



Rayat Shikshan Sanstha's
Yashavantrao Chavan Institute of Science, Satara (Autonomous)
Lead College of Karmaveer Bhaurao Patil University, Satara

Faculty Profile

❖ **General information**

Name : Dr. Mahendra Laxman Ahire
Designation : Assistant Professor
Department : Botany
Educational Qualification : M. Sc., M. Phil., Ph. D.
Date of Appointment : 01/03/2013
Teaching Experience : UG: 10 years
PG: 10 years
Research Experience : 16 years
Research Area : Plant Physiology and Biotechnology
E-mail ID : mlahire@gmail.com



❖ **Educational Qualification Details (undergraduate onwards)**

Sr. No.	College/University	Degree	Subjects	Year	Class/Percentage
1.	K. A. N. M. S. Arts, Comm. and Science College, Satana, Dist. Nashik.	B. Sc.	Botany	2005	82.3%
2.	Department of Botany, Savitribai Phule Pune University, Pune	M. Sc.	Botany	2007	6.1 GPA (59.83%) (Grade 'A')
3.	Department of Botany, Savitribai Phule Pune University, Pune	M. Phil.	Botany	2009	Grade 'A'
4.	Department of Botany, Savitribai Phule Pune University, Pune	Ph. D.	Botany	2012	---

❖ **Academic and Administrative Responsibilities**

Sr. No.	Position	Organization	Date/Duration
1.	Dean, Diploma and Skill Courses	Yashavantrao Chavan Institute of Science, Satara	01/06/2022 to date

❖ **Awards/Honors/Recognitions/Scholarship etc.:**

Sr. No.	Name of the award/honor/recognition	Awarding Organization	Date and year
1	Recognized PG Teacher, M. Phil. and Ph. D. Guide	Shivaji University, Kolhapur	19/08/2019

❖ **Membership to Professional Organizations/Associations:**

Sr. No.	Membership type (Annual/Life/any other)	Organization/Association	Date and year
1.	--	--	--

❖ **Worked as Editor/Reviewer to Journals/Books/Proceedings etc.**

Sr. No.	Name of the Journal/ Book/ Proceedings	ISSN/ ISBN No.	Assignment (Editor/ Reviewer)	Publisher	Publication year
1.	Trajectory (Referred Journal: A Biannual Journal of Research Articles)	0975-1165	Editor	Karmaveer Vidya Prabodhini, Satara	From 2019
2.	Journal of Agriculture Food and Development	2415-0142/20	Member Reviewer Board	Sci Publisher	From 2020
3.	National Journal of Pharmaceutical Sciences	2788-9262	Editor	AkiNik Publications	From 2020

❖ **Research Projects (Ongoing/Completed) (as on 16/03/2023)**

Sr. No.	Title of Project	Duration	Amount Sanctioned (in Lakhs)	Agency	Status (Ongoing/ Completed)
Major Research Project					
1.	--	--	--	--	--
Minor Research Project					
1.	Study of genetic diversity and population genetics using SSR markers in local landraces of finger millet from Western Maharashtra	02 Years	0.5	Institutional seed money	Completed

❖ **Research Guidance:**

- Number of students (M.Phil) 1) Completed: -- 2) Registered: --
- Number of students (Ph.D.) 1) Completed: -- 2) Registered: 03

❖ **Details of Research Publications**

A) Patent

Sr. No.	Title	Patent No.	Indian/US/ Any other	Granting date
1.	--	--	--	--

B) Books/Book Chapters (as on 16/03/2023)

1. Books

Sr. No.	Title	Publisher	Year of Publication	ISBN No	Type (Reference/Text)
1.	Biotechnological strategies for conservation of <i>Uraria picta</i>	Lambert Academic Publishing, Germany	2013	978-3-659-50266-8	Reference

2. Book Chapters

Sr. No.	Title	Publisher	Year of Publication	ISBN No	Type (Reference/Text)
1.	<i>Antiaris toxicaria</i> (Upas Tree)	CRC Press, Boca Raton, USA	2023	9781003308249	Reference
2.	Insights into abiotic stress tolerance in small millets through transcriptomics	Springer Nature Singapore Pte Ltd.	2022	978-981-19-3907	Reference
3.	<i>Andrographis paniculata</i> (Creat or Green Chiretta) and <i>Bacopa monnieri</i> (Water Hyssop)	CRC Press, Boca Raton, USA	2022	9781003205067	Reference
4.	<i>Swertia chirata</i> (Chirata) and <i>Withania somnifera</i> (Ashwagandha)	CRC Press, Boca Raton, USA	2022	9781003205067	Reference
5.	<i>Azadirachta indica</i> (Neem) and <i>Berberis aristata</i> (Indian Barberry)	CRC Press, Boca Raton, USA	2022	9781003205067	Reference
6.	The influence of environmental pollution on secondary metabolites production in medicinal plants	CRC Press, Boca Raton, USA	2022	9781003178866	Reference
7.	Auxins and plant response to adverse environmental conditions	Springer Nature, Switzerland AG	2021	978-3-030-78520-8	Reference
8.	Plant performance and defensive role of proline under environmental stress	Springer Nature, Switzerland	2021	978-3-030-78520-8	Reference

		AG			
9.	Silicon and plant responses under adverse environmental conditions	Springer Nature, Switzerland AG	2021	978-3-030-78520-8	Reference
10.	Transgenic finger millet [<i>Eleusine coracana</i> (L.) Gaertn.] for crop improvement	Springer Nature Singapore Pte Ltd.	2021	978-981-15-5896-2	Reference
11.	Interspecific hybridization among <i>Vigna mungo</i> (L.) Hepper (Black gram) and wild <i>Vigna</i> species	Springer Nature Singapore Pte Ltd.	2020	978-981-15-4197-1	Reference
12.	Seed micro-morphological characteristics in local landraces of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.)	Springer Nature Singapore Pte Ltd.	2020	978-981-15-4197-1	Reference
13.	<i>In vitro</i> callus induction and plant regeneration from stem explants of <i>Ceropegia noorjahaniae</i> , a critically endangered medicinal herb	Springer Science + Business Media, New York	2016	978-1-4939-3330-3	Reference
14.	Alkaloids Derived from Tryptophan: Harmine and Related alkaloids	Springer-Verlag, Berlin, Heidelberg	2013	978-3-642-22143-9	Reference

C) Datasets Submission (as on 16/03/2023)

Sr. No.	Title	Accession No.	Data base	Year of publication
1.	Osmotic stress relieving action of silicon by fatty acid accumulation in Finger millet (<i>Eleusine coracana</i> (L.) Gaertn)	PRJNA602616 (Bioproject)	NCBI	2020
2.	<i>Eleusine coracana</i> Silicon transporter (<i>LSi1</i>) mRNA, complete cds	MT411011 (Gene sequence)	NCBI	2020

3.	<i>Eleusine coracana</i> Silicon transporter (<i>LSi6</i>) mRNA, complete cds	MT411012 (Gene sequence)	NCBI	2020
4.	<i>Eleusine coracana</i> Silicon transporter (<i>LSi3</i>) mRNA, complete cds	MT411013 (Gene sequence)	NCBI	2020
5.	<i>Eleusine coracana</i> Silicon transporter (<i>LSi2</i>) mRNA, complete cds	MT411014 (Gene sequence)	NCBI	2020
6.	<i>Bacillus</i> sp. psm2 16S ribosomal RNA gene, partial sequence	KT334299 (Gene sequence)	NCBI	2015

D) Research papers (as on 16/03/2023):

Sr. No	Title of paper	Journal/proceeding details (Name, volume, page no, year of publication etc.)	ISSN No	Listed in Scopus/Web of Science/ UGC Care	Impact factor (If any)
1.	Silicon alleviates PEG-induced osmotic stress in finger millet (<i>Eleusine coracana</i> (L.) Gaertn) by regulating membrane damage, osmolytes, and antioxidant defense	Notulae Scientia Biologicae. 14:11097 (2022)	2067-3264	Scopus	--
2.	Visualizing the distribution of silicon in different plant parts of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) using electron dispersive spectroscopy (EDS).	Vegetos. 35:747-755 (2022)	2229-4473	Scopus	--
3.	Multifaceted roles of silicon in mitigating environmental stresses in plants	Plant Physiology and Biochemistry. 169:291-310 (2021)	0981-9428	Scopus	5.437
4.	Phytochemical	Biocatalysis and	1878-	Scopus	--

	composition, and antioxidant potential of <i>Frerea indica</i> Dalz.: a critically endangered, endemic and monotypic genus of the Western Ghats of India	Agricultural Biotechnology. 35:102080 (2021)	8181		
5.	<i>Uraria picta</i> : A comprehensive review on evidences of utilization and strategies of conservation	Journal of Phytology. 13:41-47 (2021)	2075-6240	Scopus	--
6.	Characterization of influx and efflux silicon transporters and understanding their role in the osmotic stress tolerance in finger millet (<i>Eleusine coracana</i> (L.) Gaertn.)	Plant Physiology and Biochemistry. 162:677-689 (2021)	0981-9428	Scopus	5.437
7.	An insight into the role of silicon on retaliation to osmotic stress in finger millet (<i>Eleusine coracana</i> (L.) Gaertn)	Journal of Hazardous Materials. 403:124078 (2021)	0304-3894	Scopus	14.224
8.	Nutritional potential and antioxidant efficacy of wild, underutilized berries of economically important Indian Sandalwood (<i>Santalum album</i> L.)	Biocatalysis and Agricultural Biotechnology. 27:101705 (2020)	1878-8181	Scopus	--
9.	<i>Bacopa monnieri</i> (L.) Pennell, a potential plant species for degradation of textile azo dyes	Environmental Science and Pollution Research. 27:9349-9363 (2020)	0944-1344	Scopus	5.190
10.	Morpho-physiological and biochemical responses of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) genotypes to PEG-	Biocatalysis and Agricultural Biotechnology. 23:101488 (2020)	1878-8181	Scopus	--

	induced osmotic stress				
11.	Reduction in hyperhydricity and improvement in <i>in vitro</i> propagation of commercial hard fiber and medicinal glycoside yielding <i>Agave sisalana</i> Perr. ex. Englem by NaCl and polyethylene glycol	Plant Cell Tissue and Organ Culture. 138:67–78 (2019)	0167-6857	Scopus	2.726
12.	Genetic diversity using RAPD markers, mineral composition and their correlation in selected local landraces of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.)	Vegetos. 32:1-10 (2019)	2229-4473	Scopus	--
13.	Decolorization and detoxification of reactive azo dyes using cell cultures of a memory tonic herb <i>Evolvulus alsinoides</i> L.	Journal of Environmental Chemical Engineering. 6:6479–6488 (2018)	2213-3437	Scopus	7.968
14.	The vacuolar proton pyrophosphatase gene (<i>SbVPPase</i>) from the <i>Sorghum bicolor</i> confers salt tolerance in transgenic Brahmi [<i>Bacopa monnieri</i> (L.) Pennell]	Physiology and Molecular Biology of Plants. 24(5):809-819 (2018)	0971-5894	Scopus	3.023
15.	<i>Vigna khandalensis</i> (Santapau) Raghavan & Wadhwa: a promising underutilized, wild, endemic legume of the Northern Western Ghats, India	Genetic Resources and Crop Evolution. 65:1795-1807 (2018)	0925-9864	Scopus	1.876
16.	Herbicide effects on pigments and antioxidant enzymes of <i>Portulaca oleracea</i> L.	Journal of Pharmacognosy and Phytochemistry. 7(1):2024-2031 (2018)	2278-4136	--	--

17.	Differential response of soybean (<i>Glycine max</i> Linn.) varieties to salinity stress in relation to growth and mineral content	Trajectory. 25:14-30 (2017)	0975-1165	--	--
18.	Green synthesis of silver nanoparticles using Bamboo leaf extracts and its antimicrobial properties	Trajectory. 25:7-13 (2017)	0975-1165	--	--
19.	Morphological, biochemical and molecular characterization of <i>Evolvulus alsinoides</i> Linn.: A memory enhancing herb	Indian Journal of Biotechnology. 15:48-56. (2016)	0972-5849	Scopus	0.324
20.	<i>In vitro</i> propagation and cell cultures of memory tonic herb <i>Evolvulus alsinoides</i> : a best source for elicited production of scopoletin	Applied Microbiology and Biotechnology. 100:3463–3476 (2016)	1432-0614	Scopus	5.560
21.	Effect of potassium chloride and calcium chloride induced stress on <i>in vitro</i> cultures of <i>Bacopa monnieri</i> (L.) Pennell.	Journal of Plant Biochemistry and Biotechnology. 23: 366–378 (2014)	0971-7811	Scopus	1.525
22.	Effect of sodium chloride induced stress on growth, proline, glycine betaine accumulation, antioxidative defense and bacoside A content in <i>in vitro</i> regenerated shoots of <i>Bacopa monnieri</i> (L.) Pennell.	Acta Physiologiae Plantarum. 35:1943-1953. (2013)	0137-5881	Scopus	2.736
23.	<i>In vitro</i> propagation and production of cardiotonic glycosides	Applied Microbiology and Biotechnology. 97:2379-2393. (2013)	0175-7598	Scopus	5.560

	in shoot cultures of <i>Digitalis purpurea</i> L. by elicitation and precursor feeding.				
24.	Micropropagation and non-steroidal anti-inflammatory and anti-arthritic agent boswellic acid production in callus cultures of <i>Boswellia serrata</i> Roxb.	Physiology and Molecular Biology of Plants. 19:105-116. (2013)	0971-5894	Scopus	3.023
25.	Cyanobacterial diversity in some Districts of Maharashtra.	Bioremediation, Biodiversity, Bioavailability. 7:70-80 (2013)	1749-0596	--	--
26.	Seed characterization, viability and promotion of seed germination in nervine tonic plant <i>Evolvulus alsinoides</i> Linn.	The Asian and Australasian Journal of Plant Science and Biotechnology. 6 (Special Issue): 5-11 (2012)	1752-3818	--	--
27.	Influence of plant growth regulators on <i>in vitro</i> seed germination and seedling development of <i>Digitalis purpurea</i> L.	The Asian and Australasian Journal of Plant Science and Biotechnology. 6 (Special Issue): 12-18 (2012)	1752-3818	--	--
28.	Phytoplankton diversity related to pollution from Mula river at Pune city.	Terrestrial and Aquatic Environmental Toxicology. 6:136-141. (2012)	1749-0324	--	--
29.	Brinjal (<i>Solanum melongena</i> Linn.) varieties accumulate both Na ⁺ and K ⁺ under low NaCl stress, but excludes Na ⁺ and accumulate K ⁺ under high salt levels.	The Asian and Australasian Journal of Plant Science and Biotechnology. 6:1-6. (2012)	1752-3818	--	--
30.	Micropropagation and assessment of antibiotic selection <i>in vitro</i> of <i>Bacopa monnieri</i> (L.)	International Journal of Plant Developmental Biology. 6:34-39.	1749-4753	--	--

	Pennell.	(2012)			
31.	Axillary multiplication of <i>Ceropegia mahabalei</i> Hemadri & Ansari and <i>Ceropegia media</i> (Huber) Ansari: critically endangered ethnomedicinal herbs of Western Ghats, Maharashtra state of India.	International Journal of Plant Developmental Biology. 6:23-33. (2012)	1749-4753	--	--
32.	Effects of optimal and supra-optimal salinity stress on antioxidative defence, osmolytes and <i>in vitro</i> growth responses in <i>Sesuvium portulacastrum</i> L.	Plant Cell, Tissue and Organ Culture. 104:41-49. (2011)	0167-6857	Scopus	2.726
33.	Micropropagation of <i>Uraria picta</i> through adventitious bud regeneration and antimicrobial activity of callus.	In Vitro Cellular and Developmental Biology - Plants. 47:488-495. (2011)	1054-5476	Scopus	2.723
34.	Differential response of Brinjal (<i>Solanum melongena</i> Linn.) varieties to salinity stress in relation to seed germination and osmolytes accumulation.	Seed Science and Biotechnology. 5:29-35. (2011)	1752-3966	--	--
35.	<i>Indigofera glandulosa</i> Wendl. (Barbada) an important source of nutritious food: underutilized and neglected legume in India.	Genetic Resources and Crop Evolution. 57:147-153. (2010)	0925-9864	Scopus	1.876
36.	Seed viability and influence of presowing treatments on germination and	Seed Science and Biotechnology. 3:48-53. (2009)	1752-3966	--	--

	seedling development of <i>Uraria picta</i> (Jacq.) DC.				
37.	Production of hyoscyamine and scopolamine in shoot and root culture (liquid culture) of <i>Datura metel</i> L.	Plant Cell Biotechnology and Molecular Biology. 10:145-152. (2009)	0972-2025	Scopus	--

E) Paper Presentation in Conference /Seminar/ Symposia (as on 16/03/2023):

Sr. No	Title of paper	Name of the Conference /Seminar/ Symposia Details (Title, Date, Page No etc.)	Level (Intl/Natl/State /Uni etc.)	Organizing institute
1.	Silicon alleviates salt stress in finger millet [<i>Eleusine coracana</i> L. (Gaertn.)].	National Conference on “Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants and One Day Workshop cum Buyers-Sellers-Meet on Medicinal Plants”. 14-16 March 2023. Abstract No. O-03	National	Department of Botany, Savitribai Phule Pune University, Pune
2.	Nutritional and Anti-nutritional composition analysis of wild leguminous plant <i>Vigna trilobata</i> (L.) Verdc.: A crop wild relative of <i>Vigna aconitifoli</i>	National Conference on “Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants and One Day Workshop cum Buyers-Sellers-Meet on Medicinal Plants”. 14-16 March 2023. Abstract No. P-10.	National	Department of Botany, Savitribai Phule Pune University, Pune
3.	Effect of salt stress on Foxtail millet [<i>Setaria italica</i> (L.) Beauv.]	National Conference on “Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants and One Day Workshop cum Buyers-Sellers-Meet on Medicinal Plants”. 14-16 March 2023. Abstract No. P-11.	National	Department of Botany, Savitribai Phule Pune University, Pune
4.	Nutritional composition of wild	One Day National Conference on “Recent	National	Department of Botany, Shri

	legume <i>Vigna silvestris</i> (Lukoki, Maréchal & Otoul) Aitawade, K.V. Bhat & S.R. Yadav: a crop wild relative of urdbean (<i>V. Mungo</i> (L.) Hepper).	Advances in Biological Sciences and Biodiversity Conservation”. 28 December 2022. Pp 41		Shivaji Mahavidyalaya, Barshi
5.	Nutritional and phytochemical status of local finger millet landraces from Western Maharashtra	International Conference on “Frontiers in Nutrition, Medical Genomics and Drug Discovery (Inbix’22)”. 31 Oct. - 2 Nov. 2022. Pp 249	International	Vignan’s Foundation for Science, Technology and Research, Guntur
6.	Phytochemical and proximate composition analysis of underutilized wild Legume plant <i>Vigna stipulacea</i> Kuntze	International Conference on “Frontiers in Nutrition, Medical Genomics and Drug Discovery (Inbix’22)”. 31 Oct. - 2 Nov. 2022. Pp 196-197	International	Vignan’s Foundation for Science, Technology and Research, Guntur
7.	Nutritional composition and phytochemical analysis of wild legume <i>Vigna indica</i> Dixit et al.	International Conference on “Innovative Trends in Life Sciences (ITLS 2022)”. 11-12 March 2022. Pp	International	Sadguru Gadage Maharaj College, Karad
8.	Growth, membrane damage and minerals status in local landraces of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) under salt stress	International Conference on “Innovative Trends in Life Sciences (ITLS 2022)”. 11-12 March 2022. Pp	International	Sadguru Gadage Maharaj College, Karad
9.	Green Synthesis of Zinc Nanoparticles from <i>Psidium guajava</i> leaf extract and evaluation of its biological properties	Hybrid (Online/Onsite mode) International Conference on “Integrative Nanotechnology Perspectives for Multidisciplinary Applications 2022 (INPMA – 2022)”. 16-18 January 2022. Pp 166	International	Annasaheb Awate Arts, Commerce and Hutatma Babu Genu Science College, Manchar, Tal. Ambegaon, Dist. Pune
10.	Visualizing the	International E-Conference	International	Yashavantrao

	distribution of silicon in different plant parts of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) using electron dispersive spectroscopy (EDS)	on “Current Approaches in Life Sciences for Sustainable Development (ICCALSSD-2021)”. 19-20 March 2021. Pp 29.		Chavan Institute of Science, Satara (Autonomous)
11.	Proximate composition and phytochemical analysis of different plant parts of <i>Vigna stipulacea</i> Kuntze	International E-Conference on “Current Approaches in Life Sciences for Sustainable Development (ICCALSSD-2021)”. 19-20 March 2021. Pp 50.	International	Yashavantrao Chavan Institute of Science, Satara (Autonomous)
12.	Differential response of local landraces of finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) to salinity stress in relation to growth	International E-Conference on “Current Approaches in Life Sciences for Sustainable Development (ICCALSSD-2021)”. 19-20 March 2021. Pp 93.	International	Yashavantrao Chavan Institute of Science, Satara (Autonomous)
13.	Differential ability of millets to transport silicon via roots.	National Conference on “Interdisciplinary Approaches in Life Sciences” 2-3 February 2020. Pp 101	National	Yashavantrao Chavan Institute of Science, Satara (Autonomous)
14.	Nutritional composition analysis of wild leafy vegetable “Bharangi”.	State Level Conference on “Innovative Prospects in Basic and Applied Plant Sciences”. 27-28 th December 2019. Pp 34. ISBN: 978-93-89739-28-2	State	Hutatma Rajguru Mahavidyalaya, Rajgurunagar
15.	Isolation and characterization of biosurfactant producing bacteria and its potential application in agriculture.	State Level Conference on “Innovative Prospects in Basic and Applied Plant Sciences”. 27-28 th December 2019. Pp 14. ISBN: 978-93-89739-28-2	State	Hutatma Rajguru Mahavidyalaya, Rajgurunagar
16.	Effect of Sodium Chloride Induced Salt Stress on Growth and Antioxidant Enzyme Activities in Seedlings of Urd Bean [<i>Vigna</i>	In International Conference on “Chemistry, Environment and Energy”. 16-19 th February 2019. Pp EV-PP 24	International	Yashavantrao Chavan Institute of Science, Satara (Autonomous)

	<i>mungo</i> (L.) Hepper]			
17.	Phytochemical analysis of wild vegetable plant Bharangi (<i>Clerodendrum serratum</i> Linn.).	In International Conference on “Chemistry, Environment and Energy”. 16-19 th February 2019. Pp EV-PP 25	International	Yashavantrao Chavan Institute of Science, Satara (Autonomous)
18.	Nutritional potential of legume <i>Vigna sahyadriana</i> Aitawade, Bhat & Yadav: A crop wild relative of <i>V. mungo</i> (L.) Hepper (Urdbean)	International Conference on “Advanced Research in Life Sciences” 27-28 th March 2018. Pp.	International	Sadguru Gadage Maharaj College, Karad
19.	Nutritional potential of <i>Clerodendrum serratum</i> Linn. and its antioxidant and antimicrobial activity.	National Conference on “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development” 5-6 th January 2018. Pp 47	National	Yashavantrao Chavan Institute of Science, Satara
20.	Differential response of soybean (<i>Glycine max</i> Linn.) varieties to salinity stress in relation to growth and mineral content.	National Conference on “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development” 5-6 th January 2018. Pp 48	National	Yashavantrao Chavan Institute of Science, Satara
21.	An improved micropropagation, metabolite profiles and antimicrobial activity of active fractions of ‘Sweet Flag’ (<i>Acorus calamus</i>): a potent aromatic herb	National Conference on “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development” 5-6 th January 2018. Pp 51	National	Yashavantrao Chavan Institute of Science, Satara
22.	Differential response of finger millet (<i>Eleusine coracana</i>) cultivars to PEG 6000 induced drought stress in relation to seed germination and osmolytes	6 th International Conference on “Recent Trends in Life Sciences” 29-30 December 2017. Pp .	International	New Arts, Commerce and Science College, Parner, Dist. Ahmednagar

	accumulation			
23.	Investigation on green synthesis of silver nanoparticles and antibacterial properties against pomegranate bacterial blight	National Conference on “Industry, Academia and Environmental Challenges” 22-23 December 2017. Pp .	National	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar
24.	Control of Bacterial blight disease of pomegranate using silver nanoparticles	National Conference on “Recent Trends in Nanomaterials” 28 th September 2017. Pp 40	National	Yashavantrao Chavan Institute of Science, Satara
25.	Effect of polyethylene glycol induced drought stress on growth, proline, glycine betaine accumulation, antioxidative defense and bacoside A content in <i>in vitro</i> regenerated shoots of <i>Bacopa monnieri</i> (L.) Pennell.	Nat. Seminar on “Medicinal Plant – Bioprospecting, Agrotechniques and Enhancement of Secondary Metabolites” 13-14 th February 2014. Pp 89.	National	Department of Botany, Savitribai Phule Pune University, Pune
26.	Mitigation of adverse effect of sodium chloride stress on <i>Bacopa monnieri</i> (L.) Pennell by addition of potassium chloride and calcium chloride	Int. Con. on “Innovations in Energy, Polymer and Environmental Sciences” 10 – 12 January 2014. Pp 137	International	Yashavantrao Chavan Institute of Science, Satara
27.	Assessment of tissue culture and antibiotic selection parameters useful for transformation of an important medicinal plant <i>Bacopa monnieri</i> (L.) Pennell	Nat. Conf. on “Status, Opportunities and Challenges in Life Sciences” 17-19 September 2013. Pp 38.	National	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar
28.	Osmotic adjustment and bacoside accumulation in <i>in vitro</i> shoot cultures of	Nat. Sem. On “Current Prospects and Challenges in Life Sciences” 26-27 July 2013. pp	National	P. G. Department of Botany, New Arts,

	Brahmi (<i>Bacopa monnieri</i> (L.) Pennell.)			Commerce and Science College, Ahmednagar
29.	Effect of potassium chloride and calcium chloride induced stress on <i>in vitro</i> cultures of <i>Bacopa monnieri</i> (L.) Pennell and accumulation of medicinally important bacoside A	Nat. Sem. on “Exploring Strategies for Enhancement of Secondary Metabolites in Medicinal Plants” 13-14 Feb. 2013. Pp 49.	National	Department of Botany, Savitribai Phule Pune University, Pune
30.	Scopoletin production from <i>in vitro</i> root cultures of <i>Evolvulus alsinoides</i> L.	Nat. Sem. on “Exploring Strategies for Enhancement of Secondary Metabolites in Medicinal Plants” 13-14 Feb. 2013. Pp 47	National	Department of Botany, Savitribai Phule Pune University, Pune
31.	Micro-tuberization in <i>Ceropegia</i> : propagation and starch metabolism enzymes	Nat. Sym. on “Impact of Plant Tissue Culture on Advances in Plant Biology” 19-21 Jan. 2012. Pp 159.	National	Loyla Center for R & D, Xavier College, Ahmadabad
32.	Medicinally important metabolites in immature embryo derived callus of <i>Catharanthus roseus</i>	Nat. Sym. on “Impact of Plant Tissue Culture on Advances in Plant Biology” 19-21 Jan. 2012. Pp 218	National	Loyla Center for R & D, Xavier College, Ahmadabad
33.	Metabolic engineering for abiotic stress tolerance in <i>Bacopa monnieri</i> (L.) Pennell. using P5CS and V-PPase gene	Int. Conf. on “Current Trends in Medicinal Plant Research” 10-12 Jan. 2012. Pp 232	International	Department of Botany, Savitribai Phule Pune University, Pune
34.	Organogenesis and scopoletin accumulation in callus of Shankhpushpi (<i>Evolvulus alsinoides</i> L.)	Int. Conf. on “Current Trends in Medicinal Plant Research” 10-12 Jan. 2012. Pp 215	International	Department of Botany, Savitribai Phule Pune University, Pune
35.	<i>In vitro</i> shoot culture and production of digoxin and digoxin	Int. Conf. on “Current Trends in Medicinal Plant Research” 10-12 Jan. 2012. Pp 226	International	Department of Botany, Savitribai Phule

	in Himalayan herb <i>Digitalis purpurea</i> L.			Pune University, Pune
36.	<i>Agrobacterium tumefaciens</i> -mediated VPP-ase gene transfer and stress tolerance in neurotonic <i>Bacopa monnieri</i> (L.) Pennell.	Nat. Sem. on “Sustainable Productivity through Physiological Intervention” 24-26 Nov. 2011. Pp 93	National	Department of Life Sciences, Ramnarain Ruia College, Matunga, Mumbai
37.	<i>In vitro</i> shoot culture and cardiac glycoside production in <i>Digitalis purpurea</i> L.	Nat. Sem. on “Sustainable Productivity through Physiological Intervention” 24-26 Nov. 2011. Pp 93	National	Department of Life Sciences, Ramnarain Ruia College, Matunga, Mumbai
38.	Biomass production and biological activity of cyanobacterium <i>Nostoc calcicola</i> .	Nat. Sem. on “Sustainable Productivity through Physiological Intervention” 24-26 Nov. 2011. Pp 163	National	Department of Life Sciences, Ramnarain Ruia College, Matunga, Mumbai
39.	Morphological and molecular diversity in <i>Evolvulus alsinoides</i> Linn.	Nat. Sem. on “Plant Biodiversity for Sustainable Development” 10-12 March 2011. Pp 95.	National	Department of Botany, Savitribai Phule Pune University, Pune
40.	Optimization of parameters for <i>Agrobacterium</i> -mediated genetic transformation of Brinjal (<i>Solanum melongena</i> Linn.) using P5CS gene for salt stress tolerance.	Int. Conf. on “Biodiversity and Environmental Crisis: Past, Present & Future” 11-13 February 2011. Pp 24.	International	S. S. V. P. S. Late Kr. Ghogrey Science College, Dhule
41.	Micropropagation of <i>Uraria picta</i> through adventitious bud regeneration and antimicrobial activity of callus.	Int. Conf. on “Biotechnology for Better Tomorrow”. 6-9 February 2011. Pp 90.	International	Department of Microbiology, BAMU Aurangabad, Sub-Division, Osmanabad
42.	Differential response	Nat. Conf. on “Current	National	K. J. Somaiya

	of brinjal varieties to salinity stress in relation to seed germination, osmolytes and antioxidative defence.	Innovation in Plant Sciences". 5-7 February 2011. Pp		College of Arts, Commerce and Science, Kopergaon, Dist: Ahmednagar
43.	Direct shoot regeneration in nodal explants of <i>Uraria picta</i> (Jacq.) DC.: An important medicinal plant.	State Level Conf. on "Current Status of Plant Sciences" 19-20 March 2010. Pp 47.	State	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar
44.	Direct shoot regeneration from nodal explants of <i>Ceropegia media</i> (Huber) Ansari.	Nat. Sym. on "Plant Cell Tissue and Organ Culture: The Present Scenario" 3-5 March 2010. Pp. 90.	National	CAS, Department of Botany, University of Calcutta, Kolkata
45.	Boswellic acid production in <i>in vitro</i> raised cell biomass and propagation of <i>Boswellia serrata</i> Roxb.	Nat. Sym. on "Plant Cell Tissue and Organ Culture: The Present Scenario" 3-5 March 2010. Pp. 103.	National	CAS, Department of Botany, University of Calcutta, Kolkata
46.	Effect of organic supplements and precursors on tropane alkaloid production in callus, cell and root cultures of <i>Datura metel</i> L.	Nat. Sym. on "Plant Cell Tissue and Organ Culture: The Present Scenario" 3-5 March 2010. Pp. 107.	National	CAS, Department of Botany, University of Calcutta, Kolkata
47.	Evaluation of antioxidant activity and total phenolic content of some <i>Nostoc</i> strains.	Int. Sym. on "Phycological Research" 25-27 February 2010. Pp.	International	CAS Department of Botany, Banaras Hindu University, Varanasi
48.	An efficient <i>in vitro</i> method for propagation of <i>Dicentra spectabilis</i> : a medicinal plant from biodiversity hotspot of	Nat. Conf. "Recent Trends in Botany" 28-30 January 2010. Pp 79.	National	K. J. Somaiya College of Arts, Commerce and Science, Kopergaon, Dist:

	North-Eastern India.			Ahmednagar
49.	Production of hyoscyamine and scopolamine in shoot and root culture (Liquid Culture) of <i>Datura metel</i> L.	Nat. Sem. on "Frontiers in Biotechnological Aspects of Plant Sciences" 9-10 January 2010. Pp OR33.	National	C. T. Bora College, Shirur, Dist: Pune
50.	Influence of presowing treatments on seed germination and seedling development of <i>Uraria picta</i> (Jacq.) DC.	Golden Jubilee Conf. on "Challenges and Emerging Strategies for Improving Plant Productivity" 12-14 November 2008. Pp 349.	National	IARI, New Delhi

F) Citation Index (as on 16/03/2023)

	Google Scholar	Scopus	Web of Science
Citations	671	346	246
h-index	14	10	09
i10-index	21	--	--

❖ Participation in Orientation/Refresher/FDP/Short Term/Training Programs:

Sr. No.	Name of the programme	Organizing institute	Date
1.	90 th Orientation course	UGC Academic Staff College, Goa University, Goa	01 st Nov. 2014 to 28 th Nov. 2014
2.	Refresher Course in the subject Life Sciences (Botany)	UGC Human Resource Development Centre, University of Mysore, Mysuru	03 rd Nov. 2016 to 23 rd Nov. 2016
3.	Participated in Two Weeks Faculty Development Programme on "Managing Online Classes and Co-Creating MOOCS"	Teaching Learning Center, Ramanujan College, Delhi University, Delhi sponsored by Ministry of Human Resource Development, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT).	20 th April 2020 to 06 th May 2020
4.	Online Inter Disciplinary Refresher Course in Biological Sciences	UGC Human Resource Development Center, Kannur University, Kannur	05 th Jan. to 18 th Jan. 2021
5.	Online Innovation Ambassador Training	Ministry of Education (MoE's) Innovation Cell and AICTE	30 th June – 30 th July 2021.

	(Foundation level)		
6.	Online Refresher Course in Life Sciences (Interdisciplinary)	UGC Human Resource Development Center, Bharathidasan University, Tiruchirappalli	08 th Sep. to 21 st Sep. 2021
7.	One Week Faculty Development program on “Entrepreneurship Development”	Yashavantrao Chavan Institute of Science, Satara	14 th Mar. to 19 th Mar. 2022

❖ **Participation in Conference/Seminar/Symposia/Workshop/Any other programs (as on 16/03/2023):**

Sr. No.	Name of the event	Organizing institute	Level (Intl/ Nat/ State/ Uni/ Local etc.)	Date
1.	International Symposium on Phycological Research	CAS in Botany, Banaras Hindu University, Varanasi.	International	25-27 Feb. 2010
2.	International Conference on Biotechnology for Better Tomorrow	Department of Microbiology, Osmanabad Sub campus, BAMU, Aurangabad.	International	6-7 Feb. 2011
3.	International Conference on Biodiversity and Environmental Crisis: Past, Present & Future	S.S.V.P.S., Late Kr. Dr. P. R. Ghogrey Science College, Dhule.	International	11-13 Feb. 2011
4.	International Conference on Current Trends in Medicinal Plants	Department of Botany, Savitribai Phule Pune University, Pune	International	10-12 Jan. 2012
5.	International Conference on Innovations in Energy, Polymer and Environmental Sci. (Organizing secretary)	Yashavantrao Chavan Institute of Science, Satara	International	10-12 Jan. 2014
6.	International Summit on Technology and Innovations for Industry (ISTII 2016)	Yashavantrao Chavan Institute of Science, Satara	International	8-9 March 2016
7.	6 th International Conference on Recent Trends in Life Sciences.	New Arts, Commerce and Science College, Parner, Dist. Ahmednagar	International	29-30 Dec. 2017
8.	International Conference on Recent Advances in Renewable Energy and Hygiene Devices	Yashavantrao Chavan Institute of Science, Satara	International	5-6 March 2018

	(RAREHD 2018)			
9.	International Conference on Advanced Research in Life Sciences	Sadguru Gadage Maharaj College, Karad	International	27-28 March 2018
10.	International conference on Chemistry, Environment and Energy (ICCEE 2019)	Yashavantrao Chavan Institute of Science, Satara	International	16-18 Feb. 2019
11.	International E-Conference on “Current Approaches in Life Sciences for Sustainable Development (ICCALSSD-2021)”	Yashavantrao Chavan Institute of Science, Satara	International	19-20 March 2021
12.	Hybrid (Online/Onsite mode) International Conference on “Integrative Nanotechnology Perspectives for Multidisciplinary Applications 2022 (INPMA – 2022)”	Annasaheb Awate Arts, Commerce and Hutatma Babu Genu Science College, Manchar, Tal. Ambegaon, Dist. Pune.	International	16-18 January 2022
13.	International Conference on “Innovative Trends in Life Sciences (ITLS 2022)”	Sadguru Gadage Maharaj College, Karad	International	11-12 March 2022
14.	International Conference on “Frontiers in Nutrition, Medical Genomics and Drug Discovery (Inbix’22)”	Vignan’s Foundation for Science, Technology and Research, Guntur	International	31 Oct. - 2 Nov. 2022
15.	Seminar on “Environmental Awareness: A Need of The Time”	K.A.N.M.S. College, Satana, Tal: Baglan, Dist: Nasik.	State	29 Sep. 2004
16.	Golden Jubilee Conference of Indian Society for Plant Physiology	Plant Physiology Division, IARI, New Delhi	National	12-14 Nov. 2008
17.	National Seminar on Enhancement of Secondary Metabolite Content in Plants (<i>In Vivo</i> and <i>In Vitro</i>) Using Biotic and Abiotic Elicitors	Department of Botany, Savitribai Phule Pune University, Pune	National	8-9 Jan. 2010
18.	National Seminar on Frontiers in Biotechnological Aspects of Plant Sciences	Chandmal Tarachand Bora College, Shirur, Dist: Pune.	National	9-10 Jan. 2010
19.	National Conference on Recent Trends in Botany	K. J. Somaiya College, Kopergaon, Dist: Ahmednagar.	National	28-30 Jan. 2010

20.	National Symposium on Plant Cell Tissue and Organ Culture: The Present Scenario	CAS, Department of Botany, University of Calcutta, Kolkata.	National	3-5 March 2010
21.	State level conference on Current Status of Plant Sciences	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar.	State	19-20 March 2010
22.	Life Sciences Symposium on Current Trends in Biology and Medicine	BARC, Mumbai	National	22-24 Dec. 2010
23.	One Day State Level Seminar on Demystifying G. M. Crops in India and Current Trends in Plant Sciences	Poona College of Arts, Science & Commerce, Pune – 400 001.	State	24 th Jan 2011
24.	National Conference on Current Innovations in Plant Sciences	K. J. Somaiya College, Kopergaon, Dist: Ahmednagar.	National	5-7 Feb. 2011
25.	National Seminar on Plant Biodiversity for Sustainable Development	Department of Botany, Savitribai Phule Pune University, Pune	National	10-12 March 2011
26.	National Seminar on Sustainable Productivity through Physiological Intervention	Department of Life Sciences, Ramnarain Ruia College, Matunga, Mumbai – 19.	National	24-26 Nov. 2011
27.	National Symposium on Impact of Plant Tissue Culture on Advances in Plant Biology	Loyla Center for R & D, St. Xavier's College, Ahmedabad	National	19-21 Jan. 2012
28.	National Conference on Recent Trends in Plant Sciences	Tuljaram Chaturchand College, Baramati, Dist: Pune	National	3-5 Feb. 2012
29.	National Seminar on Research Guidance for Young Researchers (Joint-Organizing Secretary)	New Arts, Commerce and Science College, Parner, Dist: Ahmednagar	National	21-22 Dec. 2012
30.	National Seminar on Exploring Strategies for Enhancement of Secondary Metabolites in Medicinal Plants	Department of Botany, Savitribai Phule Pune University, Pune	National	13-14 Feb. 2013
31.	National Seminar on Current Prospects and Challenges in Life Sciences	P. G. Department of Botany, New Arts, Comm. and Science College, Ahmednagar	National	26-27 July 2013

32.	National Conference on Status, Opportunities and Challenges in Life Sciences	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar.	National	17-19 Sep. 2013
33.	National Conference on Recent Trends in Biology: Nanoscience	Dahiwadi College, Dahiwadi	National	13-14 Dec. 2013
34.	National Seminar on Medicinal Plants – Bioprospecting, Agrotechniques and Enhancement of Secondary Metabolites	Department of Botany, Savitribai Phule Pune University, Pune	National	13-14 Feb. 2014
35.	National Conference on Recent Trends in Nanomaterials	Yashavantrao Chavan Institute of Science, Satara	National	28 th Sep. 2017
36.	National Conference on Industry, Academia and Environmental Challenges	Radhabai Kale Mahila Mahavidyalaya, Ahmednagar	National	22-23 Dec. 2017
37.	National Conference on Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (Organizing Secretary)	Yashavantrao Chavan Institute of Science, Satara	National	5-6 Jan. 2018
38.	State Level Conference on Innovative Prospects in Basic and Applied Plant Sciences	Hutatma Rajguru Mahavidyalaya, Rajgurunagar	State	27-28 Dec. 2019
39.	National Conference on Interdisciplinary Approaches in Life Sciences	Yashavantrao Chavan Institute of Science, Satara (Autonomous)	National	2-3 February 2020
40.	National Conference on Recent Advances in Biological Sciences and Biodiversity Conservation	Shri Shivaji College, Barshi	National	28 December 2022
41.	National Conference on Emerging Trends in Plant Science Research with Special Emphasis on Medicinal Plants and One Day Workshop cum Buyers-Sellers-Meet on Medicinal Plants	Department of Botany, Savitribai Phule Pune University, Pune	National	14-16 March 2023

❖ **Resource person in Conference/Seminar/Workshop/Any other programs:**

Sr. No.	Title of the event	Level (Intl/Natl/ State/ Uni./local etc.)	Organizer	Date
1.	Lead college activity	University	Kisan Veer	26 th Nov.

			Mahavidyalaya, Wai, Dist. Satara	2022.
2.	One day National Level Webinar on Research Methodology	National	Barns College of Arts, Science and Commerce, Panvel	21 st January 2022
3.	one day workshop on “Techniques and Commercial Application of Plant Tissue Culture”	University	Chandmal Tarachand Bora College, Shirur (Ghodnadi), Tal. Shirur, Dist. Pune	20 th December 2019
4.	One day University level workshop on “Green Audit”	University	Dahiwadi College, Dahiwadi	9 th February 2019
5.	Lead College Activity	University	Sharadchandra Pawar Mahavidyalaya, Lonand, Tal. Khandala, Dist. Satara	27 th February 2018
6.	One day teacher’s workshop on “Revised Practical Syllabus of B. Sc. III”	University	Yashavantrao Chavan Institute of Science, Satara and Shivaji University, Kolhapur	02 nd September 2015
7.	One day workshop on “Biodiversity in Western Ghat”	University	Prof. Dr. N. D. Patil Mahavidyalay, Malkapur, Tal. Shahuwadi, Dist. Kolhapur	20 th January 2014

❖ **Chaired Sessions in Conference/Seminar/Workshop etc.:**

Sr. No.	Title of the event	Level (Intl/Natl/ State/Uni./local etc.)	Organizer	Date
1.	--	--	--	--

Signature of Faculty