

MAJOR ACTIVITIES

- Teaching: UG and PG level
- Research: Different aspects of Forest Biology and Tree Improvement (Plant Propagation, Molecular genetics) and Tissue Culture
- Extension activities: Krishi Mahotsav, Van Mahotsav, and transfer of technology to farmers on different aspects of forestry.

FACILITIES:

- ▶ Biotechnology Lab : Different equipment's like Spectrophotometer, Ultrasonic cleaner, Gel Documentation System, Electrophoresis Unit Microwave, Centrifuge, RT-PCR, -20°C Deep Freeze and Water bath.
- ▶ Tissue culture Lab : Different equipment like Laminar Flow, Autoclave and Digital PH meter.
- ▶ Tree Improvement Lab: Different equipment's like Serological water bath, Microscope, Universal testing machine, Mahua flower stamen remover and Seed decorticator and.
- ▶ Seed Technology Lab : Different equipment's Like Seed Germinator, Digital Moisture Meter, Seed Counter, Seed Grinder and Seed Precision Divider.
- ▶ Seed Museum: A Collected of seed of important forest tree species and rare and endangered forest species has been maintained in the Seed Museum, College of Forestry . Collected seed of different tree species such as Teak, Sisham, Biyo, Chandan and Tetu etc.



EDUCATION

COURSES OFFERED AT UG LEVEL

Course No.	Course Title	Credit
FBT 2.1	Dendrology	2+1
FBT 3.2	Wildlife Biology	2+1
FBT 3.3	Forest Ecology & Biodiversity Conservation	2+1
FBT 3.4	Forest Genetics & Tree Improvement	2+1
FBT 3.5	Forest Ecophysiology	1+1
FBT 4.7	Seed Technology & Nursery Management	2+1
FBT 8.8	Forest Biotechnology	2+1
FBT 8.9	Wildlife Management	1+1

COURSES OFFERED AT PG LEVEL

Course No.	Course Title	Credit
FBT 521	Breeding Methods in Forest Trees	2+1
FBT 522	Reproductive Biology of Forest Trees	2+1
FBT 523	Tree Seed Orchards	2+1
FBT 524	Quantitative Genetics in Forest Tree Breeding	3+0
FBT 525	Forest Genetic Diversity and Conservation	3+0
FBT 526	Biotechnology Approaches in Forestry	2+1
FBT 527	Plant Tissue Culture	2+1
FBT 528	Molecular Biology	2+1
FBT 529	Principles and Techniques of Genetic Engineering	2+1
FBT 530	Environmental Pollutants and Biotechnology	2+0

Department involved in teaching PG Courses offered by Other Departments

Course No.	Course Title	Credit
PSMA 504	Breeding of plantation crops and spices	2+1
PSMA 505	Breeding of Medicinal and Aromatic Crops	2+1
MAP 524	Improvement of Medicinal and Aromatic Plants	1+1
MAP 521	Basics of Plant Production & Breeding Techniques	2+1
MAP 523	Biotechnological Approaches & Agro-techniques for MAP species	2+1 (Associated course)

Passed out PG Masters Students

Sr. No.	Student name	Major Guide	Thesis title	specialization	Year of submission
1	Raju S. Rajpoot	Dr. M. U. Kukadia	Morphological variation and carbon sequestration potential of various clones of <i>Eucalyptus</i>	Forest Genetic Resources	2012
2	Sumit K. Gupta	Dr. S. K. Jha	Morphological and certain wood characteristics variation in <i>Eucalyptus</i> clones	Forest Genetic Resources	2012
3	Koyande Suyog	Dr. S. K. Jha	Evaluation of Phytoremediation potential in <i>Jatropha Curcas</i>	Forest Genetic Resources	2012
4.	Durga S. Nagar	Dr. S. K. Jha	<i>In vitro</i> regeneration of <i>Millettia pinnata</i> (L.) Panigrahi	Forest Biotechnology	2013
5.	Jani Jigar	Dr. S. K. Jha	<i>In vitro</i> regeneration of <i>Psoralea corylifolia</i> and <i>Tinospora cordifolia</i> - Anticancerous and Antileprotic plants	Forest Biotechnology	2014
6.	Rahul Shreekumar	Dr. R.P. Gunaga	Provenace Variation for Seed traits, Germination, Seedling Vigour and Oil Content in <i>Calophyllum inophyllum</i> Linn.	Forest Genetic Resources	2016
7.	Ravindrakumar Dhaka	Dr. S. K. Jha	Within And Between Natural Population variation for Drupe and Seedling Traits In Teak (<i>Tectona grandis</i> Linn. f.)	Forest Genetic Resources	2016

Sr. No.	Student name	Major Guide	Thesis title	Specialization	Year of submission
8.	Dhaval Bhuva	Dr. R.P. Gunaga	Stand structure and intra population variation for seed and seedling characteristics in <i>Sterculia urens</i>	Forest Genetic Resources	2016
9.	Chaudhari Chintankumar K.	Dr. S. K. Jha	Molecular variability and Population structure of Teak (<i>Tectona grandis</i> Linn. f.)	Forest Genetic Resources	2016
10.	Bhagora Mayurkumar N.	Dr. R.P. Gunaga	Stand Structure and Population Variation for Fruit and Seed Traits in <i>Miliusa tomentosa</i> (Roxb.) Fenet & Gangnepain.	Forest Genetic Resources	2017
11.	Chaudhari Bhurabhai A.	Dr. S. K. Jha	Population variability for salinity tolerance in Teak (<i>Tectona grandis</i> Linn.f.)	Forest Genetic Resources	2017
12.	Patel Rinkuben A.	Dr. M. S. Shanknur	Tree To Tree variation in Fruit Traits, Germination and seedling vigour Attributes of <i>Gmelina arborea</i> Roxb. ex. Sm	Forest Genetic Resources	2018
13.	Rathod Keyurkumar R.	Dr. S. K. Jha	Variability study for fruit, germination and nursery growth in Beheda (<i>Terminalia bellirica</i> (Gaertn.) Roxb.) from South Gujarat	Forest Biology & Tree Improvement	2020
14.	Jaliya Rakeshkumar M.	Dr. R.S. Chauhan	Genetic diversity assessment in natural populations of <i>Melia dubia</i> Cav. in south Gujarat	Forest Biology & Tree Improvement	2021

Passed out Doctoral Students

Sr. No.	Student name	Major Guide	Thesis title	specialization	Year of submission
1.	Mr. Harsha Timmappa Hegde (In service)	Dr. Rajesh. P. Gunaga	Assessment of population structure. characterization of seed and seedling dynamics and utilization pattern of <i>Madhuca longifolia</i> var. <i>latifolia</i> A. Chev. in Gujarat.	Forest Genetic Resources	2018
2.	Mr. Huse Santoshkumar Anandrao (In service)	Dr. Rajesh. P. Gunaga	Genetic variation growth and Wood quality parameters among eighteen commercial Eucalyptus clones	Forest Genetic Resources	2018
3.	Mr. Ravindra Kumar Dhaka	Dr. Rajesh. P. Gunaga	Morphological, wood anatomical and molecular characterization for selected CPTs of <i>Melia dubia</i> Cav.	Forest Genetic Resources	2019

RESEARCH RECOMMENDATIONS

A. For Scientific Community

- ▶ Evaluation of *Melia composita* (Willd.) families for germination traits and growth variation at nursery stage: **Chauhan, R. S. et al.**

Recommendation: As per the germination percentage, rate of germination and seedling vigour index, family no. 24, 76, 195, 259, 267 and 270 were performed better than other tested families of *Melia composita* Willd. (Malabar Neem) under nursery condition. It is further, informed to scientific community to test these species in field condition and improved families may be selected for future breeding and tree improvement. (Joint Agresco- 2017)

- ▶ Mass propagation of *Acacia mangium* through axillary bud: **Chauhan, R. S. et al.**

Recommendation: Tissue culture scientist are informed to surface sterilize the axillary buds of *Acacia mangium* with absolute alcohol (100%) for 1 min +Mercuric chloride (0.1%) for 6 min followed by thorough washing and culturing in MS media supplemented with combination 1.0 mg/l BAP +0.1 mg/l Kin for shoot initiation and multiplication and further rooting the micro shoots in ½ MS supplemented with 2.0 mg/l IBA for large scale propagation of *A. mangium*. (JointAgresco- 2018)

- ▶ Standardization of protocol for mass multiplication of Teak: **Chauhan, R. S. et al.**

Recommendation: Scientists are informed to surface sterilize the mature nodal buds of Teak with Mercuric chloride (0.1%) for 8 minutes followed by thorough washing and culturing in MS medium supplemented with 1.5 mg/l 6-Benzylamino purine (BAP) + 0.5 mg/l Kinetin for shoot initiation and multiplication. Further, for rooting the micro-shoots, half MS medium supplemented with 3.0 mg/l Indole-3- butyric acid (IBA) be used for micro-propagation of Teak. Coco-peat +Vermiculite (1:1 v/v) can be used as hardening medium for survival of tissue culture plantlets. (Joint Agresco-2019)

- ▶ Vegetative propagation of *Salix tetrasperma*: : **Sankanur, M. S.** and **Jha, S. K.**

Recommendation: For conservation of *Salix tetrasperma* the vegetative propagation and nursery growth can be better achieved when treated with 2500 ppm of IBA concentration with 30 minutes dipping time and grown in net-house under South Gujarat condition (Joint AGRESCO- 2022)

- ▶ Evaluation of various Poplar clones for early growth and establishment under South Gujarat condition: **Sankanur, M. S. ; Jha, S. K.**; Thakur, N. S.; Patel, and Hegde, H. T.

Recommendation: Poplar clone 5503 is better suited for block plantation under South Gujarat condition.(Joint AGRESCO-2022)

- ▶ Vegetative propagation of Dambel (*Tylophora indica*). **Jha, S.K.**, V.M. Prajapati and Amol Vasishth

Recommendation: It is recommended to the farmers and nurseryman that the vegetative propagation of Dambel can be achieved by dipping 10 cm cutting in 1 g/l IBA solution for 10 minutes and growing in coco-peat or red soil media under net house conditions. [Agresco2019]

- ▶ Seed germination and seedling emergence study in Dev shower (*Bombax insigne*): Vijay M. Prajapati **Jha, S.K.**, and Amol Vasishth

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]

- ▶ Collection and evaluation of *Mucuna* germplasm from South Gujarat for L-DOPA and protein content – : **S.K. Jha 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]

COMPLETED PROJECTS

A. External Funded

Sr. No.	Name of Project	Principal Investigator/ Co-Investigator	Funding Agency	year of completion
1.	Germplasm collection, evaluation, characterization and selection of harsh site tolerant clones of Karanja	PI: Dr S.K. Jha	NOVOD Board, New Delhi	2012
2.	Socioeconomic survey and ethno-botany of forest dwellers in the Danges.	PI: Dr S.K. Jha	Gujarat Forest Department, GoG	2012
3.	Forest resource survey of Valsad Forest Division.	PI: Dr S.K. Jha	Gujarat Forest Department, GoG	2014
4.	National Network of integrated development of Jatropha.	PI: Dr S.K. Jha	NOVOD Board, New Delhi	2012
5.	Forest resource survey of Vyara Forest Division.	Co-PI: Dr R.S. Chauhan	Gujarat Forest Department, GoG	2014
6.	Promotion of scientific management of Palmyra palm	Co-PI: Dr S.K. Jha	NOVOD Board, New Delhi	2012
7.	Population Genetics of <i>Gmelina arborea</i> Roxb. ex Sm. in the Western Ghats of India	PI: Dr. M. S. Sankanur Co-PI: Dr S.K. Jha	SERB, GoI, New Delhi	2020-21

B. Departmental

Sr. No.	Name of Project	Principal Investigator	Year of completion
1.	Evaluation of <i>Melia Composita</i> families for germination traits and growth variation at nursery stage	Dr. R.S. Chauhan	2017
2.	Mass propagation of <i>Acacia mangium</i> through axillary bud	Dr. R.S. Chauhan	2018
3.	Standardization of protocol for mass multiplication of Teak	Dr. R.S. Chauhan	2019
4.	Vegetative propagation of <i>Salix tetrasperma</i>	Dr. M. S. Sankanur	2022
5.	Evaluation of various Poplar clones for early growth and establishment under South Gujarat condition	Dr. M. S. Sankanur	2022

Ongoing Projects

A. External Funded and Plan Project

Sr. No.	Name of Project	Principal Investigator/ Co-Investigator	Funding Agency
1.	Establishment of Biodiversity Conservation Center	PI: Dr. S. K. Jha	Gov. of Gujarat state, India
2.	Evaluation of Open Pollinated progenies of <i>Calophyllum inophyllum</i> L. for flowering phenology, fruit yield, seed traits and oil content in South Gujarat condition	PI: Dr. R. P. Gunaga	Gov. of Gujarat state, India
3.	Ppopularizing <i>Melia composita</i> based Agroforestry systems in Gujarat through the production of quality planting material.	Co-PI: R S Chauhan	Gov. of Gujarat state, India
4.	Wood and morphological characteristics of 'Valsadi' Teak for the potentiality of GI tagging	PI: Dr. S. K. Jha	GFRF, GoG
5.	Development of descriptors and DUS testing guidelines for <i>Eucalyptus urophylla</i> , <i>E. globulus</i> and <i>E. grandis</i>	PI: Dr. S. A. Huse	PPVFRA
6.	Testing and Deployment of clones and Seed sources of <i>Casuarina</i> for Different planting Environments and End-use Application.	PI: Dr. S. A. Huse	ICFRE, Dehradun

B. Departmental

Sr. No.	Name of Project	Investigator
1.	Evaluation of Eucalyptus germplasm for growth and biomass productivity	PI: Dr. S. A. Huse Co-PI: Dr. R. P. Gunaga
2.	Population structure and genetic diversity analysis of Timru (<i>Diospyrus melanoxylon</i>)	PI: Dr. S. K. Jha, Co-PI: Dr. M. S. Sanknur
3.	Population structure and genetic diversity analysis of Kadayo (<i>Sterculia urens</i>)	PI: Dr. S. K. Jha
4.	Genetic diversity and population structure analysis of Tetu (<i>Oroxylum indicum</i>)	PI: Dr. S. K. Jha, Co-PI: Dr. V. P. Parekh
5.	Genetic diversity and population structure analysis of Charoli (<i>Buchnanania lanzan</i>)	PI: Dr. S. K. Jha, Co-PI: Dr. D. K. Sharma
6.	Variability study for fruit and seed characters in <i>Diospyrus melanoxylon</i> from Gujarat	PI: Dr. S. K. Jha
7.	Intra-population variation for fruit and nut characters in Charoli (<i>Buchnanania lanzan</i>)	PI: Dr. S. K. Jha, Co-PI: Dr. D. K. Sharma
8.	Tree selection and progeny evaluation of Casuarina germplasm for higher growth and biomass	PI: Dr. S. A. Huse Co-PI: Dr. R. P. Gunaga
9.	Progeny evaluation of selected plus trees of Teak from Gujarat	PI: Dr. S. K. Jha Co-PI: Dr. Vijay Prajapati
10.	Candidate plus tree selection for Behda (<i>Terminalia bellerica</i>) from Gujarat	PI: Dr. S. K. Jha
11.	Dormancy and germination investigations in <i>Melia dubia</i> Cav.	PI: Dr. R.S. Chauhan Co-PI: Dr. N.S. Thakur

LIST OF PUBLICATIONS

Full length papers in peer reviewed Journals

- 1) Patel, Minal., Desai B. S., Patel, C., Malek, S., Ram, M., Parekh, V. and **Jha, S. K.**, 2022. Model nursery of medicinal and aromatic plants at NAU, Navsari. *Initiative towards production of quality planting material & conservation of herbal resources*. **11**:1198-1206
- 2) Rathod, K., Ram Mayur, L., Jaliya, R., Dhaka, R., **Jha, S.K.** and Desai, B.S., 2022. *Oroxylum indicum*: Ethnobotany, phytochemistry and therapeutic uses. *Communities. The Pharma Innovation Journal* **28**:26
- 3) Thakur, N.S., **Gunaga R.P.**, Hegde H.T., **Chauhan R. S.**, Bhuva D.C. and Bhusara, J.B. (2021) Development of Biomass and Volume Models of *Melia dubia* Cav. for Early Establishment. *Indian Journal of Ecology* , 48(3): 698-701
- 4) **Chauhan, R.S.**, Jadeja, D.B., Thakur, N.S. and Jha, S.K. (2021) Variability in Stone Characters and Early Progeny Performance of Selected Genotypes *Melia dubia* from Northern Western Ghats of India. *Indian Journal of Ecology* , 48(4): 1032-1038
- 5) **Chauhan R.S.** and **Jha S.K.** (2018). Genetic stable mass propagation of *Acacia mangium* Willd. from mature plus tree. *Indian Journal of Biotechnology*. 17(1): 128-133
- 6) N.S. Thakur, D. Kumar, **R.S. Chauhan**, H.T. Hegde and **R.P. Gunaga** (2019) Allelopathic effects of *Melia azedarach* L. on germination, growth and yield of black gram and chickpea. *Allelopathy Journal* 46(1):133-144 doi.org/10.26651/allelo.j/2019-46-1-1204
- 7) **R.S. Chauhan**, N. S. Thakur, **R. P. Gunaga**, D.C. Bhuva and D.B. Jadeja (2019). Assessment of Germination Attributes in Candidate Plus Trees (CPTs) of Malabar Neem (*Melia dubia* Cav.) *Indian Journal of Ecology* 46(2): 335-339
- 8) 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. *IJCS*, **7**(1):2349-51.
- 9) **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. *Int. J. Curr. Microbiol. App. Sci.* 7(05): 3582-3592. doi:10.20546/ijcmas.2018.705.
- 10) Chaudhari, R Kumar, R.K Dhaka, V Parekh, **S.K. Jha**; **M.S. Sankanur** and P Prajapat, 2018, Genetic diversity analysis of teak in South Gujarat by RAPD marker, *International Journal of Chemical Studies* **6**(6): 260-267
- 11) **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

Full length papers in peer reviewed Journals

- 12) **Huse, S.A.**, Singh, N.B., Sharma, J.P. and Anand, R.K. (2018). Quantitative genetic parameters studied on growth and biomass traits in Willows. *International Journal of Agriculture Sciences*, 10(20):7398-7401.
- 13) **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.
- 14) **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 Dhaka, R. K. and **Jha, S. K.**, 2018. Effect of different forest types and populations on drupe morphometric characters of teak (*Tectona grandis* L. f) in India. *International Journal of Farm Sciences* **8**(2):12-17.
- 15) Chaudhari, C., **Jha, S. K.**, Dhaka, R. K., Parekh, V., Sankanur, M. S., Prajapat, P. and Thakur, S., 2018. Assessment of ISSR based molecular variability in teak of South Gujarat. *Journal of Pharmacognosy and Phytochemistry*. **7**(6):562-568.
- 16) Sureshbhai, P. J., Thakur, N. S., **Jha, S. K.** and Kumar, V., 2017. Productivity and carbon sequestration under prevalent agroforestry systems in Navsari District, Gujarat, India. *Int. J. Curr. Microbiol. App. Sci*, **6**(9):3405-3422.
- 17) Dhaka, R. K. and **Jha, S.K.**, 2017. Evaluation of five teak (*Tectona grandis* L.F) provenances for germination test to find out reasons of low germination. *International Journal of Pure and Applied Bioscience*. **5**(5):1420-1426.
- 18) 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. *Plantation and agroforestry: Pulpwood value chain approach*, pp.102-08.
- 19) Dhaka, R. K. and **Jha, S. K.**, 2017. Evaluation of Provenances for Drupe, Seed and Germination Traits in Teak (*Tectona grandis* L. F). *International Journal of Current Microbiology and Applied Sciences*. **6**(11):1721-1727.
- 20) Kaporiya, B. A., Chavda, J. R., Desai, B.S., Singh, A., Patel, D.P. And **Jha, S.K.**, 2016. Influence of PGR on Growth and Quality of Sarpagandha (*Rauvolfia tetraphylla* LINN.) *The Bioscan*. **4**(4): 2549-2551
- 21) 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.
- 22) S.B. Halli, K.R. Swamy, **M. Sankanur**, A. Yewale, 2016, Fruit-based agroforestry systems for food security and higher profitability, *International Journal of Farm Sciences* **6**(2):302-311

Full length papers in peer reviewed Journals

- 23) 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.
- 24) 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.
- 25) Behera, L. K., Nayak, M. R., Patel, D., Mehta, A., Sinha, S. K. and **Gunaga, R.P.** (2015). Agroforestry practices for physiological amelioration of salt affected soils. *Journal of Plant Stress Physiology*, **1**(1): 13-18
- 26) Jani, J.N., **Jha, S.K.**, Nagar, D.S., **Chauhan, R.S.** and Hegde, H., 2015. Phloroglucinol Plays Role in Shoot Bud Induction and. *Advanced Techniques in Biology & Medicine*. **3**(2): 1000125.
- 27) 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 International Journal of life science*, **10**(1):81-85.
- 28) A. Verma, N.B. Singh, N.V. Suresh, P. Choudhary, **M Sankanur**, G. Aggarwal, 2015, RAPD and ISSR markers for molecular characterization of *Grewia optiva*: an important fodder tree of north western Himalayas, *Range Management and Agroforestry* **36** (1): 26-32
- 29) Jadhav, P. R., Mahatma, M. K., Jha, S., Mahatma, L., Parekh, V. B. and **Jha, S. K.**, 2013. Changes in Phenylpropanoid Pathway during Compatible and Incompatible Interaction of *Ricinus communis*-*Fusarium oxysporum* f. sp. *ricini*. *Ricini. Indian Journal of Agricultural Biochemistry*. **26**:56-60.
- 30) Bansude, A.A., **R.P. Gunaga**, A.B Mirgal, S.S. Narkhede, A.D. Rane, S.G. Bhave 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.
- 31) N.B. Singh, S. Joshi, J.P. Sharma, Choudhary Punit, **M. Sankanur**, 2012, Principal component analysis of fast growing willow clones for quantitative traits under short rotation forestry, *Annals of Forestry* **20**(1):26-30
- 32) Nagar, D.S., **Jha, S.K.** and Jani, J., 2015. Direct adventitious shoot bud formation on hypocotyls explants in *Millettia pinnata* (L.) Panigrahi-a biodiesel producing medicinal tree species. *Physiology and Molecular Biology of plants*, **21**(2):287-292.
- 33) Chavda, J.R., Desai, B., **Jha, S.K.**, Tandel, M.B. And Patel, D., 2015. Effect Of PGR on Clonal Prop Effect of PGR on Clonal Propagation of Madhunashini (*Gymnema Sylvestre* R. Br.) Through Rooted Cutting. *The Bioscan*.**10**(4): 1645-1648.

Popular articles

1. **Chauhan R S** and Thakur N S. 2020. Malabar Neem: The money maker tree. *Everyman's Science*, LV(1&2): 5-9
2. **Sankanur, M.S., Gunaga, R.P.**, Sinha, S.K. and Ahlawat, T.R. (2020). Boosting income of tribal artisans by utilizing waste wood for novel handicrafts. *MFP News*, 30(3): 5-7.
3. Mehta, A.A., L.K. Behera, **S.K. Jha**, C.A. Dholariya and D.B. Jadeja (2019). Genetic divergence study for growth characters among the accessions of Safed Musli. *IJCS*, 7(1): 2349-2351
4. 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.
5. 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.
6. Behera, L.K., **Gunaga, R.P.**, Sinha, S.K., Sukhadiya M., Dholariya, C.A. and Prajapati, V.M. (2019). *Stereospermum chelonoides*: Prospective of a lesser known and medicinal tree. *Van Sangyam*, 6(6):1-4.
7. 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.
8. 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.
9. 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
10. Jadeja, D. B., **Jha, S.K.**, 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.
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