

Dr. M. GHOUSE BASHA Head of the Department

# **Department of Nutrition and Dietetics Jamal Mohamed College (Autonomous)**

College with Potential for Excellence Accredited (3<sup>rd</sup> Cycle) with 'A' Grade by NAAC DBT Star College Scheme & DST-FIST Funded (Affiliated to Bharathidasan University)

Tiruchirappalli – 620 020 Mobile : 9443891653 /8610396907

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# **Academic Oualifications**

Degree	Subject	Institution/University	Class/Rank awarded
UG	Botany	Jamal Mohamed college,	First Class
		Madras University	
PG	Botany	Annamalai University	First Class
M.Phil	Botany	Annamalai University	First class
	(Phytopathology)		
Ph.D	Botany	Bharathidasan University	Highly Commended
	(Environmental		
	Microbiology)		

Teaching Experience	Research Experience
35 Years	35 Years

PG- 35 years UG- 35 years

#### Academic and Research Profile links:

• Orchid Id: https://orcid.org/0000-0001-6957-6591

• Research Id: AAY-1404-2020

• Scopus Id: https://www.scopus.com/authid/detail.uri?authorId=6506023776

• Google scholar Id: https://scholar.google.co.in/citations? User = dN7E4k0AAAAJ&hl = en

• Vidwan link: https://vidwan.inflibnet.ac.in/profile/254697

Area of Specialization : Environmental Microbiology, Plant Tissue Culture, Secondary metabolites production.

# Academic positions held:

SI. No	Position	Institution/ University	From To	Period
	Lecturer	Jamal Mohamed College	05-02-1987	7 Years
	Senior Lecturer	Jamal Mohamed College	05-02-1994	4 Years
	Selection Grade Lecturer	Jamal Mohamed College	27-07-1998	3 Years
	Reader	Jamal Mohamed College	18-10-2001	5 Years
	Associate professor	Jamal Mohamed College	01.01.2006	Till date
	Head of the Department	Jamal Mohamed College	01.06.2019	Till date

## Orientation/Refresher Course Attended

- ➤ Orientation course sponsored by UGC organized by Academic Staff college, Bharathidasan University From 23<sup>rd</sup> Nov. to 19<sup>th</sup> Dec. 1987
- ➤ Refresher course on **Photosynthesis and Productivity** sponsored by UGC, Organized by Academic Staff college, Bharathidasan University From 1<sup>st</sup> Nov- 28<sup>th</sup> Nov. 1990.
- ➤ Refresher course on **Molecular Microbiology** sponsored by UGC, organized by Madurai Kamaraj University From 22<sup>nd</sup> Nov. 15<sup>th</sup> Dec. 1993.
- ➤ Refresher course on **Plant cell, Tissue and Organ culture** sponsored by UGC organized by Bharathidasan University From 5<sup>th</sup> Mar. Apr. 1996.

## Academic Responsibilities (College level)

College time table and calendar in charge	2016 -	2018
Member Board of Studies Botany	2016-	Till date
M.Phil Tutor	2016-	2019
Chairman Evaluation Board	2018-	Till date
Research Committee member	2018-	Till date
Planning and Evaluation Committee member	2017-	Till date
Dean of Science	2018-	Till date
Head, Department of Botany	2019-	Till date
Chairman, Board of Studies	2019-	Till date
Student Monitoring Committee member	2019-	Till date
Coordinator Department of Nutrition and Dietetics	2022-	2023

## Academic Responsibilities held (Outside the college)

- Board of studies member Government Arts College for Women, Pudukottai (2015-2018)
- Board of studies member Subject Expert : Nehru Memorial College, Puthanampatti (2018 2021)
- Board of studies member Subject Expert: Bishop Heber College, Tiruchirappalli (2020-2022)
- Board of studies member Subject Expert : National College, Tiruchirappalli (2019 2023)

- UGC sponsored National symposium on Biocontrol of Root diseases Organized by Department of Botany at Annamalai University on 2-4, Jan.1990
- COSIP of UGC sponsored Workshop on Indoor ornamental horticulture, landscape, fruit preservation organized by Jamal Mohamed College on 3-4<sup>th</sup> Feb. 1990
- Indian Environmental society sponsored seminar on People's participation on Environment organized by Jamal Mohamed College on 19-20<sup>th</sup> Dec.1994
- BARD DBT sponsored Seminar on Recent trends in Biotechnological Research organized by Department of Biotechnology at Bharathidasan University on 9-10<sup>th</sup> Dec. 1994
- BARD Dept. of Biotechnology & DST sponsored National Conference on Environmental Biotechnology organized by Bharathidasan University on 16-18, Mar.1996
- DBT/DST sponsored Popular Lecturers in Biotechnology organized byBharathidasan University on1997
- UGC sponsored One day seminar on Plant and Animal Molecular biology organized by Dept. of Biotechnology at Bharathidasan University on 13<sup>th</sup> Mar. 1998
- UGC sponsored Seminar on recent trends in Genetics and microbiology organized by Dept. of Botany at Jamal Mohamed College on Mar. 1999
- UGC sponsored Seminar on Biotechnology organized by Dept. of Biotechnology Dr.G.R. Damodaran college of science Coimbatore on 6-7<sup>th</sup> Jun.2000
- UGC sponsored Workshop on molecular biology organized byDept. of Biotechnology atmBharathidasan University on Mar.2000.
- UGC sponsored Seminar on Microbial Genetics organized byDept. of Botany at Jamal Mohamed College on 2000
- BARC-IGCAR sponsored National Seminar on Atomic Energy, Ecology and Environment organized by Dept. of Zoology, Jamal Mohamed College on 7<sup>th</sup> – 8<sup>th</sup> Feb. 2001.
- DBT/CSIR/BARD sponsored Human Genome Project Conference organized by Department of Biotechnology, Bharathidasan University on 9<sup>th</sup> 10<sup>th</sup> Mar.2001
- National Symposium on Emerging Trends in Modern Biology organized by Dept. of Plant Biology and Biotechnology at Loyola College on 10<sup>th</sup> – 12<sup>th</sup> Jan. 2002
- UGC sponsored National Seminar on Public health and Waste Management organized by Seethalakshmi Ramaswamy College, Trichy on 04-07, Feb. 2002
- UGC/Insti. Of Bio Sciences sponsored National Seminar on Biotechnology in New Millenium organized by Vivekananda college of Arts and Science, Tiruchengode on 15-16 Feb. 2002
- Indian Academy of Sciences, Bangalore sponsored Seminar on Current concepts in Biological Research organized by National facility for Marine Cyanobacteria, Department of Microbiology, Bharathidasan University, Tiruchirappalli, Tamil Nadu on 27<sup>th</sup> and 28<sup>th</sup> February 2004.
- Dept. of Biosciences and research sponsored National Symposium on modern Biological Sciences (Symbios-'04) organized by SNMV Arts and Science College, Coimbatore on 08-09<sup>th</sup>, Oct. 2004
- TNSCST & NCSTC sponsored National Seminar on Medicinal Plants and Herbal Exhibition organized byDept. of Botany,KKC, Velur, Tamil Nadu on 12<sup>th</sup> Feb. 2005
- DBT sponsored National Symposium on Frontier Areas in Plant Biotechnology organized by Department of Botany and Microbiology Lady Doak College, Madurai, Tamil Nadu on 20<sup>th</sup> and 21<sup>st</sup> January 2006.
- TANSCHE and UGC sponsored Seminar on Curriculum Development and

- Evaluation organized by Jamal Mohamed College, Tiruchirappalli, Tamil Nadu on 2<sup>nd</sup> and 4<sup>th</sup> march 2006.
- UGC sponsored Regional Seminar on Recent trends in Biotechnology and its role in utilization of biodiversity organized by P.G. and Research Department of Botany, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu on 5<sup>th</sup> and 6<sup>th</sup> March 2007.
- UGC-SAP and DST-FIST sponsored National level seminar on Climate Change and Environmental Changes organized by Department of Botany, Annamalai University, Tiruchirappalli, and Tamil Nadu on 7<sup>th</sup> and 8<sup>th</sup> March 2009.
- NAAC Bangalore sponsored National seminar on Quality Enhancement in teaching, Research and Extensions in Higher Education Institutions - prospectus and Problems organized by Jamal Mohamed College, Tiruchirappalli, and Tamil Nadu on 15<sup>th</sup> and 16 April 2010.
- ICMR, New Delhi sponsored National Forum on Emerging Debates on Communicable Disease (EDCD) organized by Department of Microbiology, Jamal Mohamed College, Tiruchirappalli, and Tamil Nadu on 28<sup>th</sup> February 2011.
- UGC sponsored National level seminar on "Exploring techniques in Biological Sciences" organized by PG and Research Department of Botany at K.N. Government Arts College for Women, Thanjavur, Tamil Nadu, India on 14-15, Dec. 2011

## M.Phil and Ph.D Produced

M.Phil	52
Pursuing	02
Ph.D	09

# Seminar/ Symposium Organized

National Symposium on Current scenario in Microbial Technology on 28<sup>th</sup>,29<sup>th</sup> September, 2004 Sponsored by DST, New Delhi and TNSCST, Chennai, Tamil Nadu

## Minor and Major Research projects Completed

# Minor research Project

- ❖ Utilization of thermal power station waste (fly ash) for betterment of plant growth and productivity 1998 by: Tamil Nadu State Council for Science and Technology, Tamil Nadu.
- ❖ Utilization of dairy sludge (Aavin) for betterment of plant growth and productivity 2000 Sponsored by: Tamil Nadu State Council for Science and Technology, Tamil Nadu.

#### Major Research Project:

- ❖ Perpetuation and Germplasm maintenance of endangered medicinal plants of Pachamalai Hills through invitro techniques. 2006 – 2009 University Grants Commission New Delhi.
- ❖ Chemotaxonomic and Molecular studies in *Rubia* Species from Eastern Ghats of Tamil Nadu for exploitation of Anthraquinones. 2011 − 2014 Sponsored by: **University Grants Commission New Delhi.**

## List of publications in International and National Journals:

Kolar Amzad Basha, Sulaiman Sheik Mohamed, Mohamed Hussain Ghouse Basha, Mahaboob Khan Shareef Khan (2022) In vitro regeneration of shoot and

- roots of the wild folkloric medicinal plant Ammannia baccifera L. via indirect organogenesis from leaf explant cultures, Research Journal of Biotechnology. Vol 17 (3): 48-54
- **Kolar, A.B., Mohamed, S.S., Khan, M.S. and Basha, M.G., (2021).** Direct plant regeneration from mature nodal explants of *Andrographis echioides* (l.) Nees–a valuable medicinal plant. Plant Archives, 21(1), pp.1842-1848.
- Mohamed, S.S., Kolar, A.B., Malayaman, V. and Basha, M.G., (2019). Rapid in vitro multiplication and plant regeneration from Shoot tip explants of *Ammannia baccifera* L.: An important medicinal plant. Journal of Pharmacognosy and Phytochemistry, 8(3), pp.837-841.
- Malayaman, V., Sheik Mohamed, S., Senthilkumar, R.P. and Ghouse Basha, M., (2019). Analysis of phytochemical constituents in leaves of Bhumyamalaki (Phyllanthus debilis Klein ex Willd.) from Servaroy hills, Tamil Nadu. India. J. Pharm. Phytochem, 8, pp.2678-2683.
- Natarajan, S., Mishra, P., Vadivel, M., Basha, M.G., Kumar, A. and Velusamy, S., (2019). ISSR characterization and quantification of purpurin and alizarin in Rubia cordifolia L. Populations from India. Biochemical genetics, 57(1), pp.56-72.
- Malayaman, V., Sisubalan, N., Senthilkumar, R.P. and Ranjithkumar, R., (2017). Chitosan mediated enhancement of hydrolysable tannin in *Phyllanthus debilis* Klein ex Willd via plant cell suspension culture. International journal of biological macromolecules, 104, pp.1656-1663.
- Mohamed, S.S., Sisubalan, N., Malayaman, V. and Basha, M.H.G., (2017). High frequency and reproducible plant regeneration from nodal explants of *Ammannia baccifera* L. a folkloric medicinal plant for the production of vital compounds. International Journal of Botany Studies, 2(6), pp. 129-136.
- Sisubalan, N., Ramkumar, V.S., Pugazhendhi, A., Karthikeyan, C., Indira, K., Gopinath, K., Hameed, A.S.H. and Basha, M.H.G., (2018). ROS-mediated cytotoxic activity of ZnO and CeO 2 nanoparticles synthesized using the Rubia cordifolia L. leaf extract on MG-63 human osteosarcoma cell lines. Environmental Science and Pollution Research, 25(11), pp.10482-10492.
- Saalai Senthil, M.S., Sisubalan, N., Ghouse Basha, M., (2015). Folkloric medicinal plants studies in Kalrayan Hill Eastern Ghats of Tamil Nadu, India. *Int. J. of pure and Applied Bioscience*. **3 (6)**: 109-125. (Impact factor 4.374)
- Amzad Basha Kolar., Edwin Raj Esack., Vivekanandan, L., Ghouse Basha, M., (2015). Ethnomedicinal plants and traditional knowledge of Malayali tribe in Pachamalai hills, a part of Eastern Ghats, Tamil Nadu, India. *The Journal of Ethnobiology and Traditional Medicine*. 124: 936-957. (Impact factor 6.38)
- Pradeepkumar, R. Sisubalan, N. Ghouse Basha, M. and Anwardeen, I. (2015). Floristic and Medicinal plant survey at Karaivetti Bird Sanctuary, Tamil Nadu, India. Spatula DD Peer Reviewed Journal on Complementary Medicine and Drug Discovery. 5(1):27-34.
- Sisubalan, N. Amzad Basha K. and Ghouse Basha, M. (2014). Assessment of Alizarin, Purpurin and genetic diversity of *Rubia cordifolia* L. from Eastern Ghats of Tamil Nadu, India. *International Journal of Pharma and Biosciences*. 6(1): 1112-1122. (Impact factor 5.121)
- Vivekanandan, L. Amzad Basha Kolar, E. Edwin Raj, N. Sisubalan, M. Ghouse Basha (2014). In vitro regeneration and evaluation of genetic stability of *Rubia cordifolia* L.:An endangered medicinal plant of Pachamalai Hills, Tamil Nadu, India. *European Academic Research.* 5(7): 9991-10016 (Impact factor 3.4546)
- ➤ Vaidyanathan, D. Sisubalan, N and Ghouse Basha, M. (2014). Survey of ethnomedicinal plants and folklore studies on malayali tribals of vellakadai village a part of Shervaroy range in Eastern Ghats, Tamil Nadu. *International Journal of Recent Scientific Research*. 5(7):1368-1380 (Impact factor 5.114)

- Thirupathy, S. Sisubalan, N. and Ghouse Basha, M. (2014). Callus induction from a wild medicinal plant *Tephrosia hookeriana* Wight and Arn. *International Journal of Recent Scientific Research* 5(6):1027-1030 (Impact factor 5.114)
- Salai Senthilkumar, M.S. Vaidyanathan, D. Sisubalan, N. and Ghouse Basha, M. (2014). Medicinal plants using traditional healers and Malayali tribes in Jawadhu hills of Eastern Ghats, Tamil Nadu, India. Advances in applied science and research 5(2):592-304
- Malayaman, V.Ghouse Basha, M and Amzad Basha, K. (2014). An efficient callus induction from *Phyllanthus debilis* Klein ex Willd. A wild medicinal plant of Eastern Ghats, India. *Int. J. of pure and Applied Bioscience* 2 (2): 181-186 (Impact factor 4.374)
- Sisubalan, N. Velmurugan, S. Malayaman, V. Thirupathy, S. Ghouse Basha, M. and Ravi Kumar, R(2014). Ethnomedicinal studies on villages of Thenpuranadu, Tamil Nadu, India. Spatula DD Peer Reviewed Journal on Complementary Medicine and Drug Discovery4(1):41-47
- Salai Senthilkumar, M.S. Vaidyanathan, D. Sivakumar, D. and Ghouse Basha, M. (2014). Diversity of ethnomedicinal plants used by malayali tribals in yelagiri hills of Eastern Ghats Tamil Nadu India. Asian journal of plant science and Research4(1):69-80
- ➤ Vaidyanathan, D. Salai Senthilkumar, M.S. Sisubalan, N. And Ghouse Basha, M. (2014). Studies on ethno medicinal plants used by Malayali Goundar Tribals in Pachamalai of Eastern Ghats Tamil Nadu India. Advances in applied science and research5(1):244-253
- Amzad Basha Kolar and Ghouse Basha, M. (2014). *In vitro* tuberization and quantitative analysis of colchicines using HPLC in *Gloriosa superba* L. an endangered medicinal plant of Pachamalai hills, a part of Eastern Ghats, Tamil nadu. *Int J Pharm Bio Sci.*; **5 (2)**: (B) 300 310 (Impact factor 5.121)
- ➤ Thirupathy, S. Sisubalan, N. Malayaman, V. and Ghouse Basha, M. (2014). Phytochemical analysis and anti bacterial activity of *Tephrosia hookeriana* wight and arn against human pathogens. *Int. J. of Pharmaceutical Sci. Rev. and research.* 24(2), 53-56. (Impact factor 2.191)
- Thirupathy, S. Malayaman, V. Sisubalan, N. and Ghouse Basha, M. (2014). Antibacterial activity of *Tephrosia hookeriana* wight and arn. leaf explants. *Int.J.Applied biology and Pharma.Tech.* **5** (1), 85-90. (Impact factor 0.9967)
- ➤ Vaidyanathan, D.Salai Senthilkumar, M.S and Ghouse Basha, M (2013). Studies on ethnomedicinal plants used by malayali tribals in kolli hills of Eastern ghats, Tamil Nadu, India. Asian journal of plant science and research. 3(6)-29-45
- Thirupathy, S. Vaidyanathan, D. Salai Senthil Kumar, M.S. and Ghouse Basha, M (2013). Survey of ethnomedicinal plants, Veeramalai hills at Manapparai Taluk, Tiruchirappalli, Tamil Nadu, India. *Advances in applied science research.* 4(6)-90-95.
- Amzad Basha Kolar and Ghouse Basha, M (2013). Survey of medicinal plants of pachamalai hills, a part of eastern ghats, Tamil nadu. *International Journal of current research* 5(12)-3923-3929. (Impact factor 5.349)
- AmzadBashaKolar, Vivekanandan, L., and GhouseBasha, M (2008). Invitro regeneration and flower induction on *Solanum nigrum* L. from pachamalai hills of Eastern Ghats. *Plant tissue culture & Biotech* 18(1) 43-48.
- Saravanan, R., GhouseBasha, M, AmzadBasha, and Vivekanandan, L. (2007). Invitro culture studies of a medicinal plant- *Pedalium murex.Indian J. Plant. Physiol.*12 (2):178-180.
- Mohamed Shajahan, A., GhouseBasha, M., and Kaliamoorthy, J. (2004). Etiology of Microbial ocular infection and its susceptibility to various antibiotics *Asian*. *J. Microbial, Boitechnol. Environ Sci.* (Ajmbes).

- ➤ GhouseBasha, M. and Ramachandran, B. (2004). Influence of tannery sludge on seed germination and morphometric parameters of two legumes. *J.Poll.Res.* 23(2)-387-386.
- ➤ GhouseBasha, M and Adhiyaman, M. (2004). Impact of treated Tamil Nadu paper Factory (TNPL) effluent on morphometric parameters of two legumes. *J.Poll.Res*. 23(2)-387-390.
- ➤ GhouseBasha, M and Sridhar, R. (2003). In fluence of flyash on morphometric parameters and basic biomolecular constituents in two legumes. J. Swamy. Bot. Club. 20:39-42.
- ➤ GhouseBasha, M (2003). Isolation of antibiotic resistant bacteria from bronchial washings of infected patients (2003). Asian. J. microbial. Biotech.
- ➤ GhouseBasha, M and SoosaiManickam, A. (2003). Isolation of antibiotic resistant E.coli from urinary tract infected patients. *Asian J. Microbial. Biotech*.
- ➤ GhouseBasha, M and Vivekanandan, M. (2002). Impact of rhizobial strains inoculation on root nodule biochemistry of three tropical legumes. *Bulletin of pure and Appl. Sci.*, 17:21-25.
- GhouseBasha, M and Vivekanandan, M. (2002). Response of *Vignamungo* and *V. unguiculata* to inoculation of rhizobial strains from extreme environments on CO<sub>2</sub> fixation and morphometric parameters. *J. Ecophysiol. And Occup. Hlth* 2:13-19.
- ➤ GhouseBasha, M and Vivekanandan (2002). Impact on rhizobial inoculation on nitrogen metabolism related enzymes in two summer legumes. J. *Ecophysiol and Occup. Hlth.* 2: 105-116.
- ➤ GhouseBasha, M. and Vivekanandan (2001). Saline tolerance in rhizobial isolates from extreme environments. *Philippines J. Science*, 130 (2) 135-138.
- ➤ GhouseBasha, M. and Vivekanandan (2000). Potency of rhizobial strains from different environment to increase economic productivity in some legumes. *PhilpipinesJ.Science*, 129(2) 131-134.

#### **Personal Details**

Date of Birth : 01.10.1962

Native Place : Madurai

Designation : Associate professor & Head

Date of Appointment : 05.02.1987

Official Address : PG & Research Department of Botany

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College with Potential for Excellence

Accredited (3<sup>rd</sup> Cycle) with 'A' Grade by NAAC DBT Star College Scheme & DST-FIST Funded

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