FACULTY PROFILE

NAME	**:**	**Dr. Navya, H. M.**
Designation	:	Assistant Professor
Department	:	Biotechnology
Qualification	:	M.Sc., M.Phil., Ph.D., Postdoc.
Areas of Specialization	:	Molecular plant pathology; plant protection; Plant extracts and Bioactive compounds; aflatoxin management; Edible coatings; Postharvest management; bio-fertilizer
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Vision

Provide knowledge and creating scientific awareness in curious young minds through teaching and research in turn helpful in solving contemporary issues of biotechnology.

Sl. No.	Degree	Specialization/ Subjects	University
1	**Ph.D.**	Applied Botany	University of Mysore
2	**M.Phil.**	Seed Technology	University of Mysore
3	**PG**	Botany	Bangalore University
4	**UG**	Chemistry, Botany, Zoology	Bangalore University

Professional Details (Academic/Research Experience)

Sl. No.	Designation	Institution/University	From	To
1	Assistant Professor	Department of Studies in Biotechnology, Shivagangotri, Davangere University, Davangere-07	15-07-2019	Till date
2	Post-Doctoral Fellow under National Post-Doctoral Fellowship (N-PDF) funded by DST-SERB, India.	CSIR-CFTRI, Mysore	March 2016	March 2018
3	Senior Research Fellow under DBT funded major	University of Mysore	November 2008	June 2011

	research project at Department of Biotechnology, University of Mysore			

Areas of Research Interest:	
1.	Molecular plant pathology; plant protection; Plant extracts and Bioactive compounds
2.	Postharvest management of fruits and vegetables; edible coatings
3.	Aflatoxin management; bio-fertilizer

Research Projects:

Sl. No.	Title of the Project	Funding Agency	Project Budget	Period	Status
1.	Understanding the mechanism of action for prevention of postharvest losses of bell pepper using plant extracts.	DST-SERB	18 lakhs	March 2016 TO March 2018	completed

Research Publications:

a) International/National Journals

1	Seed-Phytopriming with Decalepis hamiltonii Extracts Improves Plant Health by Suppressing Aspergillus flavus Infection in Groundnut. **H.M. Navya,** J. Naveen,P. Hariprasad,G. Hithamani,Prabhurajeshwar &S.R. Niranjana Journal of Biologically Active Products from Nature Volume 11, 2021 - Issue 1. Pages 70-81.
2	Pathological, biochemical and molecular variability of Colletotrichum truncatum incitant of anthracnose disease in chilli (Capsicum annuum L.). Jayapala Naveen, **Navya, H. M.**, Gavirangappa Hithamani, Puttaswamy Hariprasad, Siddapura Ramachandrappa Niranjana. 2021. Microbial Pathogenesis Volume 152.
3	Aflatoxin Contamination in Agricultural Crops and Their Eco-Friendly Management- A Review. **Navya H M,** Prabhurajeshwar, S R Niranjana, International Journal of Engineering Research & Technology, 09(06), 2020.
4	Characterization of non-aflatoxigenic strains of *Aspergillus flavus* as potential biocontrol agent for the management of aflatoxin contamination in groundnut. **Navya, H. M.,** Naveen, J., Hariprasad, P. and Niranjana, S. R. Microbial Pathogenesis**.**102: 2017. 21-28.
5	Beneficial rhizospheric microorganisms mediated plant growth promotion and suppression of aflatoxigenic fungal and aflatoxin contamination in groundnut seeds.**Navya, H. M.,** Naveen, J., Hariprasad, P. and Niranjana, S. R. Annals of Applied Biology. 167: 2015. 225-235
6	Natural occurrence of aflatoxin and aflatoxigenic and non-aflatoxigenic *Aspergillus flavus* in groundnut seeds across India. **Navya, H. M.,** Hariprasad, P., Naveen, J., Chandranayaka, S. and

	Niranjana, S. R. African Journal of Biotechnology. 12: 2013. 2587-2597.
7	Morphological, physiological and biochemical characterization of *Aspergillus flavus* isolates from groundnut (*Arachis hypogaea* L.). International Journal of Recent Scientific Research. **Navya, H. M.,** Naveen, J., Hariprasad, P., Niranjana, S. R. 5(7): 2014. 1286-1292.
8	Advantage of using PSIRB over PSRB and IRB to improve plant health of tomato. Hariprasad, P., **Navya, H. M.,** Chandranayak, S. and Niranjana, S. R. Biological Control. 50 (3). 2009. 307-316.
9	First report of *Diaphorthe masirevicii* causing leaf blight of *Gloriosa superba* in India. Naveen, J, Navya H. M., Hithamani, G., Niranjana, S. R., Hariprasad, P. New Disease Reports. 37: 2018. 13.
10	Naveen, J., Hariprasad, P., **Navya, H. M.** and Niranjana, S. R.. Induction of resistance in chilli seedlings against anthracnose disease by crude cell wall elicitors from *Colletotrichum capsici* isolates UOM-18. International Journal of Pharma and Bioscience 4: 2013. 304-14.
11	Naveen, J., **Navya H.M.,** Hariprasad, P., Hithamani, G., Niranjana S.R. 2019. Rhizobacteria *Bacillus* spp. induced resistance against anthracnose disease in chili (*Capsicum annuum* L.) through activating host defense response. Egyptian Journal of Biological Pest Control.1-9.
b) BOOK CHAPTER	
1	Potential Phytoextracts and essential oils for anthracnose disease: A postharvest management in fruits and vegetables. Weser Books No. 79737, Advances in Agriculture and Life Sciences, ISBN: 978-3-96492-132-1, 2020.
2	Natural resource management and environmental security Vol-1/Bioproduction of biodiesel using different strains of microorganisms Integrated publication, 2020. ISBN: 1391-9407
Conference/ Workshops/Trainings attended/organized:	
	• **Workshop:** • Completed Two weeks online workshop " Comprehensive e-Learning to e-Training guide for Administrative Work " conducted by MHRD, Govt of India, Pandit Madan Mohan Malavia National Mission on Teachers and Teaching, from 25th May to 05th June, 2020. • **Faculty Development Program:** • Completed Two weeks Faculty Development Programme " Advanced Concepts for Developing MOOCS " conducted by MHRD, Govt of India, Pandit Madan Mohan Malavia National Mission on Teachers and Teaching, from 2nd July to 17th July 2020. • Completed One week Faculty Development Program Development of Careers in Higher Education in India in the 21st Century, conducted by Guru Angad Dev Teaching Learning centre of MHRD under PMMMNM for Teaching and Missions, from 23rd June to 27th June 2020. • Completed National level Three days faculty development Programme on Hybrid

Classroom: ICT tools for teaching and learning. Conducted by Research Culture Society and Late. M.C.Parmar B.Ed., College, Vadodara from 29th May to 31st May 2020.

- Attended one week Faculty Development Program from 6th -13th January 2020 organized by Davangere University Shivagangotri, Davangere.

•Short Term Course:

- Completed UGC-HRDC, Govt of India One week Short Term Course on Challenges in Discovery of Antiviral Agents and vaccines, conducted by Jawaharlal Nehru Technological University, Hyderabad, from 8th June to 13th June 2020.

- Completed UGC-HRDC, Govt of India 3 days Online Short Term Course on Research Methodology conducted by Osmania University, Hyderabad, from 15th June to 17th June 2020.

List of Posters presented in International/National Conferences:

1. Navya, H. M., Chandra Nayaka, S., Hariprasad, P., Uday Shankar, A. C., Niranjana, S. R. and Prakash, H. S. "Screening for the incidence of aflatoxigenic and non aflatoxigenic isolates of *Aspergillus flavus* in groundnut and its effect on seed quality". Poster presented in "National seminar on Molecular Plant Pathology and Biotechnology for sustainable Crop Production" November 28-29, 2007 at the Department of Applied Botany and Biotechnology, University of Mysore, Mysore, India (First prize).
2. Navya, H. M. and Niranjana, S. R. 2009. "Toxigenic *Aspergillus flavus* in groundnut and its effects on seed quality parameters". Presented at the "5th International conference on Plant Pathology in the Globalized Era" organized by Indian Agricultural Research Institute, New Delhi, India in association with IPS on 10-13th November, 2009.
3. Navya, H. M. and Niranjana, S. R. 2010. "Biological management of aflatoxin fungi in groundnut (*Arachis hypogaea* L.) using antagonistic rhizobacteria". Presented at 3rd conference on Biopesticides: Emerging Trends – Biopesticides in Food and Environment Security, on October, 20-22, 2010 at CCS Haryana Agricultural University, Hisar.
4. Navya, H. M. and Niranjana, S. R. 2009. Participated in "First Asian PGPR Congress for sustainable agriculture" organized by Acharya N. G. Ranga Agriculture University, Rajendranagar, Hyderabad, AP, India, from 21st-24th June, 2009.
5. Navya, H. M. and Niranjana, S. R. 2012. "Detection of aflatoxigenic fungi in groundnut (*Arachis hypogaea*, L.) and its Biological management. Presented at the "3rd Global conference on Plant Pathology for Food Security" organized by Rajasthan College of Agriculture, Udaipur, India on 10-13th January, 2012.

International/National Conferences attended:

1. **Navya H. M. 2008.**Attended 30th Annual conference and Symposium on Advances in Biotechnology for Plant Protection Organized by Department of Studies in Applied Botany and Biotechnology University of Mysore during 17-19th November 2008.

2. **Navya H. M. 2009.** Attended DST-FIST sponsered National Conference on "Plant Biodiversity and Bioprospecting" Organized by Department of Studies in Applied Botany and Biotechnology University of Mysore during 16-17th March 2009.

3. **Navya H. M.** 2016. Attended 85th Annual meeting of Society of Biological Chemists (India) held during 21st to 24th November 2016 at CSIR-Cental Food Technological Research Institute.

4. **Navya H. M. 2019.** Atended National conference on phytochemicals and microbial bioactive compounds- role in agricultura and human welfare (PMBC-2019) held on 3rd and 4th October; organized by Department of Microbiology and Biotechnology, Bangalore University, Bangalore.

Achievements/Awards / Abroad visit / Professional Membership	
1.	**First prize for Best poster presentation award** in "National seminar on Molecular Plant Pathology and Biotechnology for sustainable Crop Production" November 28-29, 2007
2.	**Second prize for Best poster presentation award** at 3rd conference on Biopesticides: Emerging Trends – Biopesticides in Food and Environment Security, October, 20-22, 2010 at CCS Haryana Agricultural University, Hisar.
3.	**Life Member** –The Indian Science Congress Association
4.	**Life member -** Association of Food Technologists of India (AFSTI)