



### **Curricula Vitae**

**NAME** : **Dr. UDHAV NARBA BHALE**

**FATHER'S NAME** : **NARBA KERBA BHALE**

**DATE OF BIRTH** : 18<sup>th</sup> March 1974

**FULL POSTAL ADDRESS** : Dept. of Botany, Arts, Science and  
Commerce College Naldurg.  
Tal. Tuljapur, Dist. Osmanabad  
Pin 413 602 (M.S), India.

**DESIGNATION** : **Professor**

**RESIDENTIAL ADDRESS** : Green Park Estate, Near Water Filter Pump,  
Behind Frie Brigade, Tuljapur Road  
NALDURG, 413 602

**CONTACT NO.** : Office No. (02471) 246042  
Mobile No. 9890742997 /8830047123

**SEX** : Male

**E-MAIL** : [unbhale2007@rediffmail.com](mailto:unbhale2007@rediffmail.com), drunbhale2012@gmail.com

**EDUCATION QUALIFICATION** : M.Sc. B.Ed. Ph.D. (Botany)

<b>Examination passed</b>	<b>Board / University</b>	<b>Year of Passing</b>	<b>Percentage</b>	<b>Division</b>
S.S.C.	Aurangabad	1989	61.71%	I <sup>st</sup>
H.S.C.	Aurangabad	1991	47.67%	II <sup>nd</sup>
B.Sc.	Dr.B.A.M.U. Aurangabad	1994	64.50%	I <sup>st</sup>
M.Sc.	Dr. B.A.M.U. Aurangabad	1996	65.00%	I <sup>st</sup>

B.Ed.	S.R.T.M.U. Nanded	1998	69.78%	I <sup>st</sup>
Ph.D.	Dr. B.A.M.U. Aurangabad	2002	-	-

**Title of the Thesis : “Studies on management of some important diseases of Spinach (*Spinacea oleracea* L.) in Maharashtra”.**

### **Research Papers Published :145**

### **In Journals: 106**

1. **Kamble, S.S. and U.N.Bhale (2001).**Antifungal activity of plant extracts against *Fusarium oxysporum udum* the incitant of pigeon pea wilt. *Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Journal of Science, Aurangabad.* Vol. No xxx I No. 8. Pp-39-44.
2. **Bhale,U.N., S.S.Kamble and L.V.Ganawane (2005).** Effect of plant extracts on growth and spore germination in *Fusarium oxysporum f. spinaciae* causing wilt of spinach. *Bioinfolet*, 2 (2) :122-125.
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11. **Suryawanshi, D.S., and U.N.Bhale (2009).** Use of fungal cultures for composting, *BIONANOFRONTIER*, Science Day Issue, pp-91-92
12. **Bhale,U.N., S.S.Bharade and S.S.Kamble (2009).** Biochemical changes in Pomegranate (*Punnica granatwm* L) Fruit infected with carbendazim resistant of *Alternaria alternate*. *Journal of Biotechnology and Bioinformatics*, 1(1):109-112.
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16. **Bhale,U.N., V.S.Sawant, J. N. Rajkonda and D. S. Jadhav (2010).** Influence of different nutrients sources on fungicide resistant and sensitive *Alternaria spinaciae* the incitant of leaf spot of Spinach (*Spinacea oleracea* L.) *Ad. Plant Sci.* 23:459-462,
17. **Sarwade, P.P., J.N.RaikondaP.M. Wagh and U.N.Bhale (2010).** Association of AM fungi in four medicinal plants of Maharashtra, India. *Bioscience Discovery*, 1(1): 40-43.
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81. **Amit Yadav, Vipool Thorat & Udhav Bhale & Yogesh Shouche (2015)** Association of 16SrII-C and 16SrII-D subgroup phytoplasma strains with witches' broom disease of *Parthenium hysterophorus* and insect vector *Orosius albicinctus* in India. *Australasian Plant Dis. Notes.*, 10(31):1-5.

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  98. **Bhale U.N. (2018).** Physiological changes induced by Arbuscular Mycorrhizal Fungi (AMF) and plant growth promoting fungi (PGPF) in tomato (*Lycopersicum esculantum*). J Mycol Pl Pathol 48(1):65-73.
  99. **Udhav Narba Bhale (2018).** Arbuscular Mycorrhizal Fungi (AMF) Status and Diversity Of weedy Plants in Degraded Land. *International Journal of Plant Pathology*, 9: 1-8.

100. **Kumbhar, V.R. S.R. Mane<sup>1</sup>, G.M. Birajdar<sup>1</sup>, S.A. Bansode, C.S. Swami and U.N. Bhale (2018).** Physicochemical Characterization and Population Dynamics of Mycoflora in Infected Rhizosphere Soil of Onion White Rot caused by *Sclerotium cepivorum*. *Int.J.Curr.Microbiol.App.Sci*, 7(8): 3771-3780.
101. **Gavali<sup>1</sup>, M. T. Mane S. R, Kumbhar V. R., Birajdar G. M. and U. N. Bhale (2018).** Variations in Physicochemical Parameters and Distribution of Mycoflora in Rhizospheric Soil due to Charcoal Rot of Jowar (*Sorghum bicolor* L.). *J. Biol. Chem. Chronicals*, 4(2), 41-47.
102. **Udhav Narba Bhale (2018).** Prominence of Mycorrhizal Colonization And Diversity In Weed Species Growing In Agronomic Field Of Naldurg, India. *IJCAS*, 8 9(A):. 311-317.
103. **Sudarshan Ramesh Mane, Rafeeqe Ishakhoddin Shaikh, Sushma Parashram Surve and Udhav Narba Bhale (2019).** Mycorrhizal association in Pteridophytes species from Marathwada region of Deccan Plateau Zone of India *Asian Journal of Plant Sciences*, 18-33-45.
104. **Bhale, U.N., V.R.Kumbhar and G.M.Birajdar (2019).** An account of *Chlorophyllum molybdites* and *Macrocybe lobayensis* mushroom species from drought prone area of Naldurg, Osmanabad district of Maharashtra, India . *East African Scholars J Agri Life Sci*; 2 (5): 258-261.
105. **U. N. Bhale and V.S.Sawant (2019).** Effect of Mycorrhizae and PGPF growth of tomato CVTO1389. *Bioinfolet*, 16 (1-2):8-11.
106. **Birajdar G.M., V.R.Kumbhar, R.S.Narayankar and U.N.Bhale (2019).** Efficiency of Prepared Organic Compost By Thermophilic Microbes on Vigour Growth of Leafy Vegetables. *Int J Recent Sci Res*. 10(08), pp.34104-34108.

### In Conference Proceedings: 21

1. **Ambuse, M.G., V.S.Chatage, P.P.Sarwade, J.N.Rajkonda and U.N.Bhale (2011).** Efficacy of chemical control against pathogenic fungi on *Rumex acetosa* L. Proceeding of UGC sponsored National Conference on “Role of non agricultural Institution in the important of Agricultural technology” held at Dept of Botany, Shrikrishna Mahavidyalaya gunjoti on 23-24<sup>th</sup> Jan.2011. *BIONANOFRONTIER*, Special issue, 34-35.
2. **Wagh, P.M. and U.N.Bhale (2011).** In vitro biocontrol activity of *Trichoderma* species against fungal phytopathogen *Rhizoctonia solani* from post-harvest sapota. Proceeding of UGC sponsored National Conference on “Role of non agricultural

- Institution in the important of Agricultural technology” held at Dept of Botany, Shrikrishna Mahavidyalaya gunjoti on 23-24<sup>th</sup> Jan.2011. *BIONANOFONTIER*, Special issue, 36-38.
3. **Sarwade,P.P., V.S.Sawant and U.N.Bhale (2011).**Arbuscular Mycorrhizal (AM) fungi in some timber yielding plant of Maharashtra, India, Proceeding of UGC sponsored National Conference on “Role of non agricultural Institution in the important of Agricultural technology” held at Dept of Botany, Shrikrishna Mahavidyalaya gunjoti on 23-24<sup>th</sup> Jan.2011. *BIONANOFONTIER*, Special issue, 39-40.
  4. **Rajkonda,J.N., P.P.Sarwade V.S.Sawant and U.N.Bhale (2011).** Effect of *Trichoderma* species on biomass production of cereal crops. Proceeding of UGC sponsored National Conference on “Role of non agricultural Institution in the important of Agricultural technology” held at Dept of Botany, Shrikrishna Mahavidyalaya gunjoti on 23-24<sup>th</sup> Jan.2011. *BIONANOFONTIER*, Special issue, 70-72.
  5. **Wagh,P.M., V.K. Vaze and U.N.Bhale (2011).** Spoilage of ash content in sapota pulp due to different isolates of *Aspergillus niger*. Proceeding of UGC sponsored National Conference on “Role of non agricultural Institution in the important of Agricultural technology” held at Dept of Botany, Shrikrishna Mahavidyalaya gunjoti on 23-24<sup>th</sup> Jan.2011. *BIONANOFONTIER*, Special issue, 109-110.
  6. **Rajkonda J.N. and U.N.Bhale (2012).**Efficacy of Agro waste materials for mass multiplication of *Trichoderma* species. The proceedings of State level Seminar on “Recent innovative trends in plant Sciences, Sept 2012 held at Mahatma Phule ASC College, Panvel.pp-51-58.
  7. **Ambuse M.G. and U.N.Bhale (2012).** Biochemical changes in *Colocasia esculenta* due to blight infection of *Phytophthora colocasiae*. The proceedings of State level Seminar on “Recent innovative trends in plant Sciences, Sept 2012 held at Mahatma Phule ASC College, Panvel.pp-223-227.
  8. **Wagh P.M., P.A. Maygaonkar and U.N.Bhale (2012).** Changes in ascorbic acid contents of sapota (*Achras sapota* L.) due to infection of *Aspergillus niger*. The

- proceedings of State level Seminar on “Recent innovative trends in plant Sciences, Sept 2012 held at Mahatma Phule ASC College, Panvel.pp-259-262.
9. **Rajkonda, J.N.S.K.Murmkar and U.N.Bhale (2013).** Phytotoxicity of culture filtrates of *Trichoderma* species on seed germination of crop plants,.’Plant Biotechnology for Agriculture Development and Human welfare’, Wizcraft publications and Distribution Pvt Ltd. Solapur,Maharashtra,pp-84-87.
  10. **Sawant,, V.S. ,J.N.Rajkonda and U.N.Bhale (2013).**Interface between Arbuscular Mycorrhizal Fungi and Plant growth promoting fungi in tomato, Plant Biotechnology for Agriculture Development and Human welfare’, Wizcraft publications and Distribution Pvt Ltd. Solapur,Maharashtra.pp-138-140.
  11. **Ambuse, M.G., S.K.Murumkar and U.N.Bhale (2013).** Biochemical changes in *Rumex acetosa* infected with mancozeb resistant *Alternaria tenuissima*, Plant Biotechnology for Agriculture Development and Human welfare’, Wizcraft publications and Distribution Pvt Ltd. Solapur,Maharashtra pp-141-144.
  12. **U.N.Bhale (2014).** Protection of atmosphere vigorous: An overview of Integrated Plant Health Management (IPHM).In the proceeding of National conference on Water pollution and solid waste management for Natural resources conservation held at Jawahar College, Anadur on 17-18<sup>Th</sup> Feb..2014. Thematics Publications Pvt. Ltd. Latur, pp.13-17.
  13. **Rajkonda J. N. and Bhale U. N. (2014):** Influenced of culture media in the growth of *Trichoderma* species. Biodiversity prospectus and potentials (Dr. D. S. Jadhav Ed.),, Dama International Publication, Solapur pp,113-120.
  14. **Bhale U. N. and D. S. Jadhav (2014):** Repercussion of *Trichoderma* spp strains against *Fusarium proliferatum* inciting wilt of *Rumex acetosa* L. Biodiversity prospectus and potentials (Dr. D. S. Jadhav Ed.),, Dama International Publication, Solapur pp,188-196.
  15. **Bansode, S.A. and U.N.Bhale (2014).** Improving Deficient Soil for Sunflower (*Helianthus annuus* l.) Vigor Index and Arbuscular Mycorrhizal Fungi (AMF) Habitat by Rhizospheric Soil as Inoculum. Proceedings of National seminar on “ Role of life forms in Controlling Pollution”(Dargad et al. Eds), held at Dayanand Science College, Latur on 8&9<sup>th</sup> August, 2014,pp.287-292.

16. **Rajkonda, J. N. and U. N. Bhale (2014).**Connotation of *Trichoderma* Species on Seed Germination and Biomass Production of Crop Plants. Proceedings of National seminar on “Role of life forms in Controlling Pollution”(Dargad et al. Eds), held at Dayanand Science College, Latur on 8 &9<sup>th</sup> August, 2014,pp.293-300.
17. **Ambuse, M.G. and U.N.Bhale (2014).** Biochemical Changes in Infected Dill (*Peucedonum Graveolens*) With Mancozeb Sensitive and Resistant *Fusarium oxysporum*. Proceedings of National seminar on “Role of life forms in Controlling Pollution” (Dargad et al. Eds), held at Dayanand Science College, Latur on 8 & 9<sup>th</sup> August, 2014,pp.301-305.
18. **Rajkonda J. N. and U. N. Bhale (2014).** Combating Consequence Of *Trichoderma* Spp On Pathogenic Fungi. Proceeding of National Conference “Advances in plant Sciences for Sustainable Rural Development” held on 23-24<sup>th</sup> Sept.2014, Shirur,Pune, pp,195-200.
19. **Bansode, S.A., V.S.Sawant and Bhale, U.N. (2016).**Influence of Organic Fertilizers and AMF on Groundnut (*Arachis hypogea* L.) Productivity” Proceedings of International Conference on “Plant Research and Resource Management” and 25<sup>th</sup> APSI Silver Jubilee Scientists Meet being held at Post Graduate Department of Botany, Tuljaram Chaturchand College, Baramati, Maharashtra, India during 11-13<sup>th</sup> Feb. 2016.pp.142-148.
20. **Rajkonda, J. N. and Bhale, U.N.(2016).** “Strain Development and Mass Multiplication of *Trichoderma koningii* on Agro wastes Base Materials” Proceedings of International Conference on “Plant Research and Resource Management” and 25<sup>th</sup> APSI Silver Jubilee Scientists Meet being held at Post Graduate Department of Botany, Tuljaram Chaturchand College, Baramati, Maharashtra, India during 11-13<sup>th</sup> Feb. 2016. pp.149-153.
21. **Ambuse, M.G. and Bhale, U.N.(2016).**Evaluation of prevention activity of essential oils against pathogenic fungi of *Rumex acetosa* L. Proceedings of International Conference on “Plant Research and Resource Management” and 25<sup>th</sup> APSI Silver Jubilee Scientists Meet being held at Post Graduate Department of Botany, Tuljaram Chaturchand College, Baramati, Maharashtra, India during 11-13<sup>th</sup> Feb. 2016. pp.392-395.

1. **Bhale,U.N., D.P.Gogle and D.S.Suryawanshi (2005).** Effect of plant extracts on growth of sensitive and resistant isolates of *Fusarium oxysporum f. spinaciae* causing wilt of spinach (palak). *Shodhyatra 'Vol.II,A Collection of National level research papers, Parbhani* pp-312-323.
2. **Rajkonda, J.N. S.L Korekar,V.S.Sawant and U.N.Bhale (2012).** Biopriming of seeds for improving germination behavior and biomass production of oilseed crops.Proceedings of the National conference on “Plant Science for Sustainable Agriculture and Rural Development” held at Dept of Botany, ASC College Naldurg (Bhale and Sawant Eds) pp.76-80.
3. **Sawant, V.S.,P.P.Sarwade,V.S.Chatage, J.N. Rajkonda and U.N.Bhale (2012).** Mycorrhiza: Biofertilizer for *Solanum melongena* L. Proceedings of the National Conference on Plant Science for Sustainable Agriculture and Rural Development” held at Dept of Botany, ASC College Naldurg (Bhale and Sawant Eds) pp.81-85.
4. **Sarwade, P.P.,Sawant, V.S. and U.N.Bhale (2012).** Diversity of Arbuscular Mycorrhizal (AM) fungi in some common plants of Marathwada. Proceedings of the National Conference on “Plant Science for Sustainable Agriculture and Rural Development” held at Dept of Botany, ASC College Naldurg (Bhale and Sawant Eds) pp.145-148.
5. **Chatage, V.S., A.S.Sonwane and U.N.Bhale (2012).** Chemical control of fruit rots of *Coccinia indica* caused by *Bipolaris tetramera* and *Macrophomina phaseolina*. Proceedings of the National Conference on “Plant Science for Sustainable Agriculture and Rural Development” held at Dept of Botany, ASC College Naldurg (Bhale and Sawant Eds) pp.165-168.
6. **Rajkonda, J.N., P. P. Sarwade, M. G. Ambuse and U. N. Bhale (2012).** Antagonistic effect of *Trichoderma* spp on pathogenic fungi. Proceedings of the National Conference on “Biodiversity and Biotechnology for sustainable development” held at PG.Dept of Botany Karanataka University Dharwad (Lakshman and Hegde Eds) pp.143-146.



7. **Sarwade, P. P., M. G. Ambuse, J. N. Rajkonda and U. N. Bhale (2012).** Growth response of *Capsicum annum* var. Jwala plants inoculated with *Glomus fasciculatum* and *Trichoderma* species. Proceedings of the National Conference on “Biodiversity and Biotechnology for sustainable development” held at PG. Dept. of Botany Karanataka University Dharwad (Lakshman and Hegde Eds) pp.147-151.
8. **Bhale U.N. (2015).** Biopesticidal Approaches for the Management of Sorrel (*Rumex acetosa* L.) Diseases, Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 1: Pages 149–160.
9. **Bhale, U.N. and P.M.Wagh.(2015).** Physiological impact of sapota post- harvest fruit fungi on toxin production of *Vigna aconitifolia* seeds. Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 1: Pages 227–233.
10. **Rajkonda, J. N. and U. N. Bhale. (2015).** Enhancement of seedling emergence and biomass production of crop plants by *Trichoderma* spp. Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 1: Pages 292–302
11. **Ambuse, M.G. and U.N.Bhale. (2015).** Looming of *Trichoderma* spp against *Alternaria alternata* provoking Leaf spot of *Trigonella foneum-graecum* (L.). Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 2: Pages 455–461.
12. **Chatage, V. S. and U.N. Bhale.(2015).** Synergistic effects of agrochemicals on carbendazim resistance *Geotrichum candidus* incitant of fruit rot of Ivy gourd. Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 2: Pages 476–484.
13. **Bansode, S.A.and U.N.Bhale.(2015).** Strategies of deficient soil for improvement of AMF inoculums and biomass production of pigeon pea. Major Constrains and Verdict of Crop Productivity (Editor: Dr. U.N. Bhale) ASTRAL INTERNATIONAL (P) LIMITED, NEW DELHI, Vol 2: Pages 550–557.
14. **Rajkonda J. N. And U. N. Bhale (2015).** Improved Seedling Emergence and Biomass Production of Crop Plants by *Trichoderma* Spp, Recent Trends in

- Microbiology, Mycology and Plant pathology (*Editor: Dr. H.C. Lakshman*) Pages. 83-93.
15. **Chatage V. S. And U. N. Bhale (2015).** Eco-Friendly Approaches In The Management Of Post-Harvest Fruit Diseases Of Ivy Gourd (*Coccinia Indica* Wight And Arn.), Recent Trends in Microbiology, Mycology and Plant pathology (*Editor: Dr. H.C. Lakshman*) Pages.283-295.
  16. **Mane S.R., S.P.Surve, S.A.Bansode and U.N.Bhale (2018).** Seasonal Diversity of Arbuscular Mycorrhizal Fungal (AMF) status of horsetail (*Equisetum hyemale* L.). Role of Microorganisms in agriculture and plant science for sustainable development (Eds Dr,Patale S.S.) special Issue on 16<sup>th</sup> Feb.2018 published by R. Yash Book publishing House Latur pp.6-13.
  17. **Rajkonda J. N., Ghadsingh S.G., Mukhedkar Archana And U. N. Bhale (2018).**Screening of antagonism and phytotoxic activity of *Trichoderma harzianum*. Role of Microorganisms in agriculture and plant science for sustainable development (Eds Dr,Patale S.S.) special Issue on 16<sup>th</sup> Feb.2018 published by R. Yash Book publishing House Latur pp 95-101.
  18. **Bhale, U. N. S. A. Bansode, and Simranjeet Singh (2018).**Multifactorial Role of ArbuscularMycorrhizae in Agroecosystem. In:Gehilot P., Singh J. (Eds) Fungi and their role in Sustainable Development:Current Perespectives.Springer,pp.205-220.

#### **Research Papers/chapter Communicated and accepted for Publication:03**

1. **U. N. Bhale (2018).**Growth performance of tomato Plants to Mycorrhizae and other plant growth promoting fungi (PGPF).*Bioinfolet*.

#### **First /New Report: 08**

1. **Bhale,U.N., V.S. Sawant,V.S.Chatage and J.N.Rajkonda (2009).** A New Disease Record of Phylloidy in *Catheranthas roseus* in Maharashtra, India, *J.Mycol Plant Pathol*, 39(2):358-359.
2. **Chatage, V.S. and U.N.Bhale (2010).**Fungi associated with fruit rot diseases of ivy gourd (*Coccinia indica* Wight & Am.) from Maharashtra, India, *Bioinfolet*, 7(3):242-243,
3. **Rajkonda, J.N. and U.N.Bhale (2011).** Report on two species of *Trichoderma* from black soil of Marathwada region of Maharashtra state. *Bioinfolet*, 8(4):363-364.

4. **Bhale ,U.N., Chatage, V.S., Rajkonda, J.N. (2012).** First Report of Phytoplasma Associated with Leaf Roll on Dhak (palas) in India. J Plant Pathol Microbiol 3:115.doi:[10.4172/2157-7471.1000115](https://doi.org/10.4172/2157-7471.1000115) (USA)
5. **Bhale, U.N., Chatage, V.S., Ambuse, M.G. (2012).** First Report of *Fusarium proliferatum* Inciting Wilt of *Rumex acetosa* L. in Maharashtra, India. J Plant PatholMicrobiol 3:116. doi:[10.4172/2157-7471.1000116](https://doi.org/10.4172/2157-7471.1000116) (USA)
6. **Bhale U.N, V. S.CHATAGE AND M. G. AMBUSE (2012).** First report of *Alternaria tenuissima* inciting leaf spot of sorrel *Rumex acetosa* ( L.) In maharashtra, india. Indian J. Sci. Res. 3(2) : 187-188.
7. **Amit Yadav , Udhav Bhale, Vipool Thorat and Yogesh Shouche (2014).** First Report of new subgroup 16Sr II-M ‘*Candidatus* Phytoplasma aurantifolia’ associated with ‘Witches Broom’ disease of *Tephrosia purpurea* in India. Plant Disease, 98(7):990. <http://dx.doi.org/10.1094/PDIS-11-13-1183-PDN>.
8. **Sawant VS and Bhale UN. 2014.** *Acaulospora soloidea*-A new report of arbuscular mycorrhizal fungal species from black cotton soil of Maharashtra, India. J Mycol Pl Pathol 44 (4): 452-453.

**Publications of nucleotide submissions on: 06**

**URL Link:** <http://www.ncbi.nlm.nih.gov/nucleotide>

Sr. No	Plant	Disease	Pathogen	Year	GenBank Accession Number
1	<i>Rumex acetosa</i>	Wilt	<i>Fusarium proliferatum</i>	2011-12	JQ322969
2	<i>Rumex acetosa</i>	Leaf spot	<i>Alternaria tenuissima</i>	2011-12	JQ417902
3	<i>Tephrosia purpurea</i>	‘Witches Broom’	<i>Candidatus Phytoplasma aurantifolia</i>	2012-13	HG792252
4	<i>Zizyphus oenoplia</i>	little leaf	<i>Candidatus Phytoplasma balanitae</i>	2013-14	HG937644
5	<i>Parthenium hysterophorus</i>	Phylloidy	<i>Candidatus Phytoplasma aurantifolia</i>	2014-15	LN811709
6	<i>Cleome viscosa</i> (tick weed)	‘Witches Broom’	<i>Phytoplasma aurantifolia</i>	2015-16	LT558784

**No. of Conferences / Seminar / Symposia/Workshop/Training attended: 52**

1. National Seminar on "Integrated crop Disease management for sustainable Agriculture", Feb 26- 27<sup>th</sup> 1996 at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Participated**).
2. Seminar on "Plant resource development", Dec. 9<sup>th</sup> 2000 at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Participated**).
3. Seminar on Management of health with plants, Jan. 6<sup>th</sup> 2001. At Govt. Institute of Science, Aurangabad (**Participated**).
4. Regional Level conference on "Botany in Agriculture and Rural Development", Jan. 20-21<sup>th</sup> 2001 at Lal Bahadur Shastri Mahavidyalaya, Dharmabad (**Oral presentation "Use of Plant extracts in the management of certain pathogens"**).
5. National Seminar on "Eco-friendly approaches for plant disease management", Jan 22-24<sup>th</sup> 2001 at University of Madras (**Poster presentation "Use of plant extracts on the management of spinach wilt"**).
6. National conference on "Frontiers in biotechnological aspect of plant sciences", Jan 30-31<sup>th</sup> 2002. at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Oral presentation "Antifungal activity of plant extracts against *Fusarium udum* the incitant of pigeon pea wilt"**).
7. Zonal Symposium on "Major plant diseases and their management, Oct. 29-30<sup>th</sup> 2002. at Central Institute for cotton research", Nagpur (**Oral Presentation "Effect of plant extract and spore germination in *Fusarium oxysporum f.sp. spinaciae* causing wilt of spinach"**).
8. Workshop on Wild life and conservation Oct. 1-7<sup>th</sup> 2003 at ASC College Naldurg (**Participated**).
9. State level Seminar on Availability, Utilization and Protection of plant wealth, Dec. 14<sup>th</sup> 2002. at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad. (**Participated**).
10. State level Seminar on "Current Innovative approaches in plant sciences", Dec. 16<sup>th</sup> 2003 at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Oral presentation "Evaluation of carbendazim against *Alternaria tenuissima* causing leaf spot of spinach"**).

11. National Seminar on “Biotechnological approaches towards the integrated management of crop diseases”, July.30-31<sup>th</sup> 2004. at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Oral presentation “Use of agrochemicals in the management of wilt of spinach caused by *Fusarium oxysporum f. sp spinaciae* resistant to benomyl”**).
12. State level Seminar on Plant Biotechnology for human welfare, Oct.24<sup>th</sup> 2004 at Balbhim Arts, Science and Commerce College, Beed (**Participated**).
13. Zonal Symposium on Biology, Biotechnology, Epidemiology and management of plant diseases, Dec.9-10<sup>th</sup> 2004 at Gulbarga university, Gulbarga (**Oral presentation “Use of agrochemicals in the management of Leaf spot of spinach caused by *Alternaria tenuissima* resistant to carbendazim”**).
14. National Conference on “Emerging trends in Mycology, Plant Pathology and Microbial Biotechnology”, Dec.29-31<sup>th</sup> 2004 at Osmania University, Hyderabad (**Participated**).
15. Workshop on “Scope and limitations of syllabus of Botany”, August 21<sup>st</sup> 2005 at SMDM College Kalamb (**Participated**).
16. Workshop on “Molecular biology technique”, Nov 18<sup>th</sup> 2005 at Dr. Babasaheb Ambedkar Marathawada University sub-center, Osmanabad (**Participated**).
17. Zonal Symposium on “Current trends in Innovative approaches for plant disease management”, Jan.6-7<sup>th</sup> 2006 at Marathawada agricultural University, Parbhani (**Oral presentation “Development of benomyl resistance in *Fusarium oxysporum f.sp. spinaciae* causing wilt of spinach”**).
18. National conference on “Modern trends in Plant Sciences”, Oct.6-7<sup>th</sup> 2007 at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad (**Oral presentation “Botanicals to control Phytopathogenic fungus *Fusarium oxysporum f.sp spinaciae* incitant of wilt of spinach (*Spinacea oleracea* L.)”**).
19. 2<sup>nd</sup> Asian Congress on “Microbial diversity for Asian prosperity”, Dec.19-22<sup>nd</sup> 2007 at Osmania University, Hyderabad (**Poster presentation “Botanicals to control *Fusarium oxysporum f.sp spinaciae* incitant of wilt of spinach (*Spinacea oleracea* L.)”**).
20. National Seminar on “Changing Biodiversity scenario in India: Initiative for creation, Sustainable utilization & retention of wealth”, July14-15<sup>th</sup> 2008 at Deogiri College,

Aurangabad (**Oral presentation “Studies on the thermophilic fungi from different natural substrates of Osmanabad district in Maharashtra”**).

21. Training on “Mycorrhizae” during 1-4<sup>th</sup> July, 2008 at Dept of Botany, Goa University, Goa.
22. National workshop on “Techniques in Arbuscular Mycorrhizal (AM) fungal research”, Feb.25-27<sup>th</sup> 2009 at Goa University, Goa. (**Participated**)
23. National conference on “Frontiers in Plant sciences: Diagnosis and management”, Jan 3-4<sup>th</sup> 2010 at Maharashtra Mahavidyalaya, Nilanga (**Oral presentation “Pathogenic potential of seed mycoflora of spinach (*Spinacea oleracea* L.)”**).
24. National Seminar on Frontiers in biotechnological aspects of plant sciences, Jan.9-10<sup>th</sup> 2010 at C.T.Bora College Shirur (**Oral presentation and Co-Chairman “ Two new fungal pathogens on post- harvest fruit rot of ivy gourd (*Coccinia indica* Wight & Arn.) from Maharashtra, India**).
25. XXXIII Conference of Indian Botanical Society and International Symposium on The New Horizons of Botany, Nov. 10-12<sup>th</sup> 2010 at Shivaji University Kplhapur (**Poster presentation “Diversity of AM fungal association in some medicinal plants of Maharashtra, India”**).
26. National conference on “Plant Biotechnology for agriculture and Rural development”, Jan.17-18<sup>th</sup> 2011 at Shri Madhavrao Patil mahavidyalaya, Murum (**Participated**).
27. National conference on “Role of Non-Agricultural Institution in the improvement of Agricultural technology”, Jan. 22-23<sup>rd</sup> 2011. At Shrikrishna Mahavidyal, Gunjoti (**Participated**).
28. National conference on “Biodiversity and Biotechnology for sustainable development”, March 21-22<sup>nd</sup> 2011 at Karnataka University, Dharwad (**Poster presentation and Co-Chairman “Tolerance of polluted water on seedling growth of some cereal crops”**).
29. National conference on “Recent trends in plant sciences”, Feb.3-5<sup>th</sup> 2012 at Tuljaram Chaturchand College Baramati (**Poster presentation “Biochemical changes in *Coccinia indica* fruit rot infected with carbendazim resistant *Geotrichum candidus*”**).

30. National conference on Mycodiversity with its sustainable Exploration and Biotechnological Applications and 38<sup>th</sup> Annual meeting of Mycological Society of India, Feb 6-7<sup>th</sup>, 2012 at Shri Shivaji Science College Amravati (**Participated**).
31. State level Seminar on “Recent innovative trends in plant Sciences, 1<sup>st</sup> Sept 2012 held at Mahatma Phule ASC College, Panvel (**Participated- Chairman**)
32. National Conference on Biodiversity: Prospects and Potentials held at Dept of Botany, S.M. Dnyandeo Mohekar Mahavidyala, Kalamb (**Participated- Chairman**) on 28-29<sup>th</sup> Dec. 2012.
33. State level conference on “Biodiversity Conservation and Environmental Challenges in India”, 17th January 2013 held at Ramkrishna paramhansa Mahavidyala, Osmanabad (**Chairman Oral & presentation “Fungitoxic potential of *Cassia fistula* (L.) extracts on mycelial growth and spore germination of pathogenic fungi incitant of spinach (*Spinacea oleracea* L.)”**).
34. **National level Conference on Plant Biotechnology for Agricultural Development and Human Welfare** Organized by Dept. of C.B. Khedgi’s B.Science.R.V., Comm. R.J. Arts college, Akkalkot. Dist. Solapur on 18<sup>th</sup> & 19<sup>th</sup> December 2013. [**Chairperson & Resource Person (Strategies for Integrated Plant Disease Management (IPDM): An Overview)**].
35. **National Symposium of IPS (WZ) on “Plant Diseases: Diagnostics and Integrated Disease Management For Food Security”** organized by Department Of Plant Pathology, College of Agriculture, Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra on 27<sup>th</sup> and 28<sup>st</sup> December, 2013[ **Chairperson & Resource Person (Potential of Arbuscular Mycorrhizal Fungi (AMF) and Status In Marathwada Region of Maharashtra)**].
36. **National conference on “Water pollution and solid waste management for Natural resources conservation”** organized by Dept of Chemistry at Jawahar College Anadur on 17-18<sup>Th</sup> Feb. 2014. (Oral Presentation- **Protection of atmosphere vigorous: An overview of Integrated Plant Health Management (IPHM)**).
37. **National conference on “ Plant Pathology”** organized by Dept of Botany, Rajarshi Shahu Mahavidyalaya, Latur on 2-3<sup>rd</sup> March 2014 (**Participated**).
38. National seminar on “ Biological terminology in Regional Language In Marathi” organized by ministry of human Resource development, New Delhi and Dept of

Botany, Sangola College, Sangola on 23-24<sup>th</sup> August, 2014[**Chairperson & Resource Person (“Plant Diseases : Plant Protection Agrochemicals, Use and Precautions”)**].

39. National seminar on “Role of life forms in Controlling Pollution, held at Dayanand Science College, Latur on 8 & 9<sup>th</sup> August, 2014, ( **Chairman & Oral presentation- Improving Deficient Soil for Sunflower (*Helianthus annuus* L.) Vigor Index and Arbuscular Mycorrhizal Fungi (AMF) Habitat by Rhizospheric Soil as Inoculum.**
40. National Conference on” Life Sciences: An Outlook and Challenges” held at Dahiwadi College Dahiwadi on 12-13<sup>th</sup> Sept.2014. (**Resource Person “Prospective of Mycorrhizae and Collision of Sedimentary soils for Biomass vigour and AMF Prevalence).**
41. Pre Science Congress Conference on Science and Technology for Human Development organized by Indian Science Congress Association Aurangabad Chapter, Dr. Babasaheb Ambedkar Marathwada University Aurangabad on Dec. 30-31,2014 (**Oral Presentation: Potential of Pond Sedimentary Soils for Improving Productivity and Arbuscular Mycorrhizal Fungal Associations of Soybean in Newly Renovated Land).**
42. **National Symposium of IPS (WZ) on “Plant Pathology: Disease Diagnosis & Management for Sustainable Agriculture”** organized by Department Of Botany, Maharashtra Mahavidyalaya Nilanga on 24-25, January, 2015 [ **Chairperson (Oral) & Resource Person (Biopesticidal Approaches for the Integrated Management of Plant Diseases)**].
43. Asian Mycological Congress-2015. Organized by Department of Botany, Goa University on 7-10 Oct.2015(**Oral- Impact Of Pond Deposit Soils For Improving Vigour Index And AMF Status Of Soybean In Renovated Land).**
44. State level seminar on ‘Medicinal Plants and Plant Pathology’ Organised by Dept of Botany,Sangola Mahavidyalaya, Sangola on 9<sup>th</sup> Feb.2016. (**Resource Person “Concepts and Role of Plant Pathology in Agriculture).**
45. International Conference on “Plant Research and Resource Management” and 25<sup>th</sup> APSI Silver Jubilee Scientists Meet being held at Post Graduate Department of Botany, Tuljaram Chaturchand College, Baramati, Maharashtra, India during 11-13<sup>th</sup> Feb. 2016.



**[ Co-Chairperson (Oral) & Oral Presentation on Influence of Organic Fertilizers and AMF on Groundnut (*Arachis hypogea* L.) Productivity)].**

46. **National Symposium of IPS (WZ) on “Plant Health Management For Sustainable Agriculture”** organized by Department Of Plant Pathology, College of Agriculture, Udgir Dist Latur, Maharashtra on 11<sup>th</sup> and 12<sup>st</sup> December, 2016 [**Chairperson & Resource Person (Multifaciated benefits effect of Arbuscular Mycorrhizal Fungi (AMF) on plant health and Productivity)**]
47. **One day National Seminar on ‘Scope in Interdisciplinary Science’** Organized by Baburao Patil College Angar Dist Sholapur on 25<sup>th</sup> Jan.2017 [**Chairperson & Oral Presentation (Impact of *Trichoderma* species strains against *Fusarium proliferatum* inciting wilt of *Rumex acetosa* L.)**].
48. **National Conference on “Emerging Trends in Mycotechnology”** organized by Department of Botany, Biotechnology & IQAC, G.M.Momin Womens College Bhiwandi Dist Thane on 5-6<sup>th</sup> Jan 2018,[**Chairperson & Resource Person (Biopesticidal Approaches for the Integrated Management of Plant Diseases (IMPD)**].
49. **National Conference on “Aquatic Biodiversity”** organized by department of Botany Yeshwantrao Chavan Mahavidyalaya Tuljapur dist Osmanabad on 19-20<sup>th</sup> Jan. 2018,[**Chairperson & Resource Person (Ecofriendly plant disease management strategy)**].
50. **National Conference on “Role of Microorganism in agricultural and plant Science for Sustainable Development”** organized by department of Botany,Smt Shantabai Kantilal Gandhi Arts,Amolak Science and Panalal Hiralal Gandhi Commerce College Kada Dist Beed on 16<sup>th</sup> Feb.2018,[ **Resource Person (Mycorrhizal Potential And Impact Of Sedimentary Soils For Soybean Productivity)**].
51. **National Conference on “Journey of Biosciences From Wild to Urban and what next?”** organized by department of Botany,Shri.Shivaji College Omerga on 27<sup>th</sup> April 2018,[**Resource Person (PATHWAYS OF MICROORGANISMS IN DISCOVERIES,DIVERSITY AND APPLICATIONS)**].
52. **International Conference on “ Role of soil and Plant health in achieving sustainable development goals”** held at APPARI institute Bangkok, Thailand on 21-25<sup>th</sup>

Nov.2018 & a oral paper presented “**Mycorrhizal Diversity of weed species in Degraded and deficient land ecosystems**”

### **Chairmans/Co-Chairmans in the conferences/Symposia/ Seminars: 15**

1. **Co-Chairman** -National Seminar on Frontiers in biotechnological aspects of plant sciences, Jan.9-10<sup>th</sup> 2010at C.T.Bora College Shirur . (**Oral Paper Presentation Session**)
2. **Co-Chairman-** National conference on “Biodiversity and Biotechnology for sustainable development”, March 21-22<sup>nd</sup> 2011 at Karnataka University, Dharwad (**Oral Paper Presentation Session**).
3. **Chairman** -State level Seminar on “Recent innovative trends in plant Sciences, 1<sup>st</sup> Sept 2012 held at Mahatma Phule ASC College, Panvel (**Poster Presentation Session**)
4. **Chairman** -National Conference on Biodiversity: Prospects and Potentials held at Dept of Botany,S.M.Dnyandeo Mohekar Mahavidyala, Kalamb on 28-29<sup>th</sup> Dec.2012(**Scientific Session**).
5. **Chairman-** State level conference on “Biodiversity Conservation and Environmental Challenges in India”, 17th January 2013 held at Ramkrishna paramhansa Mahavidyala,Osmanabad (**Oral Paper presentation Session**).
6. **Chairperson-** National level Conference on Plant Biotechnology for Agricultural Development and Human Welfare Organized by Dept. of C.B.Khedgi's B.Science.R.V.,Comm. R.J. Arts college, Akkalkot. Dist. Solapur on 18<sup>th</sup> &19<sup>th</sup> December 2013. (**Scientific Session**).
7. **Chairperson-** National Symposium of IPS (WZ) on “Plant Diseases: Diagnostics and Integrated Disease Management For Food Security” organized by Department Of Plant Pathology,College of Agriculture, Vasantao Naik Marathwada Krishi Vidyapeeth ,Parbhani, Maharashtra on 27<sup>th</sup> and 28<sup>st</sup> December, 2013 (**Poster paper Presentation Session**).
8. **Chairperson-** National seminar on “ Biological terminology in Regional Language In Marathi” organized by ministry of human Resource development, New Delhi and Dept of Botany, Sangola College, Sangola on 23-24<sup>th</sup> August, 2014 ( **Technical Session**)

9. **Chairperson--** National seminar on “Role of life forms in Controlling Pollution, held at Dayanand Science College, Latur on 8 & 9<sup>th</sup> August, 2014, (**Scientific Session**).
10. **Chairperson-** National Symposium of IPS (WZ) on “Plant Pathology: Disease Diagnosis & Management for Sustainable Agriculture” organized by Department Of Botany, Maharashtra Mahavidyalaya Nilanga on 24-25, January, 2015 ( **Scientific Session**).
11. **Co-Chairperson-** International Conference on “Plant Research and Resource Management” and 25<sup>th</sup> APSI Silver Jubilee Scientists Meet being held at Post Graduate Department of Botany, Tuljaram Chaturchand College, Baramati, Maharashtra, India during 11-13<sup>th</sup> Feb. 2016. ( **Oral Presentation**)
12. **Chairperson-** National Symposium of IPS (WZ) on “Plant Health Management For Sustainable Agriculture” organized by Department Of Plant Pathology, College of Agriculture, Udgir Dist Latur, Maharashtra on 11<sup>th</sup> and 12<sup>st</sup> December, 2016. (**Scientific Session & Oral presentation**).
13. **Chairperson-** One day National Seminar on ‘Scope in Interdisciplinary Science’ Organized by Baburao Patil College Angar Dist Solapur on 25<sup>th</sup> Jan. 2017 (**Scientific Session**).
14. **Chairperson-National Conference on** “Emerging Trends in Mycotechnology” organized by Department of Botany, Biotechnology & IQAC, G.M.Momin Womens College Bhiwandi Dist Thane on 5-6<sup>th</sup> Jan 2018, [**Scientific and Oral Presentation**].
15. **Chairperson-** National Conference on “Aquatic Biodiversity” organized by department of Botany Yeshwantrao Chavan Mahavidyalaya Tuljapur dist Osmanabad on 19-20<sup>th</sup> Jan. 2018, [**Chairperson–Oral presentation**].

### **Resource Person and Deliverd Lecture: 11**

1. **National level Conference on Plant Biotechnology for Agricultural Development and Human Welfare** Organized by Dept. of C.B.Khedgi’s B.Science.R.V., Comm. R.J. Arts college, Akkalkot. Dist. Solapur on 18<sup>th</sup> & 19<sup>th</sup> December 2013. (**Strategies for Integrated Plant Disease Management ( IPDM): An Overview**).
2. **National Symposium of IPS (WZ) on “Plant Diseases: Diagnostics and Integrated Disease Management For Food Security”** organized by Department Of Plant Pathology, College of Agriculture, Vasantrao Naik Marathwada Krishi Vidyapeeth

,Parbhani, Maharashtra on 27<sup>th</sup> and 28<sup>st</sup> December, 2013 (**Potential of Arbuscular Mycorrhizal Fungi (AMF) and Status In Marathwada Region of Maharashtra**).

3. National seminar on “ Biological terminology in Regional Language In Marathi” organized by ministry of human Resource development, New Delhi and Dept of Botany, Sangola College, Sangola on 23-24<sup>th</sup> August, 2014 (**“Plant Diseases : Plant Protection Agrochemicals, Use and Precautions”**).
4. National Conference on” Life Sciences: An Outlook and Challenges” held at Dahiwadi College Dahiwadi on 12-13<sup>th</sup> Sept.2014. ( **“Prospective of Mycorrhizae and Collision of Sedimentary soils for Biomass vigour and AMF Prevalence**).
5. **National Symposium of IPS (WZ) on “Plant Pathology: Disease Diagnosis & Management for Sustainable Agriculture”** organized by Department Of Botany, Maharashtra Mahavidyalaya Nilangaon 24-25, January, 2015 (**Biopesticidal Approaches for the Integrated Management of Plant Diseases**).
6. State level seminar on ‘Medicinal Plants and Plant Pathology’ Organised by Dept of Botany,Sangola Mahavidyalaya, Sangola on 9<sup>th</sup> Feb.2016. (**Resource Person “Concepts and Role of Pant Pathology in Agriculture**).
7. **National Symposium of IPS (WZ) on “Plant Health Management For Sustainable Agriculture”** organized by Department Of Plant Pathology, College of Agriculture, Udgir Dist Latur, Maharashtra on 11<sup>th</sup> and 12<sup>st</sup> December, 2016. (**Multifaceted benefits effect of Arbuscular Mycorrhizal Fungi (AMF) on Plant Health and Productivity**).
8. **National Conference on “Emerging Trends in Mycotechnology”** organized by Department of Botany, Biotechnology & IQAC, G.M.Momin Womens College Bhiwandi Dist Thane on 5-6<sup>th</sup> Jan 2018,[(**Biopesticidal Approaches for the Integrated Management of Plant Diseases (IMPD)**).
9. **National Conference on “Aquatic Biodiversity”** organized by department of Botany Yeshwantrao Chavan Mahavidyalaya Tuljapur dist Osmanabad on 19-20<sup>th</sup> Jan. 2018, (**Ecofriendly plant disease management strategy**).
10. **National Conference on “Role of Microorganism in agricultural and plant Science for Sustainable Development”** organized by department of Botany,Smt Shantabai Kantilal Gandhi Arts, Amolak Science and Panalal Hiralal Gandhi Commerce College Kada Dist Beed on 16<sup>th</sup> Feb.2018,(**Mycorrhizal Potential And Impact Of Sedimentary Soils For Soybean Productivity**).

11. National Conference on “Journey of Biosciences From Wild to Urban and what next?” organized by department of Botany, Shri. Shivaji College Omerga on 27<sup>th</sup> April 2018, [Resource Person (PATHWAYS OF MICROORGANISMS IN DISCOVERIES, DIVERSITY AND APPLICATIONS)].

**List of Ph.D. Awarded/Working Students:**

Sr. No	Name of the student	Topic	Status	Year
1	Mr.J.N.Rajkonda	Studies on commercial mass production <i>Trichoderma</i> spp as a biocontrol on agrowaste materials available in Marathwada region.	Awarded	2 <sup>nd</sup> April 2012
2	Mr. P.P.Sarwade.	Studies on Arbuscular Mycorrhizal (AM) fungi selected plant species of Marathwada region in Maharashtra	Awarded	11 <sup>th</sup> May, 2011
3	Miss.P.M.Wagh	Studies on management of post-harvest fruit diseases of Chiku ( <i>Achras sapota</i> L.) in Thane District of Maharashtra	Awarded	14 <sup>th</sup> Sept 2012
4	Miss. M.G.Ambuse	Studies on management of fungal diseases of some important leafy vegetable crops in Marathwada region of Maharashtra	Awarded	28 <sup>th</sup> March 2013
5	Miss. V.S.Chatage	Studies on management of some important fungal diseases of Ivy gourd ( <i>Coccinia indica</i> Wight & Arn.) .	Awarded	28 <sup>th</sup> March 2013.
6	V.S.Sawant	Occurance and Quantification of Arbuscular Mycorrhizal (AM) fungi in the vicinity of solanaceous vegetable crops in Marathwada.”	Awarded	25 <sup>th</sup> March 2014
7	Mr. S.A. Bansode	Renovation of Degraded and deficient soil through Arbuscular Mycorrhizal Fungi (AMF) in Non agricultural land.	Awarded	6 <sup>th</sup> April 2016
8	Mr. S. R. Mane	Occurrence and Diversity of Arbuscular Mycorrhizal Fungi Associated With Some Pteridophytes In Marathwada Region	Awarded	12.Dec.2017
9	Mr.G.M.Birajdar	Studies on Thermophilic Microbes From Different Substrates And Their Role Of Compost Preparation	Awarded	14 <sup>th</sup> May,,2019
10	Mr.R.S..Narayankar	Studies on Integrated management of <i>Verticillium</i> wilt of tomato ( <i>Solanum lycopersicum</i> L.).	Working	Since July,2013
11	Mr. M. T. Gavali	Eco friendly approaches for the management	Working	Since,2014

		of Jowar ( <i>Sorghum bicolor</i> L.) charcoal Rot caused by <i>Macrophomina phaseolina</i> from Solapur District		
12	<b>Mr.A. R.Shinde</b>	Eco friendly management of fruit rots fungal diseases of Bitter Gourd ( <i>Momordica charantia</i> L.)	<b>Working</b>	<b>Since, July,2018</b>
13	<b>Miss.A.R.Mukhedkar</b>	Studies on ecofriendly management of Red Rot of sugarcane ( <i>Saccharum officinarum</i> L.) caused by <i>Colletotrichum falcatum</i>	<b>Working</b>	<b>Since,July,2018</b>

### **Completed/Ongoing Major/Minor Research Projects :05**

Sr. No.	Name of the Faculty	Name of the Projects	Agency	Status	Type
1	Dr.U.N.Bhale (Principal Investigator)	Studies on Management of fungi diseases of Spinach ( <i>Spinacea oleracea</i> L.) by using Botanical pesticides. [Sanctioned No:F.No.47-300/04 (WRO) dated 16/11/2004].	UGC, WRO, Pune	Completed	Minor
2	Dr.U.N.Bhale (Principal Investigator)	Eco-friendly approaches for the management of fungal diseases of leafy vegetable crops <b>File.No.38-19/2009 (SR) dated 19/12/2009</b>	UGC, New Delhi	Completed	Major
3	Mr. Sawant V.S. (Principal Investigator) Dr.U.N.Bhale (Co-Investigator)	Occurrence and Quantification of Arbuscular Mycorrhizal (AM) fungi in the vicinity of solanaceous vegetable crops in Marathwada. File No. 47-1301/09(WRO) dated 29/01/2010	UGC, WRO, Pune	Completed	Minor
4	Dr.U.N.Bhale	Studies on commercial mass	UGC,	Completed	Minor

	(Co-Investigator)	production of <i>Trichoderma</i> spp as a biocontrol on agrowaste materials available in Marathwada region. File No. 47-1109/09(WRO) dated 06/10/2010	WRO, Pune		
5	Dr.U.N.Bhale (Principal Investigator)	Renovation of Degraded and Deficient Soil Through Arbuscular Mycorrhizal Fungi (AMF) in Non Agricultural Land . File No. SB/EMEQ-317/2013 dated 21/08/2015	SERB, DST, New Delhi	Completed	Major

## **Courses**

### **Orientation Course :02**

1. University Grants Commission UGC – Academic Staff College Dr. B.A.M. University, Aurangabad during 16/03/2006 – 12/04/2006.
2. National Service Scheme (NSS), Govt. of India, Ministry of Youth Affairs and Sports-, Empanelled Training Institute, Ahmednagar during 14-10-2013 to 20-10-2013.

### **Refresher Course: 02**

1. University Grants Commission UGC- Academic Staff College, Mumbai University Mumbai, Based on ‘Biotechnology’ during 01/10/2008-22/10/2008.
2. University Grants Commission UGC- Academic Staff College, Coimbatore, Bharthiar University Coimbatore, during 01/6/2009-22/6/2009.

### **Short Term Course: 01**

1. University Grants Commission UGC- Human Research Development Center, Andhra University Visakhapatnam on ‘Women studies’ during 24/06/2015-29/06/2015.

## **Experience:**

**Teaching Experience** : 16 Years  
**Graduate** : 16Years  
**Research Experience** : 21Years

### **Life Membership /Memberships /Editorial Board/ Reviewer :**

1. Life member of Indian Phytopathological Society, (IARI), New Delhi, India.
2. Life member of Mycology and Plant Pathology, Udaipur, Rajasthan, India.
3. Life member of Bioinfolet, Journal of life Sciences, Aurangabad, India.
4. Life Member of the Journal of Biotechnology and Bioinformatics, New Delhi
5. Life Member of the International Journal of Bioscience Biotechnology Research communications, Bhopal
6. Life Member of the International Journal of Advances in Plant Sciences, Muzffarnagar
7. Life Member of the Journal of Mycological Society of India, Patiala
8. Life Member of the International Journal of Bionano-frontier, Mumbai, India.
9. Life member of the Journal of Bioscience Discovery, Jalana
10. Life member of Indian Society of Mycology, Kolkata.
11. Life member of Journal of Biopesticides, Palayamkottai.
12. Five year Life member of Current Science, Bangalore
13. Member of Geobios- An International Quarterly Journal of life Sciences Jodhpur, Rajasthan, India.
14. Member of Mycorrhiza News, New Delhi.
15. Life member of Hind Agri-Horticultural Society, Muzaffarnagar.

### **Editorial Board/ Reviewers :**

1. **Associate Editor:** Journal of Bioscience Discovery, Jalana
2. **Associate Editor:** International Journal of Agricultural Research, Science Alert
3. **Associate Editor:** Research Journal of Botany, Science Alert
4. **Technical Editor :** Asian Journal of Plant Pathology, Science Alert
5. **Technical Editor :** Asian Journal of Plant Sciences, Science Alert
6. **Reviewer:** Indian Phytopathological Society, (IARI), New Delhi, India.
7. **Member of Peer reviewed:** Journal of Global Agriculture and ecology, Hoogley, West Bengal.

### **Fellow**

1. Fellow of Hind Agri-Horticultural Society (FHAS), Muzaffarnagar, UP, India.

### **Awards**



1. **Dr Ambedkar Fellowship Award 2005**, Bhartiya Dalit Sahitya Akademi, New Delhi, 21<sup>st</sup> National Conference of Dalit Writers, New Delhi on 12-13<sup>st</sup> Dec. 2005.
2. **Dnyan Gaurav Ideal Teacher Award-2007**, Parivartan Samajik Partisthan, Mumbai on 6<sup>th</sup> Sept. 2007.
3. **Dr. A.P.J. Abdul Kalam Scientific Excellence Award-2015**, Marina Labs, Chennai on 27<sup>th</sup> Oct. 2015.

### **Foreign Visit: Thailand, Bangkok**

### **Research Skill Developed**

Identification of the plant diseases (Pathogens), Isolation of Pathogens, MIC (Minimum Inhibitory Concentration), Fungicide resistant, Induction of Mutation, Biochemistry, Physiological activities, Synergistic effects, Enzymes and toxins, Bio-Pesticides effects, Biological control and Mass multiplication of *Trichoderma*, AMF technology and mass multiplication of AM Fungi, compost technology, Mushroom Studies etc.

### **National Conference Organized: 01**

“Frontiers of plant sciences for Sustainable Agriculture and Rural Development” as a ‘Organizing Secretary’ on 28-29 Jan .2011.

### **Books: 5**

1. **Bhale U.N. and A.B. Ade. 2008.** Text book of Botany “Cell Biology, Genetics and Plant Breeding”. Educational Publisher and Distributor Aurangabad. (ISBN-978-81-906858-2-5).
2. **Bhale U.N. 2010.** Hai Divas Jatilach. Autobiography, Sugava Publication, Pune ( ISBN-978-93-80166-05-6).
3. **Bhale U.N. and V.S. Sawant. 2012.** “Plant Science for Sustainable Agriculture and Rural Development” Daya Publishing House, New Delhi (ISBN-978-81-7035-784-1).
4. **Bhale U.N. 2015.** “Major Constrains and Verdict of Crop Productivity” Astral International Pvt. Ltd, New Delhi, in 2 Vol (ISBN 9789351243489 (Set) ISBN

9789351243694 (Vol. 1), ISBN 9789351243700 (Vol. 2), ISBN 9789351305545  
(International Edition)

5. **Bhale U.N. and J.N.Rajkonda. 2015. Plant Pathology, Microbiology and Disease Management, Kailas Publication, Aurangabad ((ISBN 978- 93-84451-65-3).**

### **Radio Talks:**

1. *Trichoderma* is useful Biopesticides at Akashwani Osmanabad Center. (Published on 13<sup>th</sup> Jan.2012).
2. Biofertilizers at Akashwani Osmanabad Center (Published on 14<sup>th</sup> Jan. 2012).

### **NSS Programme Officer:**

Programme officer of National Service Scheme (NSS) for the period of 2013-2016 in college.

### **AVISHKAR College Co-ordinator**

Working as college Coordinator of 'Avishkar' in 2016-2018.

### **AVISHKAR District Co-ordinator**

Working as District Coordinator of 'Avishkar' in 2017-2018.

### **BOARD OF STUDIES (BOS) Member**

Working as Board of Studies (BOS) member in Botany of Dr.Babasaheb Ambedkar Marathwada University Aurangabad since 2018.

### **College/ University Committee:**

1. Chairman of College NAAC committee of Criteria III
2. Chief- Superintendent of UG & PG examination
3. Member of College Library Committee
4. Member of College Sports Committee
5. Member of College Discipline Committee
6. Member of College Time Table Committee
7. Member of Botanical Garden Development Committee
8. Member of University affiliation Committee
9. Member of University paper setting Committee
10. Member of University subject expert Committee

11. Member of Ph.D. expert Committee

***Dr.U.N.Bhale***