). Survival, Growth and Biomass of *Bambusa tulda* Seedlings as affected by Different Level of Saline Irrigation Water. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 172-173.
33. Darshna Ramani, Patel, S.M., Tandel, M.B., Behera, L.K. and Desai, M.K. (2023). Enhancement of Seedling Growth and Vigour using Biofertilizers in Anjan (*Hardwickia binata* Roxb.). Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 174.
34. Punamkumari Chauhan, Behera, L.K., Tandel, M.B., Thakur, N.S., Chauhan, R.S., Chhatrola, H.N. and Dholariya, C.A. (2023). Influence of Biofertilizers on Early-Stage Seedling Growth, Biomass and Vigour of *Anthocephalus cadamba* (Roxb.) Miq. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 175.
35. Pathak, J., Tandel, M.B., Parekh, V.B., Sinha, S.K., Chavda, J.R., Prajapati, D.H. and Nidhi B. Patel (2023). Current Development and Research in Bamboo in Gujarat State. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 240.
36. Shambharkar, V. B., Tandel, M.B., Deshmukh, H.K. and Choudhari, S.W. (2023). Pterocarpus santalinus: An Overview on Propagation Techniques for its Conservation. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 301-302.
37. Parmar, M.R., Arunachalam, A., Jha, S.K., Tandel, M.B., Patel, D.P. and Patel, S.M. (2023). Soil Texture Variations in Different Horticulture-Based Agroforestry Systems in Valsad District of South Gujarat. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 309-310.

38. Chauhan Jahanvi, Desai, M. K., Tandel, M. B., Patel, S. M., Viyol, S. V. and Behera, L. K. (2023). Forest Fire: Impacts on Floral Biodiversity. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 313.
39. Chaudhari, V., Ankita Patel, Prajapati, V.M., Tandel, M.B. and Arti Patel (2023). Effect of Biopriming on Seed Germination, Growth and Biomass of Waras (*Heterophragma quadriloculare*). Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 360-361.
40. Sanjana J. Vaghasiya, Tandel, M. B., Parmar, M. R., Patel, S. M. and Behera, L.K. (2023). Techniques for Production of Quality Planting Material- Poplar. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 363.
41. Tandel, M. B., Pathak, J., Desai, M. K., Patel, S. M., Chavda, J. R. and Prajapati, D. H. (2023). Growth performance and economics of different bamboo species at different spacing. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 366.
42. Behera, S., Tandel, M. B., Desai, M. K., Patel, N. K. and Mehfuza M. Patel (2023). Economics of Different Brinjal Varieties under Young Plantation of Gamhar (*Gmelina arborea* Roxb.) and Sole Cropping. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 366.
43. Prajapati, V. M., Bhargavi M. Patel, Desai, B. S., Tandel, M. B., Mansi U. Bharadva and Viyol, S. V. (2023). Effect of Potting Mixture on Seedling Germination and Vigour of *Terminalia bellirica*. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 373.
44. Rathod, T.N., Desai, M.K., Tandel, M.B., Patel, S.M. and Garde, Y.A. (2023). Vegetative Propagation of Indian Tulip Tree [*Thespesia populnea* (L.)] through cuttings. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 378.
45. Bhuva, D.C., Gunaga, R.P., Thakur, N.S., Dobriyal, M.J., Nayak, D. and Hegde, H.T. (2023). Variation in Fruit and Seed Traits Among Different Accessions of *Sterculia urens*. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 180-181.

46. Sukhadiya, M.L., Thakur, N.S., Kharadi, V.B., Patel, V.R. and Gunaga, R.P. (2023). Nutritive Value of *Melia dubia* Cav. Drupe pulp and its Feeding Effect on Surti Goat (*Capra aegagrus hircus* L.) Kids. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 203.
47. Sukhadiya, M.L., Thakur, N.S. and Gunaga, R.P. (2023). Trees as Feed and Fodder Resources: Potential and Prospects for Small Ruminants. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 204-205.
48. Malek, S.S., Thakur, N.S., Patel, V.R., Gunaga, R.P., Hegde, H.T. and Garde, Y.A. (2023). Variation in Proximate Principles of *Melia dubia* Fodder across Different Sources of Gujarat, India. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 244.
49. Thakur, N.S., Gunaga, R.P., Hegde, H.T., Chauhan, R.S. and Bhuva, D.C. (2023). *Melia dubia* Cav. cultivation in Gujarat, India: Research Development and Outreach. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 304.
50. Bhusara, J.B., Sondarva, R.L., Gunaga, R.P., Thakur, N.S., Behera, L.K. and Sankanur, M.S. (2023). Volume, Biomass and Carbon content of Agroforestry Systems of Chikhli, South Gujarat, India. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 374-375.
51. Sondarva, R.L., Bhusara, J.B., Gunaga, R.P., Hegde, H.T., Mehta, A.A. and Huse, S.A. (2023). Germination Studies in *Millettia ovalifolia* Kurz. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 376-377.
52. Gunaga, R.P., Behera, L.K., Sinha, S.K., Mehta, A.A., Thakur, N.S., Garde, Y.A., Bhusara, J.B. and Sondarva, R.L. (2023). Development of Volumetric Equation for Quick Assessment of Standing Trees of *Casuarina* sp. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 379-380.
53. Aya Tarh, Behera, L.K., Gunaga, R. P., Mehta, A. A., Huse, S.A., Garde, Y.A. and Dholariya, C.A. (2023). Influence of Biofertilizers on Seedling Growth and Vigour of Indian Redwood [*Soymida febrifuga* Roxb.] - A Lesser Known Tree. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 343-344.

54. Manojkumar S., Behera, L.K., Gunaga, R.P., Mehta, A.A., Nayak, D., Chhatrola, H.N. and Patel, S.M. (2023). Community Structure of Lesser-Known Tree Species, *Dalbergia lanceolaria* L. f., in Tropical Deciduous Forest. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 352-353.
55. Dholariya, C.A., Behera, L.K., Gunaga, R.P., Huse, S.A., Mehta, A.A., Patel, S.M. and Patel, D.P. (2023). Seed Germination and Seedling Growth of *Bauhinia malabarica* Roxb., a Species of Conservation Concern. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 362.
56. Behera, L. K., Gunaga, R. P., Mehta, A. A., Huse, S. A., Sinha, S. K., Patel, D.P., Patel, S.M. and Dholariya, C.A. (2023). Germination Pattern of some Important Lesser Known and Threatened Tree Species: Nursery Prospective. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 371-372.
57. Patel, D.P., Prajapati, V.M., Viyol, S.V., Mevada, R.J., Behera, L.K. and Chaudhary, A.P. (2023). Eucalyptus Plantations: Effects on Soil Properties. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 298.
58. Prajapati, M.R., Patel, E.K., Gorfad, K.P., Desai, B.S., Prajapati, V.M. and Parekh, V.B. (2023). Diversity of Trees at Navsari Agricultural University Campus: Pictorial Glimpses. Proceedings of NAU-IES-IUFRO Conference on “Tree Based Diversified Land-use System: Augmenting Livelihood Security and Industrial Growth” organized by College of Forestry, Navsari Agricultural University, Navsari, February, 15-17 pp. 255.
59. Tandel, M.B. (2024). Soil Physico-Chemical Properties of Coastal Land use Systems of Historical Place Dandi, Gujarat, India . Proceedings of IESIC organized by Punjab Agricultural University, Ludhiana, November, 12-15 pp.

(C) BOOKS

- A. M. R. Nayak, L. K. Behera and Prasannajit Mishra (2019). Agroforestry Concepts & Principles. *International Books and periodicals Supply Service*, Delhi-India. Pp. 390. (ISBN 9789388892636)
- B. M.R. Nayak and L.K. Behera (2015). Forest Solution. New Vishal Publications, New Delhi, India. Pp-452 (ISBN 818399093-3).
- C. Sushil Kumar, Vijay Prajapati and M. U. Kukadia (2012). Susceptibility of teak clones against defoliation and skeletonizer. *Lambert Academic Publishing*.
- D. Uniyal, M. R., Thakur, N. S., Lhouvum, G. and Bhojvaid, P. P. (2009). *Svasth Jeevan Ke Liye Aushdhye Paudhe* (In Hindi). TERI press, The Energy and Resources Institute (TERI), Darbari Seth Block, IHC Complex Lodhi Road, New Delhi, India-110 003. Pp. 142. ISBN-978-81-7993-224-5.

(D) BOOKLETS / EXTENSION MATERIAL

1. Pathak, J.; Parekh,V.B.; Huse, S.A.;Parmar, M.; Patel, S.M. and Desai, M. (2015) “Vansh ni mukhya Prajatio”, on the occasion of world Bamboo Day AHF, NAU,Navsari (Uni. Publi.No. 26/2015-16) 18p.
2. Pathak, Jayesh, V.M Prajapati, M.B Tandel, AA Kazi, VB Parekh, M.K Desai, J.M Patel, S.M Patel (2016) Tad nu vaigyanik Vyavsthapan , Publisher : Dr.B.N Patel ,Principal ACHF, NAU Navsari (Uni.Punli. No. 40/2015-16)
3. Pathak, J. Prajapati, V.M., Tandel, M.B., Kazi, A.A. and Sinha S.K. 2015. Bansnu Vaigyanik Vyavasthapan (In Gujarati).Published by ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari.Pp.1-22.
4. Prajapati, V. M., Pathak J., Tandel, M. B., Patel S. M., Desai M. K., Parmar M. R., Parekh V. B. and Jadeja D. B. (2013). *Dharti Upernu Lilu Sonu - Vans (Bamboo)* (In: Gujarati). Published by Principal, ACHF, NAU, Navsari. Pp. 48.
5. Prajapati, V. M., Pathak J., Tandel, M. B., Patel S. M., Desai M. K., Parmar M. R., Parekh V. B. and Jadeja D. B. (2013). *Dharti Upernu Lilu Sonu - Vans (Bamboo)* (In: Gujarati). Published by Principal, ACHF, NAU, Navsari. Pp. 48.
6. Sabalpara, A. N., Mahatma, L., Pandya, J. R., Prajapati, V. M., Parmar, M. R. and Jadeja, D. B. (2009). *Important nursery disease in South Gujarat*. Published by Director of Research, Navsari Agricultural University, Navsari. Pp.18.
7. Saxena, S. P., Prajapati, V. M., Parmar, M. R. and Jadeja, D. B. (2010). *Eucalyptus Gall insect Leptocybe invasa* in Southern Gujarat. Published by Director of Research, Navsari Agricultural University, Navsari. Pp. 24.
8. Sexena S. P., Prajapati V. M., Parmar M. R., Jadeja D. B. (2009). *Sag na Sketoniser*, (In: Gujarati), Published by Director of Research, Navsari Agricultural University, Navsari. Pp. 12.

(E) BOOK CHAPTERS

1. Amol Vasistht and Manmohan, J. R. (2013). Potential of Natural Gums in India. *In: Plant Biotechnology, Utilization and Biodiversity. Bijalwan A. and C.P. Kala (Eds).* Aviskar Publication, Jaipur. Pp. 16-21.
2. Arvind Bijalwan, Manmohan J.R. Dobriyal, Anup Praksh Upadhy and Soesh Singh (2016) . Carbon sequestration potential in agroforestry systems: A study in Uttrakhand Himalaya. *In: Climate Change combating through science and Technology (Eds.) G.A. Kinhal, A.K. Dharni, A.P. Upadhy and D. Dugaya. Bishanpal Singh and Mahindrapal sigh, Dehradun and IIFM, Bhopal .157-164 pp ISBN-978-81-211-0949-9 .*
3. Arvind Bijalwan; Pooja Verma and Manmohan JR Dobriyal (2017) Certification process of pulp and paper plantation in India. *In Book: Plantation and Agroforestry Pulpwood Value Chain Approach, Editors: K.T. Parthiban, and R. Sreenivasan, Publisher: Scientific Publishers (India), pp.26-35. ISBN : 978-93-86347-98-5*
4. Behera, L.K., M.R. Nayak, R.P. Gunaga and M.J. Dobriyal (2016) Agroforestry: A land use system for ecological conservation of native species. *In: Holistic development of Agroforestry (Eds.) Salis Tewari, V.K. Shah and S.K. Lawania) pp 137-147. Jaya Publishing House , New Delhi ISBN: 978938433752-0.*
5. Bhagyawantha, N.M, Rajesh P. Gunaga, Pradeep Damle and Vasudeva, R. (2010). Development of fruit and seed descriptors in *Garcinia gummi-gutta*: Implication for Domestication. *In: Garcinia genetic resources: Linking diversity, livelihood and Management. (Eds. Vasudeva, R., Janagoudar, B.S., Reddy, B.M.C., Bhuwon Sthapit and Singh, H.B). Published by College of Forestry, Sirsi, India. Pp. 103-111*
6. Bijalwan, Arvind and Manmohan J.R. Dobriyal (2016) Traditional Agroforestry along Altitudinal Gradient and Aspects in the Hills of Uttarakhand Himalaya, India. *In: Holistic development of Agroforestry (Eds.) Salis Tewari, V.K. Shah and S.K. Lawania) pp 109-118. Jaya Publishing House , New Delhi ISBN: 978938433752-0.*
7. Choudhury, Pritam and Manmohan J.R. Dobriyal (2016) Potentialities of home garden in humid and sub humid climate of south Gujarat *In: Holistic development of Agroforestry (Eds.) Salis Tewari, V.K. Shah and S.K. Lawania) pp 159-166. Jaya Publishing House , New Delhi ISBN: 978938433752-0.*
8. Gunaga, R.P. and Vasudeva, R. (2005). Causes for low fruit production in clonal seed orchards of teak (*Tectona grandis* Linn. f): A special references to India. *In: Quality Timber Products of Teak from Sustainable Forest Management (Eds. Bhat, et al.). Published by KFRI and ITTO. Pp. 352-358.*
9. Jadeja, D.B. and Manmohan J.R. (2016) Agroforestry and Tree farming policy *In: India's prespective policy on Agriculture- A compilation of policy papers on different aspects of India's agriculture (Eds) M.C.Varshneya and Anil Javalekar. Uttan Krushi Sansodhan Sanstha, Thane. ISBN: 9789352544172*

10. Kumar, V., Sinha, S.K., Huse, S.A. and Gunaga, R.P. (2014). *Introduction*. In: V. Kumar and T.K. Kunhamu (Eds.), *A Question Bank of Forestry*, Narendra Publishing House, New Delhi, India, Pp. 1-30.
11. Lyngdoh, N., Vasudeva, R., Fakruddin, B. and R. P. Gunaga. (2006). Genetic Diversity of Teak Clonal Seed Orchard Estimated through RAPD. *In: Concepts in Forestry Research* (Eds. Todaria, N.P., Chamola, B.P. and Chauhan, D.S.). Published by IBD., New Delhi. Pp: 41-48.
12. Manmohan Jagatram, P.P. Bhojvaid, Mahender Gusain and Seema Negi (2004). Orchidarium for the conservation of Orchids in Uttaranchal. *In: Protected Habitats and Biodiversity*, Nature Conservators Publication. Pp. 367-376. ISBN: 81-900467-6-4.
13. Manmohan, J. R. Dobriyal (2013). Forest Products Utilisation. *In: Forestry- Principles and Applications*. Antony Joseph Raj and S.B. Lal (Eds.), *Scientific Publishers*, Jodhpur. Pp. 601-627. ISBN: 978-81-7233-810-7.
14. Manmohan, J.R. Dobriyal (2014). Agroforestry Practices for Non-Wood Forest Products and Rural Development. *In: Agroforestry- Theory and Practices* (Eds.) Antony Joseph Raj and S.B. Lal, *Scientific Publishers*, Jodhpur. Pp. 528-550. ISBN: 978-81-7233-866-4.
15. Manmohan J.R. Dobriyal (2016) Forest Reproductive Material Legislation *In: Forest Seed Science and Management* (Ed. Gopal Shukla),. New India Publishing Agency, New Delhi, India pp 179-209
16. Manmohan JR Dobriyal, Arvind Bijalwan, Tarun Kumar Thakur and Amol Vasishth (2017) [Complexity of Marketing and Policy issues derailing the Silviculture of Indian trees](#). In Book: Status and Recent researches on Important Timber Trees of India (Eds) C. Buvaneswaran, S. Senthilkumar, S. Saravanan, P. Kathirvel, S. Murugasan, R.S. Prashanth; Publisher: ICFRE- IFGTB, Coimbatore, PP 237-245
17. Mirgal, A.B., Rane, A.D., Rajesh P. Gunaga, Narkhede, S.S. and Bhawe, S.G. (2010). Characterization of fruit and seed traits of *Garcinia indica* Choisy: implication to Tree selection. In: *Garcinia genetic resources: Linking diversity, livelihood and Management*. (Eds. Vasudeva, R., Janagoudar, B.S., Reddy, B.M.C., Bhuwon Sthapit and Singh, H.B). Published by College of Forestry, Sirsi, India. Pp. 96-98.
18. Uma Shannker, R., Ramesha, B.T., Ravikanth, G., R. P. Gunaga, R. Vasudeva and Ganeshaiah, K.N. (2008). Chemical profiling of *Nothapodytes nimmoniana* for Camptothecin, an important anticancer alkaloid: Towards the development of a sustainable production system. Chapter 10 in *Bioactive Molecules and Medicinal Plants* (Eds. Ramawat, K.G. and Merillon, J.M.). Published by Springer, Pp: 197-213.
19. Vasudeva, R. and Rajesh Gunaga (2012). Flowering Phenology in Teak Seed Orchards - Genetic Variation, Measurement and Implications to Seed Orchard Fertility. Chapter 10 in *Phenology and Climate Change* (Ed. Xiaoyang Zhang). Published by INTECH. Pp: 179-192.
20. Shrivastava, P.K. (2016). Impact of Climate Change on Horticultural Crops, *Book on Commercial Horticulture*, (Eds: Patel, N.L., Chawla, S.L. and Ahlawat, T.R.). *New India Publishing Agency*, New Delhi, India, Pp. 327-344.

21. Patel, R.M., Shrivastava, P.K., Nayak, D. and Patel, D.P. (2017). Evaluation of micro watersheds of Navsari, Book on Natural Resource Management for Climate Smart Agriculture (Eds: Sanjay Arora, Sanjay Swami and Suraj Bhan). *Soil Conservation Society of India*, New Delhi. Pp. 343 - 352.
22. Chaudhari, P.A., Sohagiya, N.J., Sinha, S.K., Thakur, N.S. and Jha, S.K. (2017). Wood anatomical screening of short rotation trees for pulp and paper making properties: A review (Eds. Parthiban, K.T., Sreenivasan, R.), Plantation and Agroforestry: Pulpwood Value Chain Approach. *Scientific Publishers*, India. Pp.102-108.
23. Sinha, S.K., Rao, R.V., Rathore, T.S. and Borgaonkar, H.P. (2017). Growth ring structure and specific gravity variation in juvenile and mature wood of natural growth of teak (*Tectona grandis* L.F.). (Eds.), Wood is God: Current trends and future prospects in utilization. *Springer Nature Publisher*, Singapore. Pp. 105-115.
24. Thakur, N.S., Suvera, A.H., Jha, S.K. and Patel, D.B. (2019). Growth performance, essential oil recovery and financial flows of *Ocimum* spp. under *Pongamia pinnata*-*Ocimum* spp. based silvi-medicinal agroforestry systems. In: Dev I, Ram A, Kumar N, Singh R, Kumar D, Uthappa A R, Handa A K and Chaturvedi O P (Eds), Agroforestry for climate resilience and rural livelihood. *Scientific Publishers*, Jodhpur. Pp. 335-344. ISBN: 9789387307063.

(F) POPULAR ARTICLES

1. A.A. Mehta, G.G. Pastagia and L.K. Behera (2016). Madhmakhi palan: Badhu naka apta rojgari matano ak saphala babasaya. Dashani Gujaratma krushi Salanga Navin Technology yena Babsaya. NAU, Navsari. (Univesity Publication No- 4/2016-17, pp-74-80). (Gujarati)
2. Behera, L. K. and T. K. S. Rao. (2013). Wildlife Protection, *Science Reporter*, Pp. 44.
3. Bijalwan, A. and M. J. Dobriyal. (2013). Need for Transformation in Recruitment of Forestry Faculty in Academic Institutions in India *In: University News*, April 1-7, 2013.
4. Bijalwan, A. and Manmohan, J. Dobriyal (2015) Examination pattern of National Eligibility test- a critique. *University News*”, 55 (22): 20-21. April 1-7, 2013. June 1-7, 2015
5. Chaudhari, D. C., Manmohan, J.R. Dobriyal and Gusain, M.S. (2004). Holistic Herbal Healing. MFP News, Dehradun, Vol. XIV(3): 3-7.
6. Deepak Rai, Manmohan Jagatram Dobriyal and Tara Singh Mehra (2004). Control of stem borer in plantations of *Gmeliana arborea*. *MFP News*, Dehradun, Vol. XIV(2): 11.
7. Dobriyal , M. J. R. and A. Bijalwan (2016) Farming Quotient (FQ) or Framing Intelligence (FI) and Its Relevance in India. *Int. J. Curr. Res. Biosci. Plant Biol.* 2016, 3(5): 144-146
8. Dobriyal, Manmohan J.R. and Bijalwan, A. (2015) Why cutting down Chirpine is not a solution to Uttarakhand forest fires. Down to Earth.Blog.
9. Dobriyal, Manmohan J. R. and Bijalwan, A. (2016) We did start the fire - A range of preventive and remedial steps must be taken in hill forests of Uttrakhand- The Indian Express (Ideas page 15), Friday, May 6, 2016
10. Hegde, H.T., Jha, S.K., Thakur, N.S. and Chauhan, R.S. (2014). Propagation and importance of *Terminallia chebula*. *Vatika from the seed and plant people*, Spring (1): 29-31.
11. Jadeja D. B., Patel S. M., Desai M. K and Kirti Vardhan. (2012). Economically important tree species- Shisam (*Dalbergia latifolia*), *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 9-10.
12. Jadeja, D. B., Desai, B. S., Pathak, J. and Huse, S. (2012). Economically important timber tree species: Hed (*Adina cordifolia*), *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 11-13.
13. Jadeja, D. B., Jha, S., Pathak, J. and Kirti Vardhan (2012). Rearing of Bamboos (*Bambusa arundinacea* and *Dendricalamus strictus*), *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 16-18.
14. Jadeja, D. B., Nayak, D., Behara, L.K and Desai, B. S. (2012). Neem (*Azadirachta indica*) - Multipurpose tree. *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 19-21.
15. Jadeja, D. B., Parmar, M. R. and Prajapati, V. M. (2012). Rules for felling of trees. *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 1-3.

16. Jadeja, D. B., Pathak J. and Chouhan, R. (2012). Scientific rearing of teak. *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 4-6.
17. Jadeja, D. B., Prajapati, V. M. and Parmar, M. R. (2012). Economically important timber tree species: Sevan (*Gmelina arboria*). *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 14-15.
18. Jadeja, D. B., Tandel, M. B. and Desai, B. S. (2012). Education and training of forestry in India. *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 22-23.
19. Jadeja, D. B., Tandel, M. B. and Nayak, D. (2012). Cultivation of Mahua (*Madhuca latifolia*), *Seminar on Agro-forestry and High-tech Horticulture*, Pp. 7-8.
20. Jadeja, D. B., Tandel, M. B., Patel, S. M., Parmar, M. R. and Desai, M. K. (2010). Water conservation works and its utility. *Krishi Jivan*, 43(2): 9-10.
21. Jain, S. K., Jitendra Singh, P.S. Chauhan, Dheeraj Singh and Manmohan Jagatram (2009) *Kainth sae banayae poustik utpad. Phal Phool*, Pp. 8-10.
22. M.B. Tandel, V.M. Prajapati, and L.K. Behera (2016). Sevan (*Gmelina arborea*). *Krushijivan*, 11(572): 31. (Gujarati)
23. Manmohan J.R. Dobriyal (2002). Rare and threatened Medicinal orchids of Asthavarga in Uttaranchal - *Microstylis wallichii* and *Microstylis muscifera*, *MFP News*, Vol. XII(5): 4-5.
24. Manmohan, J. R. Dobriyal (2002). Rare and Endangered Medicinal orchids of Asthavarga group in Uttaranchal- *Habenaria intermedia* and *Habenaria edgeworthii*, *MFP News*, Vol. XII (4): 4-5.
25. Manmohan, J.R. and Amol Vasishth (2011). Aparajita (*Clitoria terneata*) - An important multipurpose medi-climber. *MFP NEWS*, Vol. XXI(3): 17-18.
26. Mehta, A.A., Behera, L.K. and Sinha, S.K. (2016). Apiculture practices through capture and transfer of wild colonies of Indian honey bees (*Apis cerena*) into wooden hives. *MFP News*, XXVI (1):8-11.
27. Nayak, D., Prajapati, V. M. and Warpa, P. (2009). Bamboo as food. *Agrobios Newsletter*, viii (5): 31-33.
28. Patel, N. L., Saxena, S. P., Jadeja, D. B. and Prajapati, V. M. (2008). Article on gall damage, *Sandesh News Paper* dated 12/05/2008.
29. Pathak J. (2016). Tad ni Vegyanik kheti. *Smarnika (Dakshin Gujarat Neera-Tad-Godh Gramodhyog Sangh)* 2016. Pp. 65-69.
30. Prajapati, V. M., M. B. Tandel, M. K. Desai and S. A. Huse. (2013). Gujaratma clonal paddhatithi Vrikshonu sanvardhan (Clonal Tree Propagation in Gujarat). *Krishigovidhdya*. 66: 07:12-15.
31. Prajapati, V. M., Parmar, M. R., Tandel, M. B. and Jadeja, D. B. (2011). Gujarat Ma Krishi-vaniki, *Krishi Jivan*, 44(5): 7-9.
32. Prajapati, V. M., Tandel, M. B. and Pathak, J. (2013). Chandan ni vaigyanik kheti, *Ek Prayas*, 1 (7): 28-30.
33. Prajapati, V. M., Tandel, M. B., M. K. Desai and S. A. Huse (2013). Gujarat ma clonal paddhti thi vrukhonu savardhan (Gujarati), *Krushigovidhya*, 66(07): 33-34.

34. Prajapati, V. M., Tandel, M. B., Pathak, J. and Patel D. P. (2016). Vartaman Samay Mate labkarik Krishi vaniki, *Dakshin gujaratma krishi sanalga Naveen technology aane vyvsayo* 4: 62-65.
35. Prajapati, V.M., Sondarva, R.L., Behera, L.K., Patel, S.M. and Viyol, S. (2015). Khedut upyogi brukhsya African Mahogoni. *Krushijivan*, 48(3):23- 24.
36. Sharma, Ankur and Manmohan, J.R. (2009). Giloe (*Tinospora cordifolia*)- A Potential Medi-climber for Rapid Mass Cultivation and Sustainable Raw material to Ayurvedic Pharmacies. *MFP NEWS*, Dehradun, XIX (2):11-13.
37. Sharma, Ankur and Manmohan, J.R. Dobriyal. (2009). *Ex-situ* Conservation of Giloe (*Tinospora cordifolia*)- A Potential Tropical Medi-climber in India. *Non Wood News*, Vol. XIX: 49.
38. V.M. Prajapati, R.L. Sondarva, L.K. Behera, S.M. Patel and S. B. Viyol (2016). Mahogoni Bruskhyanu Baigynanik Bebesthapan. *Krushijivan*, 11(572): 5-6. (Gujarati)
39. Vashi, B. G., Jadeja, D. B. and Patel, N. K. (2011). Endagered Species; *Dahivi (Cordia macleodii)*. *Shrishti*, 47: 21-22.
40. Vashi, B. G., Jadeja, D. B. and Patel, N. K. (2011). Endagered Species; *Medhasingi (Dolichandron falcata)*. *Shrishti*, 47: 28.
41. Vashi, B. G., Jadeja, D. B. and Tandel, M. B. (2011). Endagered Species; *Kodaro (Firmiana colorata)*. *Shrishti*, 47: 22-23.
42. Vashi, B. G., Jadeja, D. B. and Tandel, M. B. (2011). Endangered Species; *Bhilamo (Semecarpous anacardium)*. *Shrishti*, 47: 19-20.
43. Vashi, B. G., Jadeja, D. B., Tandel, M. B. and Parmar, M. R (2011). Endagered Species; Semul (*Bombax ceiba*). *Shrishti*, 47: 25-27.
44. Vashi, B. G., Jadeja, D. B., Tandel, M. B. and Parmar, M. R. (2011). Endagered Species; *Sardol (Sterculia villosa)*. *Shrishti*, 47: 24-25.
45. Mehta, A.A., Behera, L.K. and Sinha, S.K. (2016). Apiculture practices through capture and transfer of wild colonies of Indian honey bees (*Apis cerana*) into wooden hives. *MFP News*, XXVI (1):8-11.
46. Hardik, G., Chavda, J.R., Parekh, V. and Desai, B.S. (2017). *Agrobacterium tumefaciens* Mechanism of DNA Transfer into Plant Cell. *Readers Shelf*, 13(12): 6-7.
47. Hardik, G., Chavda, J.R., Parekh, V. and Desai, B.S. (2018) RNai - A Modern Biotechnological Tool Mechanism and Application. *Readers Shelf*, 14(05): 56-57.
48. Malek, S.S., Dobriyal, M.J.R., Gunaga, R.P. and Desai, B.S. 2018. Effect of cutting types and IBA treatment on propagation of aromatic herb Ajmapaan (*Coleus aromaticus* Benth). *MFP News*, 28(3):11-15.
49. Bardhan K. 2018. Potassium may be a key in making rice plants more tolerant to drought. *Rice Today*. 1-3 pages. <http://ricetoday.irri.org/potassium-may-be-a-key-in-making-rice-plants-more-tolerant-to-droughts>.
50. Bardhan, K., Patel, D.S. and Patel, D.P. (2018). Revealing the effects of potassium on rice roots under moisture stress. *Better Crops*, 102(4):28-31.
51. Dhaka, R.K., Jha, S.K. and Chaudhari, C. (2019). Good farming practices of teak in India. *Readers Shelf*, 15(7):10-11.

52. Dholariya, C.A., Sukhadiya, M., Behera, L.K., Desai, B.S., Huse, S.A. and Mehta, A.A. 2019. Utilization and silviculture of a lesser known tree species: *Sterculia villosa* Roxb. *Van Sangyan*, 6(4):16-18.
53. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Mehta, A. A., Sinha, S.K. and Patel, S.M. (2019). Biography of lesser known and medicinal tree species marking nut (*Semecarpus anacardium* L.), *MFP News*, 29(1):9-13.
54. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Mehta, A.A., Huse, S.A. and Gunaga, R.P. (2019). Indian kino tree (*Pterocarpus marsupium* Roxb.): Biography of excellent timber tree species. *MFP News*, XXIX (1):4-8.
55. Dholariya, C.A., Sukhadiya, M., Behera, L.K., Mehta, A.A., Nayak, D. and Patel, S.M. (2019). *Dalbergia lanceolaria* L.f.: Prospect of a lesser known tree species in India. *Van Sangyan* 6(4):9-11.
56. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Mehta, A.A., Shrivastava, P.K. and Patel, S.M. (2019). Prospective of lesser known tree species: Malabar orchid (*Bauhinia malabarica* Roxb.). *Van Sangyan*, 6(4):12-14.
57. Sukhadiya M., Dholariya C.A., Behera L.K., Mehta A.A., Patel S.M. and Dobriyal M.J. (2019). Overview of lesser known and medicinal tree Tanachh: *Ougeiniaoojeinensis*. *Van Sangyan*, 6(3): 9-13.
58. Behera, L.K., Gunaga, R.P., Sinha, S.K., Sukhadiya M., Dholariya, C.A. and Prajapati, V.M. (2019). *Stereospermumchelonoide*s: Prospective of a lesser known and medicinal tree. *Van Sangyam*, 6(6):1-4.
59. Dholariya, C.A., Sukhadiya, M., Behera, L.K., Mehta, A.A., Patel, S.M. and Bhusara, J. (2019). *Mallotusphilippinensis*: Overall outlook of a multipurpose medicinal tree. *Van Sangyan*, 6(7):7-10.
60. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Nayak, D. Mehta, A.A. and Sondarva, R.L. (2019). *Miliusa tomentosa*: A lesser known tree species. *VanSangyan*, 6(7):23-24.
61. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Mehta, A.A., Patel, D.P. and Gunaga, R.P. (2019). Commercial utilization and propagation of Gum Karaya (*Sterculia urens* Roxb.) *MFP News*, XXIX(3):5-8.
62. Behera, L.K., Gunaga, R.P., Thakur, N.S., Mehta, A.A., Sukhadiya, M. and Dholariya, C.A. (2019). *Oroxylum indicum*: Detail on a medicinally important and rare tree species of India. *MFP News*, XXIX(3):9-12.
63. Sukhadiya, M., Dholariya, C.A., Behera, L.K., Mehta, A.A., Shrivastava, P.K. and Desai, B.S. (2019). Silviculture and utilization of a lesser known tree species: *Albizia procera*. *MFP News*, XXIX(2):8-13.
64. Behera, L.K., Mehta, A.A., Sukhadiya, M., Dholariya, C.A., Patel, D.P. and Desai, B.S. (2019). Commercial utilization and nursery practices of Anjan (*Hardwickiabinata* Roxb.): A MPTs. *MFP News*, XXIX(2):4-6.
65. Hegde, H.T., Gunaga, R.P. and Thakur, N.S. (2019). Current trends and future prospects for utilization of Mahua resources. *Van Sangyan*, 6(2):7-11.

Sr. No.	Popular Articles in Gujarati
66.	One of the Important Vegetable vine crop - Bottle gourd S. N. Sarvaiya, Y. N. Tandel, M. B. Tandel, S. Y. Patel and Ku. Bhumica Tandel Krishi Jivan 45 (10) May 2013, Page No. 7-11
67.	Scientific management of Sandalwood [Santalum album L.] V.M. Prajapati, M. B. Tandel and Jayesh Pathak Ek Praysh- Krushi Vikas Mashik, (7) April 2013, Page No. 28-29
68.	Ailanthus (<i>Ailanthus excelsa</i> Roxb.) M. B. Tandel, B. S. Desai and V.M. Prajapati Krishi Jivan, June 2016, Page No. 28
69.	Scientific management of Bamboo Jayesh Pathak, V.M. Prajapati, M. B. Tandel, A. A. Kazi and S. K. Sinha University Prakashan No. 25/2015-16, Page No. 1-22
70.	Casuarina (<i>Casuarina equisetifolia</i> L.) M. B. Tandel, V.M. Prajapati and B. S. Desai Krishi Jivan, June 2016, Page No. 32
71.	An important tree for farmer - Sandalwood V.M. Prajapati, M. B. Tandel, Manmohan J. R., R. P. Gunaga and Jayesh Pathak Krushi Jivan, June 2016, Page No. 11-12
72.	Khair (<i>Acacia catechu</i> (L.) Willd.) M. B. Tandel, M. R. Parmar and V.M. Prajapati Krishi Jivan, June 2016, Page No. 34
73.	Ailanthus (<i>Ailanthus excelsa</i> Roxb.) M. B. Tandel, B. S. Desai and V.M. Prajapati Krishi Jivan, June 2016, Page No. 28
74.	Neem (<i>Azadirachta indica</i> A. Juss.) V.M. Prajapati, M. B. Tandel and B.S. Desai Krishi Jivan, June 2016, Page No. 33

Sr. No.	Popular Articles in Gujarati
75.	Plant trees on bunds to get additional income V.M. Prajapati, M. B. Tandel, M. K. Desai, D. Nayak and M. R. Parmar Krishi Jivan, June 2016, Page No. 18
76.	Scientific management of Simarouba glauca DC. V.M. Prajapati, M. B. Tandel, M. R. Parmar and S. A. Huse Krishi Jivan, June 2016, Page No. 24-26
77.	Sisham (<i>Dalbergia latifolia</i> Roxb.) V.M. Prajapati, M. B. Tandel and M. R. Parmar Krishi Jivan, June 2016, Page No. 29
78.	Success story of farming of trees V.M. Prajapati and M. B. Tandel Krishi Jivan, June 2016, Page No. 27
79.	Teak: A best timber wood V.M. Prajapati, M. B. Tandel and M. R. Parmar Krishi Jivan, June 2016, Page No. 9-10
80.	Timru (<i>Diospyros melanoxylon</i> Roxb.) V.M. Prajapati, M. B. Tandel and M. R. Parmar Krishi Jivan, June 2016, Page No. 30
81.	Scientific management of Simarouba glauca DC. V.M. Prajapati, M. B. Tandel, M. R. Parmar and S. A. Huse Krishi Jivan, June 2016, Page No. 24-26
82.	Sisham (<i>Dalbergia latifolia</i> Roxb.) V.M. Prajapati, M. B. Tandel and M. R. Parmar Krishi Jivan, June 2016, Page No. 29

G. M.Sc./ Ph.D. THESIS

DEPARTMENT OF SILVICULTURE & AGROFORESTRY

M. Sc. FORESTRY (Agroforestry & Ecology / Agroforestry / Plantation Technology/SAF)

SN	Name of Student	Research Title	Major Advisor	Year
1.	Mr. Ashish D. Patel 04-3287-92	Allelopathic effects of few multipurpose tree and arable crops on seed germination and seedling growth	Dr. R. R. Shah	1995
2.	Mr. Vitthal Ramakrishna Karoshi 04-3371-93	Allelopathic effect of agro-forestry tree species on arable crops	Dr. N. S. Patil	1995
3.	Mr. Hasmukhbhai Prabhudas Panchasara 04-3286-92	Effect on auxins on rooting of cuttings in <i>Dalbergia sissoo</i> Roxb.	Dr. B. G. Vashi	1995
4.	Mr. Bharatkumar Ravjibhai Vekariya 04-3290-92	Propagation of <i>Ficus glomerata</i> Roxb. By stem cutting with aid of auxins	Dr. B. G. Vashi	1995
5.	Mr. Kshitish Babarav Mehta 04-3285-92	Intercropping of agricultural crops with forest tree species.	Dr. M. U. Kukadia	1995
6.	Mr. Harshad Lalbhai Patel 04-3288-92	Effect of forest tree species on the production of agricultural crop.	Dr. N. S. Patil	1995
7.	Mr. Vijaykumar Somalal Patel 04-3289-92	Effect of pre -sowing treatment of seed on germination and subsequent growth of seedlings of some forest tree species.	Dr. M. U. Kukadia	1995
8.	Mr. Sanjay Vashista 04-3369-94	Effect of various potting mixtures on the germination and growth parameters of few agro-forestry tree species in the nursery stages	Dr. M. U. Kukadia	1996
9.	Mr. Kirtikumar B. Patel 04-3367-94	Growth and productivity of agricultural crop in Agri-silvicultural system	Dr. R. R. Shah	1996

SN	Name of Student	Research Title	Major Advisor	Year
10 .	Mr. Ashutosh Sharma 04-3365-94	Effect of different salinity level on germination and initial growth parameter of different agro-forestry tree species in nursery stage	Dr. M. U. Kukadia	1996
11 .	Mr. Navin Kumar Patle 04-3366-94	Growth and production of drilled paddy (<i>Oryza sativa</i> L). under <i>Terminalia arjuna</i> Bedd. and <i>Mitragyna parvifolia</i> Korth. in an Agro-silvicultural system	Dr. N. S. Patil	1996
12 .	Mr. Saboliya Khimjibhai M. 04-3780-95	The intercropping of flowers crops (<i>Gaillardia pulchella</i> Foug. and <i>Jagates patula</i> L.) with forest tree species (<i>Terminalia arjuna</i> Bedd. and <i>Mitragyna parvifolia</i> Korth.)	Dr. N. S. Patil	1998
13 .	Mr. Dineshkumar D. Dasa 04-3776-95	Effect of different tree cover on soil characteristics	Dr. N. S. Patil	1998
14 .	Mr. Ghanshyam L. Gaudani 04-3777-95	Effect of plant growth regulation on growth & development of <i>Cassia fistula</i> seedling	Dr. B. G. Vashi	1998
15 .	Mr. Raghji H. Patel 04-3779-95	Effect of different size of polythene bags and fertilizers on the growth of some forestry tree species in the nursery stage	Dr. M. U. Kukadia	1998
16 .	Ms. Jilpa Hiren Khatri 04-3778-95	Micropropagation of Teak (<i>Tectona grandis</i> Linn. F)	Dr. M. U. Kukadia	1998
17 .	Ms. Urvashi I. Prajapati 04-4026-97	Micropropagation of rosewood (<i>Dalbergia latifolia</i> Roxb.)	Dr. R. R. Shah	2000
18 .	Mr. Prashant V. Patel 04-3851-96	Studies of soil parameters under different forest cover of Dangas district	Dr. M. U. Kukadia	2000
19 .	Mr. Ajay Sharma 04-4237-2000	Micro-propagation of <i>Paulownia tomentosa</i> Steud.	Dr. M. U. Kukadia	2001
20 .	Mr. Vishal Mahajan 04-4241-2000	Effect of different spacements and pruning intensities of <i>Casuarina equisetifolia</i> L. on growth and yield of <i>Trigonella foenum-graecum</i> grown as intercrop	Dr. D. B. Jadeja	2001

SN	Name of Student	Research Title	Major Advisor	Year
21.	Mr. Sachin B. Shinde 04-4028-97	Effect of forest tree species on the growth and production of forage crops.	Dr. N. S. Patil	2001
22.	Mr. Arvind D. Chavda 04-4238-2000	Feasibility of growing aromatic grasses in agro-forestry system	Dr. R. R. Shah	2002
23.	Mr. Bharatkumar S. Gunjal 04-4239-2000	Influence of bio-fertilizer on growth biomass and nutrient uptake in <i>Jatropha curcas</i> L.	Dr. B. G. Vashi	2002
24.	Mr. Goraniya Jayesh. S 04-4240-2000	Influence of nitrogen fixing trees on the status of soil micronutrient	Dr. M. U. Kukadia	2002
25.	Mr. Parekh Dhavalkumar J. 04-4833-2001	Feasibility of growing different pulse crop with forest tree species under Agroforestry system	Dr. N. S. Patil	2003
26.	Mr. Yogendrasing J. Rana 04-4389-2000	Micro-propagation of <i>Sterculia urens</i> Roxb.	Dr. M. U. Kukadia	2003
27.	Mr. Tandel Minalkumar B. 04-4834-2001	Influence of tree cover and litter fall on physico-chemical properties of soil and availability of nutrients.	Dr. M. U. Kukadia	2003
28.	Mr. Patel Dhanrajbhai R. 04-5255-2002	The effect of salinity on the growth of <i>Simmondsia chinensis</i> L. raised by seed and cutting at nursery stage.	Dr. M. U. Kukadia	2004
29.	Mr. Limbasiya Rakeshkumar T. 04-5255-2002	Effect of salinity on the growth of <i>Jatropha curcas</i> L. raised by seeds and cutting at an early stage	Dr. D. B. Jadeja	2004
30.	Mr. Rahul M. Patel 04-5587-2003	The effect of <i>Casuarina equisetifolia</i> L. raised at different spacements on physico-chemical properties of soil in South Gujarat condition.	Dr. D. B. Jadeja	2005
31.	Mr. Kathota J.C. 04-0006-2004	Performance of <i>Dendrocalamus strictus</i> Nees. and <i>Bambusa arundinacea</i> (Retz) Willd. for pickle making	Dr. B. G. Vashi	2006

SN	Name of Student	Research Title	Major Advisor	Year
32.	Mr. Kumar Gautam 04-0007-2004	Germination behavior of White teak, Mahuva, Indian Rosewood and Baheda as influenced by size of seeds	Dr. M. U. Kukadia	2006
33.	Mr. Desai Maheshkumar K. 04-0003-2004	Effect of different tree species on soil amelioration	Dr. B. G. Vashi	2006
34.	Mr. Sandip M. Patel 04-0008-2004	Influence of bio-fertilizer on growth, biomass and nutrient uptake in <i>Jatropha curcas</i> L.	Dr. N. S. Patil	2006
35.	Mr. Patel Vimalkumar S. 04-5588-2003	Influence of various potting mixture on germination of <i>Terminalia bellerica</i>	Dr. N. S. Patil	2006
36.	Mr. Prajapati Vijaykumar M 04-0009-2004	Assess the performance of <i>Curcuma longa</i> L. grown as an intercrop under tree species	Dr. N. S. Patil	2006
37.	Mr. Dileshwar Nayak 04-0004-2004	Evaluation of different provenances of <i>Jatropha curcas</i> L. in South Gujarat	Dr. D. B. Jadeja	2006
38.	Mr. Ahir Sanjaykumar M. 04-0001-2004	Performance of <i>Colocasia esculanta</i> (L) Schott. grown as an intercrop under tree species	Dr. B. G. Vashi	2006
39.	Mr. Prajapati Ketankumar N. 04-0147-2005	Effect of fertilizer and spacing on growth of <i>Jatropha curcas</i> L.	Dr. N. S. Patil	2007
40.	Mr. Laxmikanta Behera 04-0146-2005	Micro-propagation and development of salt tolerant cell line in <i>Jatropha curcas</i> L.	Dr. D. B. Jadeja	2007
41.	Mr. Ambuj Ranjan 04-0145-2005	Effect of various seed weight classes and depth of planting on germination behavior, growth and biomass of <i>Terminalia bellerica</i> L., <i>T. arjuna</i> and <i>Madhuca indica</i>	Dr. M. U. Kukadia	2007
42.	Mr. Mehta Abhishek A. 04-0248-2006	Efficacy of different methods for the extraction of annatto colour from the seed of <i>Bixa orellana</i>	Dr. B. G. Vashi	2008

SN	Name of Student	Research Title	Major Advisor	Year
43.	Mr. Parmar Mukeshbhai R. 04-0245-2006	Performance of <i>Jatropha curcas</i> L. under different pruning intensities and fertilizer under irrigated condition in South Gujarat	Dr. D. B. Jadeja	2008
44.	Mr. Abduladil A. Kazi 04-0247-2006	Soil attributes in the protected area of Vansda National Park Dangs under different vegetation and topography	Dr. M. U. Kukadia	2008
45.	Mr. Jayesh Pathak 04-0246-2006	Micropropagation of bamboo (<i>Dendrocalamus strictus</i>)	Dr. R. R. Shah	2008
46.	Mr. Zahoor Ahmad Sofi 04-0359-2007	Effect of plant growth regulators on rooting and sprouting behaviour of cutting of <i>Derris indica</i> L. Bennet.	Dr. M. U. Kukadia	2009
47.	Mr. Rajveer Singh Chauhan	<i>In-vitro</i> regeneration of <i>Acacia mangium</i> Willd.	Dr. S. K. Jha	2009
48.	Ms. Shedage Swati Mahipati 04-0358-2007	Effect of storage on germination and viability of <i>Jatropha curcas</i> L.	Dr. D. B. Jadeja	2009
49.	Mr. Rajmani Kumar 04-0249-2006	Evaluation of inter cropping of maize grown under Horti-silvicultural system of Agroforestry in South Gujarat condition	Dr. N. S. Patil	2009
50.	Ms. Vishnu Kanwar Solanki 04-0433-2008	Effect of different plant growth regulators on vegetative propagation of khair (<i>Acacia catechu</i> Willd.)	Dr. M. U. Kukadia	2010
51	Mr. Sahailendra Bhalawe 04-0431-2008	Studies on nutrient release pattern in decomposition litter of multipurpose trees	Dr. M. U. Kukadia	2010
52.	Ms. Sangode Ekta Sharad 04-0430-2008	Development of insect pest management module for eucalyptus gall insect (<i>Laptocybe invasa</i> Fisher and Lasalle; Hymenptera: Eulophidae) in nursery and young plantation	Dr. D. B. Jadeja	2011
53.	Mr. Patel Tejas Rameshbhai 04-0429-2008	Surveillance of gall insect (<i>Laptocybe invasa</i> Fisher and Lasalle) in eucalyptus in different agroclimatic regions of south Gujarat and Vadodara	Dr. D. B. Jadeja	2010

SN	Name of Student	Research Title	Major Advisor	Year
54.	Mr. Gaikwad Paresh Ganeshbhai - 04-0428-2008	Effect of foliar application of GA ₃ , Ethrel and copper sulphate on flowering behavior and yield of <i>Jatropha curcus</i> L.	Dr. D. B. Jadeja	2011
55.	Ms. Sreedevi Madhusudanan 04-0432-2008	Tree allometry and Carbon Sequestration potential in the above ground biomass of selected multipurpose tree species in South Gujarat	Dr. N. S. Patil	2011
56.	Mr. Mukesh Parihar 04-550-2009	Survey and surveillance of major pests of <i>Terminalia arjuna</i> (Roxb.) Wight & Arnold (Arjun) and their management	Dr. D. B. Jadeja	2011
57.	Mr. Rathwa Vikram Singh J. 04-0551-2009	Metabolic change in relation to heavy metal stress in Karanja.	Dr. S. K. Jha	2011
58.	Mr. Sharvan Kumar 04-0553-2009	Growth and production of green-gram under <i>Terminalia arjuna</i> and <i>Mitragyna parviflora</i> in an agri-silvicultural system	Dr. N. S. Patil	2011
59.	Mr. Makwana Hareshkumar Pitambarbhai 04-0351-2007	Effect of some plant growth regulating substances on the rooting of eucalyptus cutting	Dr. M. U. Kukadia	2011
60.	Mr. Shriram Nagar 04-0554-2009	Identification of suitable intercrop under perennial trees in south Gujarat	Dr. M. U. Kukadia	2011
61.	Mr. Sanjeev Ranjan 04-0522-2009	Morphological, Biochemical and molecular variations among different clones of Casuarina	Dr. D. B. Jadeja	2011
62.	Mr. Ramraj Meena 04-897-2010	Efficacy of some fodder crops grown under kalam and arjun based silvopastoral system in south Gujarat	Dr. D. B. Jadeja	2012
63.	Mr. Patel Ruchitkumar Ashwinbhai 04-0893-2010	Studies on phenological events of some agroforestry tree species.	Dr. B.S. Desai	2012

SN	Name of Student	Research Title	Major Advisor	Year
64.	Mr. Suvera Anilkumar Hujabhai 04-0904-2010	Performance of <i>Ocimum</i> spp. under silvi-medicinal agroforestry systems in south Gujarat	Dr. N. S. Thakur	2012
65.	Mr. Bhagirath Singh Meena 04-887-2010	Scarification and growth regulator treatments of Teak (<i>Tectona grandis</i> Linn. f.) drupes in relation to germination and seedling vigour	Dr. D. B. Jadeja	2012
66.	Mr. Choudhary Sandipbhai Surajbhai - 04-0889-2010	Influence of various bio fertilizers and organic manures on growth and development of Sisoo at nursery stage	Dr. M. B. Tandel	2012
67.	Mr. Vikas Kumar 04-0905-2010	Ecology of some rare and endangered plant spp. of the Dang forest	Dr. B.S. Desai	2012
68.	Mr. Sushil Kumar 04-0903-2010	Influence of de-oiled seedcakes as fertilizers on growth and biomass production of rosewood seedlings at nursery stage	Dr. N. S. Patil	2012
69.	Mr. Sachin Kumar Singh 04-0899-2010	Bio-chemical investigation of eucalyptus for gall tolerance	Dr. D. B. Jadeja	2012
70. #	Mr. Patel Satishkumar Sureshbhai 04-0894-2010	Morphological variations and carbon sequestration potential of various clones of eucalyptus	Dr. N. S. Patil	2012
71.	Mr. Mesariya Bhaveshkumar Devendrabhai - 04-1051-2011	Efficiency of rooting hormones on propagation of different bamboo spp. (<i>Dendrocalamus strictus</i> and <i>Bambusa vulgaris</i>)	Dr. M. B. Tandel	2013
72.	Mr. Chaudhary Dhavalkumar V. 04-0888-2010	Effect of various auxins on rooting of cuttings in rosewood	Dr. M. B. Tandel	2013
73.	Mr. Panchal Jeegarkumar S. 04-1052-2011	Productivity and carbon sequestration under prevalent agroforestry system in Navsari district	Dr. N. S. Thakur	2013

SN	Name of Student	Research Title	Major Advisor	Year
74.	Rabari Baldevbhai Muljibhai 04-0895-2010	Carbon sequestration by Eucalyptus plantation	Dr. D. B. Jadeja	2013
75.	Mr. Patel Navneet Kumar Maganlal 04-892-2010	Carbon sequestration potential of some important trees in south Gujarat	Dr. M. B. Tandel	2013
76.	Mr. Prajapati Dharamshibhai Hirabahi - 04-1056-2011	Effect of the tree species leaf leachate on germination and seedling growth of some vegetable crops	Dr. M. B. Tandel	2013
77.	Mr. Bhasotiya Harshal Chhaganbhai 04-1311-2012	Influence of seed source variation and potting mixtures on germination of <i>Ailanthus excelsa</i>	Dr. M. B. Tandel	2014
78.	Mr. Bhusara Jignesh B. 04-1312-2012	Productivity and carbon sequestration under prevalent Agroforestry systems in the Valsad district	Dr. N. S. Thakur	2014
79.	Mr. Sondarva Ramesh L. 04-1317-2012	Influence of various growing media on growth and vigour of <i>khaya senegalensis</i> (African mahogany) in nursery	Dr. V.M. Prajapati	2014
80.	Mr. Mukesh Kumar 04-1314-2012	Screening of Cymbopogon spp. and Ocimum spp. for development of teak based sivi medicinal systems in south Gujarat	Dr. N. S. Thakur	2014
81.	Mr. Modi Jay Sureshkumar 203031004	Molecular and morphological variations in Teak (<i>Tectona grandis</i>) clones	Dr. M.B. Tandel	2015
82.	Mr. Dinesh Kumar 2030313003	Studies on effect of leaf leachate of <i>Melia composita</i> and <i>Melia azaderach</i> on germination, growth and yield of some pulse crops	Dr. N. S. Thakur	2015
83.	Mr. Parmar Avinash Gordhanbhai 2030313005	Studies on effect of leaf leachate of <i>Melia composita</i> and <i>Melia azaderach</i> on germination, growth and yield of some tuber crops	Dr. N. S. Thakur	2015
84.	Mr. Vasava Miteshkumar Sureshbhai 2030313006	Diagnosis and evaluation on <i>fusarial</i> wilt of Garmalo (<i>Cassia fistula</i>) in nursery condition	Dr. V.M. Prajapati	2015

SN	Name of Student	Research Title	Major Advisor	Year
85.	Mr. Ahir Balvantkumar Ranabhai - 2030313001	Studies on below ground interaction and carbon sequestration in <i>Acacia mangium</i> Willd plantation	Dr. Manmohan J. Dobriyal	2015
86.	Mr. Pritam Choudhury 2030314012	Effect of host plant and biofertilizer on seedling growth performance in <i>Santalum album</i> Linn.	Dr. Manmohan J. Dobriyal	2016
87.	Ms Jharna Chetri 2030314007	Performance of <i>Coleus aromaticus</i> (Ajma paan) <i>Centella asiatica</i> (Brahmi) and <i>Psoralea corylifoila</i> (Babchi) growth as an intercrop under different spacing	Dr. V.M. Prajapati	2016
88.	Mr. Gamit Vikaskumar Premjibhai - 2030314006	Soil atmosphere exchange of N ₂ O and CH ₄ in forest floor, grassland, rice field and open field	Dr. V.M. Prajapati	2016
89.	Mr. Patel Sagarkumar Vinubhai - 2030314011	Study of productive potential of turmeric based Agri-silviculture System in South Gujarat condition.	Dr. Dileswar Nayak	2016
90.	Mr. Amlani Moulik Harishbhai 2030314001	Assessment of growth variation and carbon sequestration potential of different species of Bamboo	Dr. M.B. Tandel	2016
91.	Mr. Jilariya Devanand Jeelubhai - 2030314008	Performance of <i>Aloe vera</i> Linn. Under <i>Melia composita</i> Willd Plantations.	Dr. N. S. Thakur	2016
92.	Mr. Patel Jitendrakumar Nathubhai - 2030314009	Allelopathic effects of <i>Terminalia arjuna</i> (Roxb.) Wight & Aon. on <i>Oryza sativa</i> L. Var. ONR-2	Dr. Dileswar Nayak	2016
93.	Debiprasad Rout 2030315004	Study of seed mycoflora association with <i>Dalbergia sissoo</i> Roxb. and <i>Dalbergia latifolia</i> Roxb. in natural and storage condition	Dr. V. M. Prajapati	2017
94.	Gamit Priyanka Babubhai 2030315005	Status of leaf spot diseases of <i>Dalbergia latifolia</i> and <i>Dalbergia sissoo</i> in forest nurseries of Navsari district.	Dr. V. M. Prajapati	2017

SN	Name of Student	Research Title	Major Advisor	Year
95.	Malek Soufil Sharifmiya 2030315006	Propagation and cultivation of <i>Coleus aromaticus</i> Benth. and <i>Coleus forskohlii</i> (Pior) Briq. under Sapota- Jatropha based agroforestry system.	Dr. Manmohan J. Dobriyal	2017
96.	Mevada Ramabhai Jepabhai 2030315007	Effect of <i>Terminalia arjuna</i> (Roxb.) Wight. & Arn. hosted tassar silkworm excreta and leaf litter on growth and yield of <i>Oryza sativa</i> . L.	Dr. D. Nayak	2017
97.	Patel Harpal Shukkarbhai 2030315008	Effect of different pre-sowing treatments and growing conditions on germination of Red senders (<i>Pterocarpus santalinus</i> L. f.)	Dr. M.B. Tandel	2017
98.	Sumit Mohanty 2030315014	Evaluation of <i>Cymbopogon flexuosus</i> (Nees Ex.Steud) Co. Watson and <i>Cymbopogon martini</i> (Roxb.) Wats. for development of <i>Melia composita</i> Willd. based silvi medicinal systems.	Dr. N.S. Thakur	2017
99.	Sukhadiya Madhuri Laljibhai 2030316006	Evaluation of nutritive value and drupe pulp of <i>Melia dubia</i> Cav. and its feeding effect on Shruti goat (<i>Capres aegagrus hircus</i> L.) kids.	Dr. N.S. Thakur	2018
100.	Rashmiparva Maharana 2030316005	Enhancement of Seed Germination and Seedling Vigour in <i>Gmelina arborea</i> Roxb.	Dr. Manmohan J Dobriyal	2018
101.	Dholariya Chintan Ashwinbhai 2030316001	Impact of different salinity on growth and physiological performance in <i>Leucaena leucocephala</i> Lam.	Dr. L. K. Behera	2018
102.	Odedera Versha Hamirbhai 2030316003	Assessment of different agroforestry land use system using remote sensing and GIS of Navsari district	Dr. Dleswar Nayak	2018
103.	Mr. Govind 2030317003	Effect of integrated nutrient management on seedling growth and biomass of Sandal wood (<i>Santalum album</i> L.)	Dr. V.M. Prajapati	2019

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104.	Ms. Chaudhary Vrushali Vijay 2030317002	Intercropping of Japanese mint (<i>Mentha arvensis</i> L.) under ashoka (<i>Saraca asoca</i> L.) in different spatial arrangement	Dr. Manmohan Dobriyal	2019
105.	Mr. Varun Saini 2030317005	Assessment of seedling vigour using organic manure and bio-fertilizer in <i>Swietenia macrophylla</i> King.	Dr. L.K. Behera	2019
106.	Mr. Jayeshkumar Baldaniya 2030317001	Performance of different varieties of wheat under <i>Ailanthus excelsa</i> (Maharukh) based Agroforestry system	Dr. D. Nayak	2019
107.	Mr. Bhaveshkumar Purohit 2030318007	Influence of <i>Melia dubia</i> Cav. Drupe pulp leachates on germination , growth, biomass and yield of <i>Capsicum annuum</i> L. and <i>Vigna radiata</i> L.	Dr. N.S. Thakur	2020
108.	Mr. Viragkumar Chaudhari 2030318001	Effect of Biopriming on seed germination and seedling vigour of waras (<i>Heterophragma quasriloculare</i> Roxb.)	V. M. Prajapati	2020
109.	Mr. Yogeshkumar D. Patel 2030317004	Effect of growing media and integrated nutrient management on seed germination and seedling growth of red sanders (<i>Pterocarpus santalinus</i> Linn. f.)	Dr. M.B. Tandel	2020
110.	Ms. Mehfuza M. Patel 2030318003	Influence of various levels of growth hormones on rooting of cutting and biofertilizer on growth of rooted cuttings of Casuarina (<i>Casuarina equisetifolia</i> L.)	Dr. M.B. Tandel	2020
111.	Ms. Chauhan Poonamkumari Chandrajit - 2030318002	Influence of various different biofertiliser on seedling vigour in kadam (<i>Anthocephalus cadamba</i> Roxb.)	Dr. L.K. Behera	2020
112.	Ms. Rudani Kejal V. 2030319008	Performance of spacings and varieties of drilled Rice (<i>Oryza sativa</i> L.) under Arduso (<i>Ailanthus excelsa</i> Roxb.) based agroforestry system	Dr. S. M. Patel	2021

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113.	Mr. Manojkumar S. 2030319003	Stands structure, germination and seedling vigour in <i>Dalbergia lanceolaria</i> L. f.	Dr. L. K. Behera	2021
114.	Mr. Prajapati Jigneshkumar Pravin bhai - 2030318006	Evaluation of germination media and organic manures for production of quality seedlings <i>Soyamida fabrifuga</i> Roxb.	Dr. L.K. Beherea	2021
115.	Ramani Darshana Jayantibhai - 2030320006	Enhancement of seedling growth and vigour using biofertilisers in Anjan (<i>Hardwickia binata</i> Roxb.)	Dr. S.M. Patel	2022
116.	Patel Twinkal Sanjaybhai 2030320005	Effect of salinity levels of irrigation water on growth of <i>Bambusa</i> Species in nursery	Dr. Jayesh Pathak	2022
117.	Tarh Aya 2030320010	Influence of different Biofertilizers on seedling Growth and Vigour of Indian Redwood (<i>Soymida febrifuga</i> Roxb.)	Dr. L. K. Behera	2022
118.	Mr. Subhaprada Behera 2030320008	Performance of different varieties of Brinjal (<i>Solanum melongena</i> L.) under Gamhar (<i>Gmelina arborea</i> Roxb.) based Agroforestry System	Dr. M. B. Tandel	2022
119.	Ms. Rathod Tanvikumari Nileshbhai - 2030320007	Vegetative propagation of Indian tulip tree (<i>Thespesia populnea</i> L.) Through Cuttings	Dr. M. K. Desai	2022
120.	Chauhan Jahanvi Dilipbhai 2030321003	Effect of leaf leachate and leaf litter of different tree species on germination, early growth and development of Paddy (<i>Oryza sativa</i> L.)	Dr. M. K. Desai	2023
119.	Bharadva Mansi Umeshbhai 2030321001	Effect of hormones and cutting types on rooting and establishment of Gliricidia (<i>Gliricidia sepium</i> Jecq.)	Dr. V. M. Prajapati	2023
120.	Thumbar Payalben Dineshbhai - 2030321005	Influence of pre-sowing treatments on seed germination and seedling vigour in Kamala (<i>Mallotus phillippinensis</i> (Lam.) Mull. Arg.)	Dr. L. K. Behera	2023

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121.	Vaghasiya Sanjana Jayasukhbhai - 2030321006	Status of Agroforestry Systems in South Saurashtra	Dr. M. B. Tandel	2023
122.	Agravat Shivaniben 2030322001	Development of Macro-proliferation in <i>Bamusa</i> spp. using rooting hormone	Dr. J. G. Pathak	2024
123.	Patel Bhargaviben Maheshbhai - 2030322003	Assesment of Seedling growth and vigour using organic manures in Indian trumpet flower [<i>Oroxylum indicum</i> (L.) Kurz]	Dr. M. R. Parmar	2024
124.	Prajapati Mahesh Rameshbhai - 2030322005	Evaluation of <i>Sterculia foetida</i> L. seed, oil and cake nutritive properties among different landscapes	Dr. N. S. Thakur	2024
125.	Doly Maibam 2030322009	Effect of ethylene and rooting hormone on rooting of branch cutting of <i>Bambusa vulgaris</i> Schrad ex. J. C. Wendl	Dr. J. G. Pathak	2024
126.	Geetha A N 2030322010	Effect of pre-sowing seed treatments and growing media on germination and seedling growth of Chironji (<i>Buchanania cochinchinensis</i> (Lour.) M. R. Almedia)	Dr. M. K. Desai	2024
127.	Thorat Akash Dilip 2030322013	Evaluation of germination media and biofertilizers for production of quality seedlings of Kamala (<i>Mallotus phillippinensis</i> (Lam.) Mull. Arg.)	Dr. L. K. Behera	2024

Ph. D. FORESTRY (AGROFORESTRY & ECOLOGY / AGROFORESTRY/ SAF)

SN	Name of Student	Research Title	Major Advisor	Year
1.	Mr. Minal B Tandel 04-0251-2006	Molecular and morphological variation among different accession of <i>Jatropha curcas</i> L.	Dr. M. U. Kukadia	2009
2.	Mr. Parekh Dhavalkumar Jayantilal 04-0354-2007	Effect of different time and intensities of pruning on growth and yield of <i>Jatropha curcas</i> L.	Dr. D. B. Jadeja	2011
3.	Mr. Sanjay M. Ahir 04-0348-2007	Feasibility of inter cropping of different pulse crop under <i>Jatropha curcus</i> L.	Dr. N. S. Patil	2010
4.	Mr. Prajapati Vijay Manilal 04-0356-2007	Morphological and biochemical variations of teak (<i>Tectona grandis</i> L.) clones in relation to resistance against leaf defoliator (<i>Hyblaea puera</i> Cramer) and skeletonizer (<i>Eutectona machaeralis</i> Walker).	Dr. M. U. Kukadia	2011
5.	Mr. Anil Kumar 04-0425-2008	Effect of Irrigation and Fertiliser on growth and Yield of <i>Jatropha (Jatropha curcus)</i> under south Gujarat condition	Dr. N.S. Patil	2012
6.	Mr. Dileswar Nayak 04-0350-2007	Induced variability in <i>Jatropha curcus</i> by gamma rays	Dr. N. S. Patil	2012
7.	Ms. Vishnu Kanwar Solanki 04-0906-2010	Silvicultural, Horticultural and Medicinal crops in three tier agroforestry system	Dr. D. B. Jadeja	2014
8.	Ms. Shedage Swati Mahipati 04-0900-2010	Effect of microsymbionts on forest tree seedlings under different moisture regimes and salinity levels	Dr. N. S. Patil	2014
9.	Mr. Shailendra Bhalawe 04-1057-2011	Carbon sequestration potential of different land use systems in South Gujarat condition	Dr. D. B. Jadeja	2015

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10.	Mr. Gayakvad Pareshbhai Ganeshbhai - 04-1050-2011	Carbon sequestration potential of different land use systems in Dangs district	Dr. D. B. Jadeja	2015
11.	Mr. Laxmikanta Behera 04-1059-2011	Clonal variation in physical, anatomical and chemical properties of wood in <i>Eucalyptus</i>	Dr. D. B. Jadeja	2016
12.	Mr. Kazi Abduladil Abdulhami 02-1319- 2012	Potentiality of tuber intercrops under naturally occurring <i>Palmyra palm</i> in South Gujarat condition	Dr. D. B. Jadeja	2016
13.	Mr. Sashi Bhushan Saran Pandey 04-1316-2012	Intercropping of Ginger (<i>Zingiber officinale</i> L.) and Turmeric (<i>Curcuma longa</i> L.) under Sapota- Jatropha based agroforestry system in South Gujarat	Dr. D. B. Jadeja	2016
14.	Mr. Abhishek A. Mehta 04-1060-2011	Evaluation of Safed musali (<i>Chlorophytum borivillianum</i>) Sant & Fernand. Germplasm for growth, yield, saponin content and suitability in agroforestry system.	Dr. D. B. Jadeja	2016
15.	Mr. Manas Ranjan Nayak 1030313002	Performance of Eucalyptus clone in relation to sodicity in nursery stage	Dr. D. B. Jadeja	2016
16.	Nongmaithem Raju Singh 1030314003	Crop diversity, productivity and soil nutrient dynamics of dominant agroforestry systems of Navsari district, Gujarat.	Dr. A. Arunachalam	2017
17.	Jayesh Pathak 04-1318- 2012	Macro and micro propagation of few long internodes species.	Dr. D. B. Jadeja	2017
18.	Patel Sandipkumar Mukundlal 1030313003	Performance of cucuritaceous vegetables crops under Teak (<i>Tectona grandis</i> L.f.) based silvihorticultural system in south Gujarat region.	Dr. M.B. Tandel	2018

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19.	Sondarva Ramesh L. 1030314005	Integrtaed nutrient mangment of Brinjal (<i>Solanum melogena</i> L.) under Teak (<i>Tectona grandis</i> L.f.) based silvihorticultural system in south Gujarat region.	Dr. M.B. Tandel	2018
20.	Bhusara Jigneshkumar Balubhai 1030314001	Intercropping of Okra and green gram with different spacing of <i>Melia composita</i> plantation.	Dr. Manmohan J. Dobriyal	2018
21.	Rajveer Singh Chauhan 04-1320-2012	Selection of candidate plus trees (CPTs) and their evaluation for seed traits, germination and seedling vigour in <i>Melia dubia</i> Cav. in south Gujarat	Dr. D. B. Jadeja	2018
22.	Desai Maheshkumar Karamsibhai 1030313001	Intercropping of medicinal crops Castor and Babchi under Sapota-Jatropha based Horti-Silvi system	Dr. Manmohan J. Dobriyal	2018
23.	Mr. Dhavalkumar R. Prajapati 1030316001	Development of <i>Melia dubia</i> Cav. Hybrid Napier (<i>Pennisetum purpureum</i> X <i>P. americanum</i>) / Sorghum sudan grass (<i>Sorghum bicolor</i> X <i>Sorghum bicolor</i> Var. Sudanese) Based silvi-pasture systems.	Dr. N.S. Thakur	2020
24.	Mr. Harshavardhan K. Deshmukh 1030317001	Assessment of management of Agroforestry systems adopted by the farmers in South Gujarat.	Dr. M.B. Tandel	2020
25.	Mr. Ramabhai J. Mevada 1030317002	Integrated Nitrogen Management on growth, yield and quality of Okara (<i>Abelmoschus esculentus</i> L.) under teak (<i>Tectona grandis</i> L. f.) based Agroforestry system .	Dr. M.B. Tandel	2020
26.	Mr. Parmar Mukeshbhai Rameshbhai - 1030314004	Ecological studies on selected horticulture-based agroforestry systems in South Gujarat	Dr. A. Arunachalam	2021

SN	Name of Student	Research Title	Major Advisor	Year
27.	David Camus D 1030319001	Assessment of <i>Melia dubia</i> Cav. progenies of some candidate plus trees for Salinity stress	Dr. N. S. Thakur	2022
28.	Govind 1030319002	Performance of Cluster Bean (<i>Cyamopsis tetragonoloba</i> (L.) Taub.) under Teak (<i>Tectona grandis</i> L. f.) based Agroforestry system in response to Micronutrient application	Dr. V. M. Prajapati	2022
29.	Malek Soufil Sharifmiya 1030319003	Nutritive quality assessment of <i>Melia dubia</i> Cav. Leaf fodder from different provenances of South Gujarat	Dr. N. S. Thakur	2022
30.	Patel Mahfuza Mohammadali 1030320002	Effect of Various Spacing and foliar spray of Novel on performance of Cowpea (<i>Vigna unguiculata</i> L.) under Mango- based Agroforestry System	Dr. M. B. Tandel	2023
31.	Vishal Balwantrao Shambharkar 1030320003	Morphological, Physico-Anatomical and Molecular Characterization of <i>Pterocarpus marsupium</i> Roxb. and <i>P. santalinus</i> Linn.	Dr. M. B. Tandel	2023
32.	Amlani Maulik Harishbhai 1030320001	Impact of INM on growth, yield and quality of Tomato (<i>Solanum lycopersicum</i> L.) under Sapota (<i>Manilkara zapota</i> L. P. ROYEN) based Agroforestry system	Dr. V. M. Prajapati	2024