

CURRICULUM VITAE

Name: Dr. Mukhtar Ahmad Bhat (*PhD, PDF*)
Office Address: Department of Botany, Amar Singh College Srinagar.
Residential Address: Shadipora Bazar, Sumbal, Bandipora Kashmir
Date of Birth: 07- 10- 1977
Marital Status: Married
Gender: Male
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Present Engagement:

**Working as Associate Professor in Department of Botany,
Amar Singh College Srinagar, Kashmir.**

Qualification:

PDF (Postdoctoral Fellow) from II Sc. Bangalore, DBT Funded)

Worked at:

Environmental Biotechnology Lab. Division of Environmental Sciences,
Sheri-Kashmir University of Agricultural Sciences and Technology of
Kashmir. Shalimar Campus, Srinagar- 191121, INDIA
(From 2007-2009)

**PDF Project: "Exploitation of Growth Promoting Potential of Rhizosphere Microflora of
Saffron (*Crocus sativus* L.) for use in Sustainable Crop Production"**

Ph.D. Botany

Session Jan. 2003- Dec. 2006

Hamdard University, New Delhi-110 062, INDIA

**Ph.D. Project: "In Vitro Morphogenetic and Biochemical Studies of *Solanum nigrum*
L. Under Salt Stress"**

M.Sc. Botany

Session 2000-2002
1st Division
Hamdard University, New Delhi-110 062, INDIA

M. Sc. Project: “Responses of *Calendula officinalis* L. to flyash amended soil”

B.Sc. General
Session 1996-2000
S.P. College Srinagar, University of Kashmir

Research skills:

Tissue culture techniques, *in vitro* mutagenesis, Microbiological techniques (Culture establishment, Isolation and purification of Microbial cultures etc), Protein isolation, enzyme assays and enzyme kinetics, GEL Electrophoresis, Phytochemistry (Extraction and isolation of active constituents), Biochemical analysis, Spectrophotometry, Flame photometry, Centrifugation, IRGA (infra red gas analyzer), Lambda 20 spectronic, HPLC, HPTLC, Genomics, Bioinformatics, Animal cell culture etc.

Teaching Experience:

Teaching experience of undergraduate level from 2009 till date

1. Govt. Degree College, Beerwah from 2009-2013
 2. Amar Singh College Srinagar from 2013-2022
 3. Govt. Degree College Sogam, Kapwara from 2022-2025
 4. Amar Singh College Srinagar from 2025 till date
- Postgraduate teaching assistance ship in the Department of Botany Hamdard University, New Delhi (From 2003 - 2005): **2 Years**
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Awards:

1. Awarded HNF (Hamdard National Foundation Fellowship) from April 2005-September 2006
 2. Awarded **Postdoctoral Fellowship** from 2007-2009 by Indian Institute of Sciences Bangalore funded by Department of Biotechnology Govt. of India
 3. Worked on a project “ **Vigyan Utsav for Scientific Learning**” (2016), funded by Department of Science and Technology, Govt. of India
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Reviewer of peer reviewed international Journals:

1. International Journal, ***In vitro* cellular and Developmental Biology-Plant**, Springer Publishers, **New York**
 2. International Journal, **Archives of Agronomy and Soil Sciences**, London
 3. International Journal, **Plant Cell Tissue and Organ Culture**, Springer Publishers, **Netherland**
 4. **International Journal of Agronomy and Plant Production**
 5. **Journal of Herbs, Spices & Medicinal Plants**
 6. **Journal of Crop Improvement**
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Member of Editorial Board:

Athens Journal of Sciences, ISSN: 2241-8466

E-Content development expert for EMMRC, University of Kashmir

As a recourse person: In one day seminar on “Global Science for Global wellbeing” organized by GDC Sogam, Kapwara in collaboration with Indian Science Congress Association, Srinagar Chapter on March 6 2023.

Training/ orientation programmes attended:

1. Attended four week UGC-sponsored 54th general orientation course from 20th Jan. 2011 to 19th Feb. 2011, conducted by Academic Staff Colleges, University of Kashmir, Srinagar
2. Attended training orientation course for NSS Programme Officers held from 16th Jan. 2013 to 22nd Jan. 2013 at Institute for Development and Communication Chandigarh.
3. Attended First 3 week's Refresher course in “Disaster Management” from 9th Feb- 2nd March 2015 at UGC Human Recourse Development Centre, Jamia Milia Islamia, New Delhi.
4. Attended 21 days training program on “Advance approaches in Genomics Bioinformatics and Animal Cell culture Technology” at the Division of

Biotechnology, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-Kashmir from 10 to 31st August 2015.

5. Attended 3 weeks interdisciplinary Special Summer School/Refresher course, organized by UGC Human Recourse Development Centre, University of Kashmir, Srinagar from 20th July-09th August, 2017.
6. Attended 2 days training program on “disaster Preparedness” from 23rd March to 24th March 2018, organized by Amar Singh College Srinagar.
7. Participated in 5 days online Faculty Development Programme in “Machine Learning and Data Sciences” from 31/08/2020 to 04/09/2020, organized by Department of Computer Science and Engineering in technical association with IEEE Bangalore Section.
8. Attended 2 weeks online National Faculty Development Programme in “Earth and Environmental Sciences” from 21/09/2020 to 05/10/2020, organized by GDC Pampore in collaboration with UGC- Human Recourse Development Centre, University of Kashmir, Srinagar.
9. Attended 2 weeks winter school (ID) on “Innovation in Science Teaching” organized by Sri Pratap College, Cluster University Srinagar (Department of Higher Education) from 3rd to 17th Feb. 2021
10. Participated in second online 2 week Refresher course in “Human Rights and Social Inclusion” (Interdisciplinary) from 3rd August - 14th August 2021, organized by UGC Human Recourse Development Centre, Jamia Milia Islamia, New Delhi.
11. Attended 7 days Faculty Development Programme on “Hands on Basic molecular Biology Techniques” jointly organized by GDC Eidgah Srinagar and Department of Bio-resources University of Kashmir Srinagar under the banner of Azadi Ka Amrut Mahaotsav celebration from 20th -26th September 2022.

Publications

Books: **02**

Research papers: **16**

Paper/Poster presentations: **22**

Conferences attended: **21**

Books:

1. **Bhat. M A & M.Y. Zargar** (2014). Rhizosphere Microflora of saffron (*Crocus sativus* L.); Isolation and characterization for use in sustainable crop production. Scholer's Press, Germany. (ISBN: 3639707133)

2. **Bhat. M A** & Khalid Hakeem (2012). Flyash- An environmental Hazard: A case study on *Calendula officinalis* L. Lambert Academic Publishing Germany. (ISBN: 9783848435142)
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Research papers

1. **Bhat. M A.**, Sayeed, A., Junaid.A., Mujib, A and Mahmooduzzafar (2008). Salinity Stress Enhances Production of Solasodine in *Solanum nigrum* L. Chem. Pharm. Bull. 56:1, 17-21. (Impact Factor: 1.564)
2. **Bhat. M A.**, Parvaiz Ahmad, Mujib, A Junaid.A., Mahmooduzzafar & Zargar M.Y. (2009) Efficient Plant regeneration through leaf, *In vitro* Flowering and Biochemical studies during morphogenesis of *Solanum nigrum* L., Journal of Phytology, 1(3): 126–135
3. **Bhat. M A.**, Junaid.A., Mujib, A and Mahmooduzzafar (2004). Biotechnological studies to enhance the mass propagation of *solanum nigrum* L., an anti-inflammatory herb. In: Role of Biotechnology in medicinal and aromatic plants. Khan, I. A. and Khanum, A., (eds.) Vol. XI. Ukaaz Publications, Hyderabad. pp, 107-113
4. **Bhat, M A.**, Mujib, A., Junaid.A. & Mahmooduzzafar (2010). *In vitro* regeneration of *Solanum nigrum* L., with enhanced production of solasodine Biologia Plantarum, 54 (4): 757-760. (Impact Factor: 1.74)
5. **Bhat, M A.**, Jamshieed, S., Mujib, A., Azooz., M.M., Mahmooduzzafar, Junaid, A. & Ahmad, P. (2013). Plant Tissue Culture: A useful measure for the screening of salt tolerance in plants. In: *Salt stress in plants: Signaling, Omics and adaptations*. Parvaiz et al eds. Springer publications, New York., pp 465-4
6. **Bhat, MA.**, Lone, H. A & Mehraj S. S. (2018). Nutrient Remobilization During Senescence. In: *Senescence Signalling and Control*, Maryam Sarwat and Narendra Toteja. Elsevier publishers., pp 227-237 (ISBN: 9780128131879)
7. Junaid, A., **Bhat, M. A.**, Mujib, A & Sharma, M.P. (2004). Somatic embryogenesis studies in *Catharanthus roseus* (L.) G. Don: an anti-cancerous plant. In: Role of Biotechnology in medicinal and aromatic plants. Khan, I. A. and Khanum, A., (eds.) Vol. XI. Ukaaz Publications, Hyderabad, pp.98-106
8. Junaid, A., Mujib, A **Bhat, M. A.**, Ilah, A & Sharma, M.P. (2005). Embryogenesis in *Catharanthus roseus*: some external factors role in proliferation, maturation and germination of embryos In: *somatic embryogenesis* (eds: A. Mujib and J. Samaj). Springer publication Germany .pp 261-270.

9. Junaid, A., Mujib, A, **Bhat, M. A.**, & Sharma, M.P. (2006). Somatic embryo proliferation, maturation and germination in *Catharanthus roseus*. Plant cell tissue and organ culture.84:325-332. (Impact Factor: **2.61**)
10. Junaid, A., **Bhat, M. A.**, Mujib, A & Sharma, M.P. (2006). Plant propagation and bioreactors, application in tissue culture: In Plant tissue culture and Biotechnology. Trivedi P.C.(eds). Pointer publications Jaipur .pp 105-116.
11. Junaid, A., Mujib, A., **Bhat, M. A.**, Sharma, M.P. J. & AMAJ (2007). Somatic embryogenesis and plant regeneration in *Catharanthus roseus* Biologia Plantarum 51 (4): 641-646. (Impact Factor: **1.74**)
12. Husaini, A.M., Aquil, S., **Bhat, M.A.**, Qadri, T., Kamaluddin & Abdin M.Z (2008). A high efficiency direct somatic embryogenesis system for Strawberry (*Fragaria x ananassa* Duch.) cultivar Chandler. J. Crop Sci. Biotech. 11(2): 107-110
13. Junaid A., Khan, SH., Siddiqui, ZH, Fatima, Z., Maqsood, M., **Bhat, MA.**, Nasim, SA., Ilah, A., Ahmad, IZ., Khan, SA., Mujib A., & Sharma, MP (2010). *Catharanthus roseus* (L.) G. Don. An important drug: Its applications and production. Pharmacie Globale (IJCP), 4 (12)
14. Helal A. Lone, **Mukhtar A. Bhat** and Ashok A. Pandit (2021). Impact of changing vegetation cover on some of the physical characteristics of forest soils of Langate forest division of Kashmir Himalaya. International Journal of forest, soil and Erosion, Vol. 11, November 3, 2021, pp-75-86
15. Helal A. Lone, Mukhtar A. Bhat and G.H. Rather (2021). Impact of Grazing on Productivity of Grasslands of Kashmir Himalaya. International Journal of forest, soil and Erosion, Vol 11 No. 4 (2021) pp 102-110.
16. Shamim A. Dar, M. Imran Malik, **Mukhtar A. Bhat** (2020). Fuel wood consumption and deforestation in lidder catchment in Kashmir Himalayas. Journal of critical reviews, vol. 7, issue 18, 5089-5096

Papers/posters presented in conferences:

1. **Bhat, M.A.**, Mahmooduzzafar, Siddiqi, T.O, T.O. Junaid, A., & Mujib, A. Effect Of Fly ash On Pigment Contents And Biochemical Responses Of *Calandula officinalis* L. National symposium on plant Biology and Biodiversity in changing environment, Dec. 29-31, 2003 held at Jamia Hamdard New Delhi, pp. 44.
2. **Bhat, M.A.**, Junaid, A., Mahmooduzzafar and Mujib, A. *In Viro* studies to enhance the mass production of Curcuma longa: An important medicinal herb. (Abstract accepted in 'Herbal drugs and Environmental Pollution ' A satellite session of the third

international conference of plants and environmental pollution, 04 -Dec 05. organized by Dept. Of Botany Jamia Hamdard.

3. **Bhat, M.A.**, Junaid, A., Wani, M. A., Zohra, F., Mahmooduzzafar and. Mujib. A. *In Vitro* regeneration of shoots and root induction from rhizome of *Curcuma longa* (Abstract No. AEB-01). National symposium Biohorizon 2003, organized by Biomedical Engineering and biotechnology IIT-Delhi.
4. **Bhat. M A.**, Mujib, Mahmooduzzafar & Zargar M.A. (2008). Extraction, Isolation and Quantification of Solasodine in Elicitor treated Cultures of *Solanum nigrum* L. 4th Science Congress 12-14 Nov 2008, organized by University of Kashmir. pp.380
5. **Bhat. M A.** & Zargar M.A. (2008). Isolation and characterization of Rhizosphere microflora of Saffron (*Crocus sativus* L.) for use in sustainable crop production. 28th Annual Session of the Academy of Environmental Biology and National Symposium on Environmental Stress & Bioresource Management, November 20-22, 2008, pp.46
6. **Bhat. M A.** (2015). Effect of salt stress on production of solasodine in *Solanum nigrum* L. 11th JK Science congress, Oct. 12-14, 2015, Organized by University of Kashmir, Srinagar.
7. Junaid, A., Jaiswal, S J., Ilah A., **Bhat, M. A.**, Mahmooduzzafar. Sharma, M.P. and Mujib, A *In vitro* Growth and Morphogenesis of *Dracaenasandarina* under Cadmium stress. National symposium on plant Biology and Biodiversity in changing environment, Dec. 29-31, 2003 held at Jamia Hamdard New Delhi, pp. 42.
8. Wani, M.A., Zargar, M.Y., Wani, A.H., **Bhat, M.A.**, Khan, M.A, Parry, S.N., Khursheed, S & Ahmad J. Isolation and characterization of rhizosphere bacteria from *Pinus wallichiana*. National symposium on plant Biology and Biodiversity in changing environment, Dec. 29-31, 2003 held at Jamia Hamdard New Delhi, pp.43.
9. Junaid, A., **Bhat, M. A.**, Mujib A & Sharma, M.P. *In vitro* propagation and related biochemical changes in *Draceana sanderina* under Pb⁺⁺ (Abstract No. AEB-38). National symposium Biohorizon 2003 organized by Biomedical Engineering and biotechnology IIT-Delhi.
10. **Bhat. M.A.**, Plant secondary metabolites, Application of *in vitro* cultivation processes, 31 May 2005, Seminar paper presented in Deptt. Of Botany, Jamia Hamdard New Delhi.
11. **Bhat. M.A.**, Strategies to improve salt tolerance in plants: In vitro approach, 2006 Seminar presented in Deptt. Of Botany, Jamia Hamdard New Delhi.
12. Hakeem K., **Bhat, M. A.**, Junaid, A., Mujib A. Revival of callusing, embryogenetic potential and effect of various temperatures on somatic embryos in *Catharanthus roseus* L.G. Don. 2nd J & K Science Congress, Organized by University of Kashmir 25th –

27th July 2006

13. Zargar MY & **Bhat MA**. Exploitation of growth promoting potential of Rhizosphere microflora of Saffron (*Crocus sativus* L.). National seminar ' Technological innovations in Saffron' organized by SKUAST-K, November 25-26, 2010.
14. **Bhat, M.A** & Zargar M.Y. Impact of Rhizosphere microflora of Saffron (*Crocus sativus* L.) for use in sustainable crop production. National seminar on "Advances in Biosciences" organized by Faculty of biosciences, Amar singh college Srinagar on 12th June 2012.
15. **Bhat, M.A** (2011) Plasmids: An E-Content presented at EMMRC, University of Kashmir
16. **Bhat, M.A** (2012). Vegetative propagation; artificial Methods and their economic values: An E-Content presented at EMMRC, University of Kashmir.
17. **Bhat, M.A** (2012). Vegetative propagation; natural Methods and means: An E-Content presented at EMMRC, University of Kashmir.
18. **Bhat, M.A** (2013). Saffron (*Crocus sativus* L.): morphology, cultivation and economic values: An E-Content presented at EMMRC, University of Kashmir.
19. **Bhat, M.A** (2015). Flyash- An environmental Hazard: presented at UGC Human Recourse Development Centre, Jamia Milia Islamia, New Delhi
20. **Bhat, M.A**. Plant Tissue Culture, Basic Concepts and Application. Paper presented in 3 days workshop organized by Kashmir Environment and Social organization, Bandipora, Kashmir and sponsored by Department of Science and Technology, New Delhi, Govt. of India, at Govt. Boys Hr. Sec. School Zachaldara, Kupwara from 12-14 Dec. 2016.
21. **Bhat, M.A**. Isolation and characterization of Rhizosphere microflora of Saffron (*Crocus sativus* L.) for use in sustainable crop production. Two days international conference on Recent Developments in Sciences, Humanities and Management-2018, held on 17-18th April 2018 at Amar Singh College campus, Cluster university Srinagar.
22. **Bhat M.A**. Flyash: an environmental Hazard. Two days international conference on 'Science popularization, Extension and communication, organized by GDC Bemina on 20-21 May-2025

Conferences attended:

1. XXIV Annual Indian Botanical Society Conference (December 29-31, 2003) held at Jamia Hamdard University New Delhi.
2. National Symposium on Plant Biology and Biodiversity in Changing Environment (December 29-31, 2003) held at Jamia Hamdard University New Delhi.

3. National Workshop on “Institute-Industry Interaction on Research in Unani Medicine to Identify Areas of Collaboration” (January 7-9,2004) held at Jamia Hamdard University New Delhi.
4. National seminar on Application of modern analytical techniques in chemical and biological science organized by Deptt. Of Chemistry Jamia Hamdard and Indian Society of Analytical scientists Delhi chapter, held on 9th Feb. 2005 Jamia Hamdard New Delhi.
5. Herbal drugs and Environmental Pollution ‘ A satellite session of the third international conference of plants and environmental pollution, 04 -Dec 05. Organized by Dept. Of Botany Jamia Hamdard
6. Five days summer school on “ basic Genetic Engineering ” organized by Department of Botany, Faculty of Science, Jamia Hamdard on March 19-23, 2006
7. National seminar “ Biotechnology and Human Welfare” organized by Department of Biotechnology, Jamia Hamdard on March 19-20, 2007
8. 4th Science Congress 2008 “ Science Technology and Society” organized by University of Kashmir 12-14 Nov. 2008
9. 28th Annual Session of the Academy of Environmental Biology and National Symposium on Environmental Stress & Bioresource Management, organized by Department of Botany, Jamia Hamdard New Delhi November 20-22, 2008,
10. Attended a workshop on “**India Innovation Growth Programme 2014**” on 30th Jan 2014 organised by FICCI and DST, at Sher-i-Kashmir International Conference Centre, Boulevard Road, Srinagar.
11. Participated in International conference on “**Regional Development, Sustainability and Socio-economic Development in Jammu and Kashmir**” organized by Amar Singh College, Srinagar on 5th – 6th June 2013.
12. Participated in National seminar on “**Faculty Development in Higher Education**” jointly organized by Amar Singh College, Srinagar and Government Degree college Vailoo, Larnoo, Anantnag on 18th September 2013.
13. Attended three day Science Academies Lecture Workshop on “**Himalayan Biodiversity and Bioresource: Mapping, Utilization and Conservation**” organized by the Department of Botany, University of Kashmir from May8-10 2014.

14. Participated in two day state level Seminar **“Role of Mathematical Science in developing Creative thinking”** organized by Jammu and Kashmir Institute of Mathematical Sciences, Srinagar (25th – 26th Nov. 2015)
15. Participated in one day online workshop on Planning and organizing Research using Elsevier tools, organized by Department of Bioresource in collaboration Elsevier on 26th April 2020
16. Participated in one day Web Dialogue on Climate alternative technologies, organized by CHINAR and Global Foundation for Advancement of Environment and Human welfare on 22 August 2020
17. Participated in the webinar on Phytoremediation: A Sustainable Approach for re-vegetation of Heavy metal polluted Land, organized by IQAC Amar Singh College Srinagar on 29th August 2020
18. Participated in the webinar on Kashmir and Kashmiriyat: A Historical prospective, organized by IQAC Amar Singh College Srinagar on 27th August 2020
19. Participated in the “International webinar on Plant Physiological Paradigms towards Agricultural Sustainability under Climate Change” organized by Bihar Agricultural University, on September 15,2020
20. Participated in the International webinar series on *“Plant Tissue Culture: Current trends and Future Prospective* organized by Department of Biotechnology, GSFC University, Gujrat, India, from 17th to 19th June 2021.
21. Participated in the 2days National Webinar on “Remote Sensing & GIS Applications for the Botanists” held on 21st & 22nd September,2021, organized by Botanical Advanced Association, Gujarat (BAAG), Botany Department, M.G. Science Institute, Ahmadabad, Indian Society of Geomatics –Ahmadabad Chapter (ISG-AC), Indian Society of Remote Sensing, Ahmadabad Chapter (ISRS-AC), TREES (Training and Research in Earth Eco-System), Initiative of Space Applications Centre Scan point Geomatics Ltd.

Declaration:

I hereby declared that information given above is correct.

Dr. Mukhtar Ahmad Bhat



Dr. Mukhtar Ahmad Bhat

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ARTICLES

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