



Dr. M.S. Sudarshana

Designation : Associate Professor

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Phone No : +91-821-2419762

Qualification: M.Sc., Ph.D.

Area of Specialization : Tissue Culture of Medicinal Plants.

Number of Projects:

Completed:

Sl. No.	Title of the Project	Funding Agency	Amount in Rs.	Year (From-To)
1.	In Vitro studies of some medicinal plants.	UOM	9000	1996-97
2.	Tissue culture studies of some medicinal plants.	UOM	20000	2002-03
3.	In Vitro phytochemical analysis of Flaveria trinervia- a medicinal	UOM	90000	2006-08

	plant.			
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Number of Projects:

On going Projects

Sl. No.	Title of the Project	Funding Agency	Amount in Rs.	Year
1	Tissue Culture and bio synthetic potentialities of some medicinal plants	UOM-IOE	6,00,000	2010
2	Isolation and characterization of compounds showing antinflammatory and anticancer properties from selected medicinal plants.	UGC	10,56,300	2010

•Number of Ph. D candidates successfully completed: 6

•Number of Ph. D candidates currently working: 9

Publications:

Articles in Journals:

1.C. Shantamma, M.S.Sudarshana and Rachaiah: *Flaveria trinervia* (Sprengle) C. Mohr (Compositae) A new herb to cure jaundice. *Ancient Science of life*. Vol. Vt. No.2 October 1986, 109-111.

2.Sudarshana.M.S, and Shantamma. C. 1988. Plant Regeneration from Inflorescence Culture of *Boerhavia diffusa* L, *Current Science*, March 5, vol. 57, No. 5, PP.268-270.

- 3.Sudarshana.M.S, and Shantamma. C. 1991. In vitro regeneration from excised leaves of *Flaveria trinervia* (Sprengle) C. Mohr. *Plant Cell Tissue and Organ Culture* 27: 297-302.
- 4.Sudarshana.M.S, Shantamma.C, and Murthy.A.N. 1992. In vitro Culture from Leaf Explants of *Delonix elata*- a tree species. *Journal of Mysore University: Section-B*. Vol.32, PP. 499-501.
- 5.Niranjan.M.H, and Sudarshana.M.S. 2000. In vitro plant regeneration in *Nymphoides cristatum* (Roxb) Kuntze. *O. Phytomorphology* 50 (3 and 4) pp. 343-344.
- 6.Kamalendra Singh, Sudarshana.M.S, and Loknath Rai. K.M. 2003. Isolation of 2-hydroxy-2-(2-oxopropyl)-indan-1,3-dione from *Baliospermum axillare*, *Bulgarian Chemical Communications* Vol.35.No.1(pp-12-13).
- 7.Kamalendra Singh and Sudarshana.M.S. 2003. In vitro Micropropagation of *Baliospermum axillare*, *Blume Indian J. Plant Physiology*. Vol.8, No. 2. PP 125-128.
- 8.Kamalendra Singh and Sudarshana.M.S. 2003. Antimicrobial activity of *Baliospermum axillare* plant and callus extracts. *Asian J. of Microbial Tech. Env. Sci*. Vol.5 No.4:571-574.
- 9.Panduranga Murthy.G, Vijaykumar and Sudarshana.M.S. 2003. Effects of different exposure periods of Gaucho and Apron on seedling morphology chlorophyll a/b and phytotoxicity in sorghum Var.BS -7707 during germination. *Poll. Res*. 22(1)51-54.
- 10.Panduranga Murthy.G, and Sudarshana.M.S. 2003. Phytotoxic effects of metalaxyl and Gaucho on seedling vigour and chlorophyll pigment of *Cajanus cajan* Mill during early growth. *Biosciences, Biotechnology Research Asia*, Vol.1:49-52.
11. Panduranga Murthy.G, Sudarshana.M.S, Prakasha, and Manjunatha.R.A. 2004. Studies on the physico-chemical properties of sugar mill effluent and their effects on germination, seedling morphology and biochemical constituents of some commercial crops. *Biosciences, Biotechnology Research Asia*, Vol.2(1):59-63.

12. Niranjana.M.H, and Sudarshana.M.S. 2005. In vitro response of encapsulated somatic embryos of *Lagerstroemia indica* L. Indian Journal of Experimental Biology Vol.43, PP.552-554.
13. Panduranga Murthy.G, Mahadeva Prasad.G, and Sudarshana.M.S. 2005. Toxicity of different imbibition periods of Dimethoate on Germination, chlorophyll a/b and dry matter of *Glycine max* (L) Merrill.Cv. KHSB-2, during early seedling growth. J.Phytol. Res.18(2):199-201.
14. Nayeemulla Shariff, Sudarshana.M.S, Umesha.S and HariPrasad.P. 2006. Antimicrobial activity of *Rauvolfia tetraphylla* and *Physalis minima* leaf and callus extracts. African Journal of Biotechnology, Vol.5(10),PP.946-950.
15. Nayeemulla Shariff, Sudarshana.M.S. 2007. Plant regeneration and In vitro flowering of *Physalis minima* L. A medicinal plant.Plant Cell Biotechnology and Molecular Biology 8(3and 4):201-204.
- 16.Panduranga Murthy.G, Shivalingaiah, Leelaja.B.C, and Sudarshana.M.S. 2007. Effects of pesticidal seed treatments on seedling vigour of Sunflower and Phytotoxicity during germination. Ecology Environment and Conservation. Vol.24.
17. Niranjana.M.H, Sudarshana.M.S, Nayeemulla Shariff and Dharmendra. 2007. In vitro plant regeneration of Crape Myrtle: An Ornamental Shrub. Plant Cell Biotechnology and Molecular Biology 8(1 and 2):101-104.
18. Niranjana.M.H, Sudarshana.M.S, Dharmendra, and Girish.S.T. 2008. Rescue of in vitro shoot tip of necrosis in *Lagerstroemia indica* L. International Journal of Plant Sciences, Vol.3 No.2:622-623.
19. Girish.H.V, Sudarshana.M.S,and Rati Rao.E. 2007. Antibacterial activity of *Cardiospermum halicacabum* Leaf and callus extracts on some human pathogenic bacteria. My Forest, Vol.43(2): 161-168.
20. Sudarshana.M.S, Niranjana.M.H, and Girish.S.T. 2008. In vitro flowering, somatic embryogenesis and regeneration in *Boerhavia diffusa* Linn- A medicinal plant. Global Journal of Biotechnology and Biochemistry 3(2): 83-86.
21. Niranjana.M.H, Sudarshana.M.S, and Girish.S.T. 2008. Direct somatic Embryogenesis and plant regeneration from leaf explants of *Nymphaeodes*

crisatum: A Medicinally Important Plant. Global Journal of Biotechnology and Biochemistry 3(2):79-82.

22. Girish.H.V, Sudarshana.M.S and Rati Rao.E. 2008. In vitro evaluation of the efficacy of leaf and its callus extracts of *Cardiospermum halicacabum* L. On important human pathogenic bacteria. Advances in Biological Research 2(1-2):34-38.

23. Girish.H.V.,Sudarshana.M.S and Satish.S. 2009. In vitro evaluation of the efficacy of leaf and its callus extracts of *Cardiospermum halicacabum* L. On important phytopathogenic fungi. Archives of Phytopathology and Plant Protection:1-11(accepted for publication)

24.G. Panduranga Murthy, Chidananda Murthy. G., Shiralingaiah., Mahadeva Prasad, G and Sudarshana, MS. 2009. Manifestation of physiological and Bio-Chemical variations in Paddy cultivars Under effluent irrigation during early emergence. J. of Curr. Sciences, 10.(2): 141-145.

25.Niranjan, M.H and Sudarshana, M.S. 2010 Preliminary Phytochemical studies of *Lagestroemia indica* Linn. J. of pharmacy Research 3(2), 216-218.

26. Nagarathnamma, M., Sudarshana, M.S., Niranjan, M.H., and Panduranga Murthy (2010) Rapid regeneration of *Enicostemma littorale* Blume from leaf and stem cultures J. of plant Interactions 5(1), 69-73. 26.

27.Niranjan, M.H., Sudarshana, M.S. and Girisha, S.T 2010 Hepatoprotective activity of *Nymphoides crisatum* on carbon tetrachloride induced acute hepatic damage in albino rats J. of Pharmacy Research 3 (4), 697-699.

28.Niranjan M.H., Kavitha H.U. Satish. S & Sudarshana, M.S.2010: Antibacterial activity of *Schrebera swietenoides* Roxb. Against some human pathogenic bacteria. J. of phonmacy Research, 3 (8), 1779-1781.

- 29.Dharmendra, Sudarshana, M.S. & M.H. Niranjana. 2010: *In vitro* micropropagation of *Oxystelma secamone* (L) Karst – A medicinal plant. Nature and Science 8 (11), 15-19.
- 30.Rezvan. K.B., Sudarshana, M.S. & Niranjana, M.H. 2010: *In vitro* plant regeneration from leaf explants of *Artemisia vulgaris*. L. A medicinal herb. Modern Applied Science. Vol. 4 (9).
- 31.Girish, H.V. Sudarshana, M.S. and Satish. S 2010 : Antifungal activity of traditionally important Medicinal plants on phytopathogenic fungi. Indian J. of Applied Microbiology 12 (1) : 43-47.
- 32.M.H. Niranjana, M.S. Sudarshana and S.T.Girisha 2010 : *In vitro* multiple shoot induction from excised short tips and nodal segment explants of *Lagerstroemia indica* (L) – A medicinal cum ornamental shrub – Journal of Biomedicine Science Research.Vol 2(3):212-217
- 33.Rezvan Karami Berzabad, M.S. Sudarshana and M.H. Niranjana 2010: In Vitro multiple shoot regeneration from nodal explants of *Artemisia vulgaris* (L) – An important aromatic and medicinal herb. International Journal of life Sciences. Ecological Studies. – New Horizons (2010). Book article
- 34.Rezvan Karami Borzabad, M.S. Sudarshana & M.H. Niranjana 2010 : In vitro plant regeneration from stem derived callus of *Artemisia Vulgari*. L. ; Report and Opinion, : 2 (12) : 121 – 125.
- 35.Girish HV, Sudarshana MS and Satish S 2011; in vitro evaluation of efficacy of plant and callus extracts of *Cardiospermum helicacabum* L. on important phyto pathogenic fungi. Archives of Phytopathology and Plant protection, 44; 1, 46-56

Papers in Conferences/Seminar/Proceedings:

1.Sudarshana.M.S, and Shanthamma. C. 1989. Seed cultures in *Flaveria trinervia*. National seminar on advances in seed science and technology. Department of Studies in applied Botany, University Of Mysore, Manasagangotri, Mysore.

Conference/Seminar participated :

1.Sudarshana.M.S. 2007. Participation in Regional workshop on “How to Protect & Promote Traditional Products- Handicrafts, Natural Agricultural & Industrial Goods” organized by the NRDC in Collaboration with GI Registry, Chennai. SJCE, Mysore.

2.Chandan.S, B.R. Prathiksha, K. Haraprasad, G. Panduranga Murthy and Sudarshana M.S. Paper presentation entitled “Variability In Crystal Binding Proteins and their Role in Kidney Stone Formation” in section Medical Sciences. 95th Indian Science Congress Association held at Andhra University, Visakhapatnam, from January 3 to 7, 2008.

3.Prathiksha.B.R, S. Chandan, G. Panduranga Murthy, Shivalingaiah and Sudarshana M.S. Paper presentation entitled “Phytochemical Analysis and Antimicrobial activity in Roots of *Aristolichia indica*, L. –An Indian Birthwort” in section New Biology. 95th Indian Science Congress Association held at Andhra University, Visakhapatnam, from January 3 to 7, 2008.

4.Chandrashekar.S, Shivalingaiah, Panduranga Murthy.G, and Sudarshana.M.S. Paper presentation entitled “Detection of Antibacterial Activity in partially Purified Lactase of *Pleurotus* spp. Against *E. coli* and *Pseudomonas aeruginosa* Isolated from Infected Persons” in section Medical Sciences. 95th Indian Science Congress Association held at Shillong, Meghalaya, from January 3 to 7, 2009.

5.Sudarshana.M.S, Shantamma.C. Postal presentation on “Leaf cultures of *Delonix elata*- a medicinal tree species” in National Symposium held at University College of Science, Osmania University, Hyderabad, from July 24-26, 1986.

6.Sudarshana.M.S, Shantamma.C. Paper presentation on “Rhizogenesis and secondary metabolites from the leafy cultures of *Phyllanthus amarus* Schumm and Thonn” at International Conference on Research in Plant Sciences and its Relevance to Future held at UGC Centre of Advanced Study in Botany, Department of Botany, University of Delhi, Delhi, from March 7-11, 1988.

15. Chairman/Member of Authority/Committee etc:

BOE member for the period of 2010-12

16. Membership to professional Organization/Associations: --NIL--