

Curriculum Vitae



Dr. M. Nataraj

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Nationality: Indian

Date of Birth: 27-03-1962

EDUCATION

Degree	University	Subject	Year
Ph.D.	Sardar Patel University Vallabh Vidyanagar Gujarat	Botany "Plant tissue culture"	1992
M.Sc.	Bharathiar University, Coimbatore. TN	Botany	1984
B.Sc.	University of Madras, Chennai TN	Botany	1982

Professional Experience

- **Assistant Professor in Biosciences** P. G. Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India (2005-present). Subject taught: Bio-instrumentation; Plant biochemistry; General Biochemistry; Mycology
- **Technician** P. G. Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India (1990-2005): In charge of Microscopy facility

RESEARCH INTRESTS

- Micropropagation of plants having agroforestry and medicinal importance.

RESEARCH PROJECTS

- Micropropagation of *Ailanthus excelsa* Roxb. - A multipurpose tree. Funding agency: GSBTM Gandhinagar. (2017-2020): Completed.
- Micropropagation of *Hyphaene dichotoma*- a rare and endemic palm. Funding agency: UGC, New Delhi. (2011-2014): Completed.

PEER-REVIEWED PAPERS

1. M M Kher, **M Nataraj**, AN Arunkumar, V Sittther, M S Shekhawat. (2021) Tissue culture of Indian Rosewood (*Dalbergia latifolia* Roxb) *Biologia* 1-10
2. D Patel, J Solanki, S Ingale, **M Nataraj** (2021) Optimization of production parameter and application of glycoprotein produced from *Sphingobacterium thalophilum* DP9. *Vegetos* 1-12
3. DT Patel, JD Solanki, KC Patel, M Nataraj (2021) [Application of biosurfactants as antifouling agent](#) Green Sustainable Process for Chemical and Environmental Engineering and ...
4. JD Solanki, DT Patel, KC Patel, M Nataraj (2021) [Production of biosurfactants using agroindustrial wastes as substrates](#) Green Sustainable Process for Chemical and Environmental Engineering and ...
5. TJA da Silva, MM Kher, D Soner, M Nataraj(2020) [A critical appraisal on the recurrence of sandalwood spike disease and its management practices \(vol 50, e12648, 2020\)](#) FOREST PATHOLOGY 51 (1)
6. Jodhani J, **Nataraj M (2021)** Synergistic effect of Aloe gel (*Aloe vera* L.) and Lemon (*Citrus limon* L.) peel extract edible coating on shelf life and quality of banana (*Musa* spp.) *Journal of Food Measurement and Characterization*. 104:6463–6479 DOI: [10.1007/s11694-021-00822-z](https://doi.org/10.1007/s11694-021-00822-z) (Online first) **IF**: 1.648.
7. Manadal S, Parsai A, Tiwari PK, **Nataraj M. (2021)** The effect of additional additives on the axillary shoot micropropagation of medicinal plant *Aegle marmelos* (L.) Corrêa *World News of Natural Sciences* 34:54-71
8. Patel D, Koriya K, Patel P, Solanki J, Mesara S, **Nataraj M (2020)** Antibiotic sensitivity and RAPD-PCR studies on cultivable gut bacteria from Indian Medicinal Leech—*Hirudinaria granulosa* *The Journal of Basic and Applied Zoology* 81:Article no.9 DOI: [10.1007/s11694-021-00822-z](https://doi.org/10.1007/s11694-021-00822-z)
9. Kher MM, Shekhawat MS, **Nataraj M**, Teixeira da Silva JA (2020) Indian Sarsaparilla (*Hemidesmus indicus* (L.) R.Br. ex Schult): advances in tissue culture. *Applied Microbiology and Biotechnology*. 104:6463–6479 DOI: [10.1007/s00253-020-10714-9](https://doi.org/10.1007/s00253-020-10714-9) **IF**: 3.530.
10. Kher MM, **Nataraj M (2020)** *In vitro* regeneration competency of *Crataeva nurvala* (Buch Ham) callus *Vegetos* 33 (1): 52-62 DOI: [10.1007/s42535-019-00080-x](https://doi.org/10.1007/s42535-019-00080-x) .
11. Kher MM, **Nataraj M (2019)** Direct somatic embryogenesis and shoot regeneration from leaves and internodes of *Pluchea lanceolata* (DC.) C.B. Clarke *In Vitro Cellular & Developmental Biology - Plant*. 55: 720-724 DOI: [10.1007/s11627-019-10016-4](https://doi.org/10.1007/s11627-019-10016-4) **IF**: 1.814.
12. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M (2019)** Red Sandalwood (*Pterocarpus santalinus* Linn.): Importance, propagation and micropropagation. *Journal of Forestry Research* 30:745–754. DOI:[10.1007/s11676-018-0714-6](https://doi.org/10.1007/s11676-018-0714-6) **IF**: 1.689
13. Kher MM, Rajput DB, Damor D, Khandhar D, **Nataraj M (2019)** Direct shoot regeneration from excised leaf segments of *Crataeva nurvala* *Environmental and Experimental Biology* 17:

179–183 [DOI: 10.22364/eeb.17.18](https://doi.org/10.22364/eeb.17.18)

14. Jodhani K, **Nataraj M (2019)** Edible coatings from plant-derived gums and clove essential oil improve postharvest strawberry (*Fragaria × ananassa*) shelf life and quality *Environmental and Experimental Biology* 17: 123–135 DOI: [10.22364/eeb.17.13](https://doi.org/10.22364/eeb.17.13)
15. Vasava D, Kher MM, **Nataraj M**, Teixeira da Silva JA (2018) Bael tree (*Aegle marmelos* (L.) Corrêa): Importance, biology, propagation and future perspectives. *Trees* 32:1165–1198. [DOI:10.1007/s00468-018-1754-4](https://doi.org/10.1007/s00468-018-1754-4) IF: 2.125
16. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M**, Dobránszki J, Millar MA (2018) *Santalum* molecular biology: molecular markers for genetic diversity, phylogenetics and taxonomy, and genetic transformation. *Agroforestry Systems* 92:1301–1315. [DOI:10.1007/s10457-017-0075-8](https://doi.org/10.1007/s10457-017-0075-8) IF: 1.973
17. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M (2018)** Indian Kino Tree (*Pterocarpus marsupium* Roxb.): Importance, propagation and micropropagation. *Environmental and Experimental Biology* 16:1–8. [DOI:10.22364/eeb.16.01](https://doi.org/10.22364/eeb.16.01)
18. Patel D, Nataraj M (2018) Callus induction in *Ailanthus excelsa* Roxb. - A multipurpose tree *International Journal of Scientific Research and Reviews* 7(11):116-129
19. Kher MM, **Nataraj M (2017)** Micropropagation of *Combretum ovalifolium* Roxb.: a medicinally important plant. *Rendiconti Lincei* 28:519–527. [DOI:10.1007/s12210-017-0625-z](https://doi.org/10.1007/s12210-017-0625-z) IF: 1.603
20. Teixeira da Silva JA, Kher MM, Soner D, Page T, Zhang X, **Nataraj M**, Ma G (2016) Sandalwood: basic biology, tissue culture, and genetic transformation. *Planta* 243:847– 887. [DOI:10.1007/s00425-015-2452-8](https://doi.org/10.1007/s00425-015-2452-8) IF: 3.060
21. Kher MM, **Nataraj M**, Teixeira da Silva JA (2016) Micropropagation of *Crataeva* L. species. *Rendiconti Lincei* 27:157–167. [DOI:10.1007/s12210-015-0478-2](https://doi.org/10.1007/s12210-015-0478-2) IF: 1.603
22. **Nataraj M**, Kher MM, Teixeira da Silva JA (2016) Micropropagation of *Clerodendrum* L. species: a review. *Rendiconti Lincei* 27:169–179. [DOI:10.1007/s12210-015-0484-4](https://doi.org/10.1007/s12210-015-0484-4) IF: 1.603
23. Teixeira da Silva JA, Kher MM, **Nataraj M (2016)** Biotechnological advances in *Vitex* species, and future perspectives. *Journal of Genetic Engineering and Biotechnology* 14:335–348 [DOI:10.1016/j.jgeb.2016.09.004](https://doi.org/10.1016/j.jgeb.2016.09.004) .
24. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M (2016)** Sandalwood spike disease: a brief synthesis. *Environmental and Experimental Biology* 14:199–204. [DOI:10.22364/eeb.14.26](https://doi.org/10.22364/eeb.14.26)
25. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M (2016)** African sandalwood or Nepalese sandalwood: a brief synthesis. *Notulae Scientia Biologicae* 8:57–61 [DOI:10.15835/nsb819714](https://doi.org/10.15835/nsb819714) .
26. Bose A, Kher MM, **Nataraj M**, Keharia H (2016) Phytostimulatory effect of indole-3- acetic acid by *Enterobacter cloacae* SN19 isolated from *Teramnus labialis* (L. f.) Spreng rhizosphere. *Biocatalysis and Agricultural Biotechnology* 6:128–137. [DOI:10.1016/j.bcab.2016.03.005](https://doi.org/10.1016/j.bcab.2016.03.005) .
27. Joshi H, Nekkala S, Soner D, Kher MM, **Nataraj M (2016)** *In vitro* shoot multiplication of *Withania coagulans* (Stocks) Dunal. *Plant Tissue Culture and Biotechnology* 26:187–195.

[DOI:10.3329/ptcb.v26i2.30569](https://doi.org/10.3329/ptcb.v26i2.30569) .

28. Kher MM, Soner D, Srivastava N, **Nataraj M**, Teixeira da Silva JA (2016) Micropropagation of *Clerodendrum phlomidis* L.F. *Journal of Horticultural Research* 24:21–28. [DOI:10.1515/johr-2016-0003](https://doi.org/10.1515/johr-2016-0003)
29. Teixeira da Silva JA, Kher MM, Soner D, **Nataraj M** (2015) *Withania coagulans* (Stocks) Dunal: biotechnological achievements and perspectives. *Journal of Horticultural Research* 23:5–12. [DOI:10.2478/johr-2015-0001](https://doi.org/10.2478/johr-2015-0001)
30. Kher MM, **Nataraj M**, Parmar HD, Buchad H (2015) Micropropagation of *Merremia quinquefolia* (L.) Hallier F. from nodal explants. *Journal of Horticultural Research* 23:13–16. [DOI:10.2478/johr-2015-0002](https://doi.org/10.2478/johr-2015-0002).
31. Kher MM, **Nataraj M** (2015) Effect of sulfuric acid treatment on breaking of seed dormancy and germination of Indian doum palm, *Hyphaene dichotoma*, a threatened and endemic palm. *Environmental and Experimental Biology* 13:99–101.
32. Soner D, **Nataraj M**, Kher MM (2015) Somatic embryogenesis in *Clerodendrum phlomidis* L. *Academic Journal of Plant Sciences* 7:6–9.
33. Suthar B, Pansuriya J, Kher MM, Patel VR, **Nataraj M** (2014) Biochemical changes under chromium stress on germinating seedlings of *Vigna radiata*. *Notulae Scientia Biologicae* 6:77–81 12. [DOI:10.15835/nsb619203](https://doi.org/10.15835/nsb619203) .
34. Kher MM, Joshi D, Nekkala S, **Nataraj M**, Raykundaliya DP (2014) Micropropagation of *Pluchea lanceolata* (Oliver & Hiern.) using nodal explant. *Journal of Horticultural Research* 22:35–39. [DOI:10.2478/johr-2014-0004](https://doi.org/10.2478/johr-2014-0004).
35. Kher MM, **Nataraj M** (2012) Micropropagation of *Hibiscus radiatus*- a medicinal plant. In: Braganza DV, Ghosh DSK, Menon DS (Eds) Impact of Plant Tissue Culture on Advances in Plant Biology. Loyola Centre for Research and Development, Xavier Research Foundation, Ahmadabad, India, pp 18–26 (Chapter in Conference Proceeding).
36. Kher MM, **Nataraj M**, Joshi A, Patel M (2010) Nuptial nectaries in some species of Bignoniaceae. *PRAJÑĀ- Journal of Pure and Applied Sciences* 18:31–33.
37. **Nataraj M**, Parmar A, Kher MM (2009) Impact of chromium during early germination of fenugreek in interaction with copper, zinc, lead, and cadmium. *PRAJÑĀ- Journal of Pure and Applied Sciences* 17:40–47.
38. **Nataraj M**, Ara R, Roshan A (2008) Impact of chromium on raya and fenugreek a biochemical study. *Advance in Biological Sciences* 7:23–28
39. **Nataraj M**, Paramar SB, Parmar S (2008) Biochemical response during the germination of raya and fenugreek seeds under heavy metal stress. *Journal of Cell & Tissue Research* 8:1589–1594
40. Varghese SK, Inamdar JA, Kalia K, Subramanian RB, **Nataraj M**, Verghese SK (1993) *In vitro* organogenesis in *Enicostema hyssopifolium* (Willd) Verdoon. *Proceedings of National Academy of Science India Sect B Biological Sciences* 63:219–221.
41. Varghese SK, Inamdar JA, Kalia K, Subramanian RB, **Nataraj M** (1993) Micropropagation of

Aegle marmelos (L) Corr. ***Phytomorphology*** 43:87–92

42. Varghese SK, Subramanian RB, Kalia K, **Nataraj M**, Inamdar JA (1992) *In vitro* studies on *Vitex negundo*. ***Indian Botanical Contactor*** 9:147–150
43. Inamdar JA, **Nataraj M**, Mohan JSS, Subramanian RB (1990) Somatic embryogenesis from callus cultures of *Crataeva nurvala* Buch. Ham. ***Phytomorphology*** 40:319–322.
44. Mohan JSS, **Nataraj M**, Inamdar JA (1989) Foliar venation in some Gentianaceae and Menyanthaceae. ***Indian Botanical Contactor*** 6:77–81
45. **Nataraj M**, Padhya MA (1988) Insect gall formation in *Crataeva nurvala* Buch Ham. ***Proceedings of National Academy of Science India Sect B Biological Sciences*** 58:87–88.

PH.D. STUDENTS:

No	Name	Title of the Ph.D. thesis	Registration	Subject	Status
1	Mafatlal M. Kher	<i>In vitro</i> propagation of some medicinally important plants	24-08-2009	Botany	Completed
2	Dhaval Patel	Microbial biosurfactant production and applications	19-10-2013	Biochemistry	Completed
3	Kaushik Jodhani	Evaluation of biosafe product as an alternate strategy to improve the postharvest quality and shelf life of some perishable horticultural produce	19-10-2013	Botany	Completed
4	Dinesh Vasava	Micropropagation and study of secondary metabolites in callus culture of <i>Aegle marmelos</i> L. (Corr.)	14-10-2015	Biochemistry	Completed
5	Jyoti Solanki	Biochemical and molecular characterization of biosurfactant producing <i>Sphingobacterium thalophilum</i> DP9 and its applications	03-10-2018	Biochemistry	On going
6	Payal Sargara	Phytopharmaceuticals as chemopreventive and chemotherapeutic agent against cancer	04-02-2020	Botany	On going

SHORT-TERM COURSES/WORKSHOPS:

- Participated in short term course “Microprocessor Based Instrumentation” jointly conducted by Western Regional Instrumentation Centre, Bombay and University Science Instrumentation Centre (U.S.I.C.), Sardar Patel University (S.P.U.), Vallabh Vidyanagar at U.S.I.C., S.P.U. between 12th to 22nd December, 1994.
- Participated in one-day workshop on “Modern Biological Techniques” Sponsored by Bangalore Genei organized by Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar on 12th December 2003.
- Participated in one-day workshop on “Statistical Computing Through Software” organized by Sardar Patel University Teacher’s Association (SPUTA) held at Department of Statistics, Sardar Patel University, Vallabh Vidyanagar on 26th December 2014.

ORANISER OF SCIENTIFIC EVENTS

- 4th UGC National Conference on “Current Trends in Biological Sciences-III [CTBS-III], dated on 11th February, 2019, at Post Graduate Department of Biosciences, Sardar Patel university. **(Organizing secretary)**
- 2nd UGC National Conference on “Current Trends in Biological Sciences, dated on 20th and 21st January, 2017, at Post Graduate Department of Biosciences, Sardar Patel university. **(Organizing secretary)**.
- 1st UGC National Symposium on Exploring Advance in Biological Sciences”. March 5th 2016, organized by P.G. Department of Biosciences held at Sardar Patel University. **(Member of organizing committee)**
- National level Symposium on Trends in Biological Sciences, P.G. Department of Biosciences, Sardar Patel University, January-28-29,2011**(Organizing secretary)**