Curriculum vitae

			A Providence of the second sec
1.	Name of the Applicant	: Dr. Ahilya V. Waghmode	100
2.	Designation	: Assistant Professor	145
3.	Institute	: Dept. of Botany, Sadguru Gadage Maharaj College, Karad.	
4.	Mailing Address	: 'Guruvarya', Plot no. 11A, Behind Sachi Residency, Near water tank, Rajendranagar, Kolhapur- 416004, Maharashtra, India.	
5.	Mob	: +91-7588595492.	
6.	Email	: waghmode.algae@gmail.com,	
		: waghmode.algae@sgm.edu.in.	
7.	Languages Known	: Marathi, Hindi, English	
8.	Educational Qualification	: M. Sc., Ph.D., FEAES	
9.	Blood Group	: B+ve	
10	. Birth Date	: 2 May 1983.	
11	. Native Place	: Malshiras (Dist-Solapur)	
12	. Orcid Id	: 0000-0002-9243-9111	
13	. Scopus Id-	: 57204565647	

Citations-149, h-index- 5, l 10-index-3 Research Gate Score: 208 Academic Profile

Sr.N o.	Degree	University/ Board	Year	Subjects	Class/ Grade
1.	B.Sc.	University of Pune, Pune.	2003	Botany	69.41%
2.	M.Sc.	Department of Botany, University of Pune, Pune.	2005	Botany (Phycology)	'B' grade
3.	Ph. D.	Department of Botany, Shivaji University, Kolhapur.	2013	Botany	Awarded

Ph. D. Title : "Biosorption of heavy metals by using seaweeds".

> Other Qualifications : Exam passed Name of the Institution/University Year Percent.

PRE- Ph. D. : Shivaji University, Kolhapur 2009 'B' grade.

Teaching Experience : 12 years

Sr. No.	Name of the Institute	Type of Appointment	Period	Tenure
1	Department of Botany, Shivaji University, Kolhapur-416004	Visiting lecturer	2007-2008	One year
2	Department of Botany, Shivaji University, Kolhapur-416004	Teaching assistant	2009-2010	One year
3	Gopal Krishna Gokhale College, Kolhapur	Assistant Professor Temporary	2013-2014	One year
4	Rajarshi Chh. Shahu College, Kolhapur	Assistant Professor Temporary	2014	One year
5	Rajarshi Chh. Shahu College, Kolhapur	C.H.B. and Principal Investigator, Young Scientist DST-SERB Project.	2015-2018	Three years
6	Dept. of Botany, Shivaji University, Kolhapur	Assistant Professor (Temporary)	10 th Oct 2018	16 May 2019
7	Dept. of Botany, Shivaji University, Kolhapur	Assistant Professor (Temporary)	11 th Sept.2019	14 May 2019
8	Sadguru Gadage Maharaj College, Karad	Assistant Professor and Co- ordinator of Food Science Dept.	5 th June 2020	Till date

Projects Completed Major (01)

Project Sanctioned by Department of Science and Technology, Govt. of India, Under SERB Fast Track Proposal for Young Scientist Scheme 2015-2018, entitled "Phytochemical screening of *Sargassum* Spp from West Cost of Maharashtra" under Start-up Research Grant vide Registration No. SERB/LS-138/2014 Dtd. 28th March, 2014. Total coast: 30, 50,000/-.

Projects Completed Minor (02)

- "Exploration of Phenolic and Flavonoid Compounds from brown algae Stoechospermum marginatum. A Minor research project funded by Rayat Shikashan Sansthas Sadguru Gadage Maharaj College, Karad (An Autonomous College under RUSA) worth of Rs.70, 000/-.
- 1. "Study of current seaweeds biodiversity assessment from Maharashtra coast". A Minor research project funded by Research initiation scheme 2021-2022, under Shivaji University, Kolhapur, worth of Rs.1,30, 000/-.

Life Membership (05)

1. Seaweed Research and Utilization Association, Parangipettai, Tamil Nadu (2019).

- 2. Mangrove Society of India (MSI), C/o National Institute of Oceanography, Dona Paula, Goa, 403004 (2019).
- 3. International Women scientist association (IWSA) Mumbai (2018).
- 4. Microbiologist Society India, Osmanabad (2023).
- 5. Young Phycological Society International (YPSI) (<u>www.aaribioscience.com</u>) (2023)
 Post-Graduation Teacher Recognition-04 June 2022
 : Ref No. Su/pgbutr/pgt Recog/8975/360/23/10372

Review Board Member

American Journal of Plant Biology, International Journal of *Science Info* (IJSI)

Journal Referee

Egyptian Journal of Aquatic Biology and Fisheries, Indian Journal of Geo-Marine Sciences, Journal of Pharmaceutical Research International, Regional studies in Marine Science.

Courses Taught

PG-Marine Botany, Algae, Fungi and Bryophytes, Biodiversity, conservation and utilization. Plant structure, development and reproduction.

UG-Plant Biochemistry, Molecular Biology, Biology of Vascular plants, Plant breeding, Genetics and Biostatics, Bioinformatics.

Area of Interest: Algal Taxonomy, Seaweeds, Bioremediation, Environmental Technology.

News articles-02

Research Monograph (01), Book Published (03), Reference Book-(01) Research Monograph (01)

Research Project

 Waghmode A.V and Sabale A. B. (2015). Hand Book on Biosorption. Omniscriptum Gmbh & Co. Kg.LAP Lambert Academic Publishing, Germany.ISBN:9783659705335. https://www.lap-publishing.com/978-3-659-70533-5/9783659705335.

Text Book and Practical Book of Botany (ALGAE, Nirali Prakashan) (03)

- 1. A Text book of Cryptogamic Botany (Algae & Fungi) for B.Sc. Botany, Nirali Prakashan (Oct 2021) ISBN- 978-93-5451-239-1.
- 2. Manual of Practical Botany (Algae & Fungi) for B.Sc. Botany, Nirali Prakashan (Oct 2022) ISBN-978-93-95951-12-8.
- 3. Hand book of Algal Technology First Year B.Sc. Semester-I, as per NEP New Syllabus.

A Reference Book (01)

" LIFE SCIENCES" (UGC CSIR NET/SET/SELT)-01, Chapter (02).

Book Chapter Published (04)

1. Waghmode A.V. 2021. Diversity and distribution of Common Seaweeds from the West Coast of Maharashtra. Book Chapter in Phycobiotechnology, CRC press, Taylor and Francis group, USA. ISBN: 978-1-77188-896(hbk), ISBN: 978-1-00301-951-0(ebk).

<u>https://www.routledge.com/Phycobiotechnology-Biodiversity-and-Biotechnology-of-Algae-and-Algal-Products/Sangeetha-Thangadurai-Elumalai-Thimmappa/p/book/9781771888967</u>.

2. Manasi Patil, Poonam Panaskar **Ahilya Waghmode**, Sharada Ghadage "A Brief Review on Bioprospecting of Passiflora, Title of Book: Emerging Trend in Science and Allied Sciences, Volume: I, Month: 25 February 2024, ISBN NO: 978-81-959483-9-0,pp 270-278. Published by Nature Light Publications, Pune, An International Edited Book.

3. Sharada Jagannath Ghadage, Manasi Shirish Patil, **Ahilya Vitthal Waghmode** and Poonam Shrimant Panaskar.Blue green algal approach in sustainable agricultural Development-Title of Book: -Emerging Trend in Science and Allied Sciences, Volume: I, Month: 25 February 2024, ISBN NO: 978-81-959483-9-0,pp 279-283. Published by Nature Light Publications, Pune, An International Edited Book.

4. Sachin Patil, **Ahilya Waghmode** and Manasi Patil (2024) Wheat Bread- IIP Book Series". Futuristic Trends in Agriculture Engineering & Food Sciences e-ISBN: 978-93-5747-486-3 IIP Series, Volume 3, Book 12, Part 2, Chapter 1 Wheat Bread.

Accepted (02)

1. Waghmode, A.V., Shinde, H.P. and Pavitra Chippalakatti³. Indigenous and traditional ecological knowledge. In Nature-based solutions for climate change: Mitigation, Adaptation and Ecological Sustainability, CRC Press, Taylor and Francis Group (Accepted).

2. Introduction to Indian Seaweed Biology and Classification. Book "Indian Seaweeds: Biology, Biodiversity and Biotechnology".

Patents: German (03) (2022) Granted

1. Waghmode A.V. Ghadage, S.J, Panaskar P.S, Patil, H. S, Patil, K.H. and Rajmane, M.M. An Apparatus for Removing Pb (II) Ions from an Aqueous Solution. Grant Certificate for German Application No.202022103534 on 19/09/2022.

2. Waghmode A.V. Ghadage, S.J, Panaskar P.S, Patil, H.S. and Patil, K.H, A System for Removal of Lead from Aqueous Solution Using Dried Biomass of Brown Algae. Grant Certificate for German Application No.202022104092 on 29/09/2022.

3. Waghmode A.V., Chavan, N.S, Gokhale M.V, Patil P.D. and Telave, Ajit. B. A System for Isolation of Starch from Mangroves. Grant Certificate for German Application No.202022105251 on 27/09/2022. **Invited Talks (23)**

1. Delivered lecture at "Pradhapak probodini" in Rajarshi Chh. Shahu College, Kadamwadi, Kolhapur on "Biosorption of Heavy metals by using Seaweeds (2014).

2. Guest lecture on "Algae and opportunity in research field" for T.Y.B.Sc. (Botany) students of Shardabai Pawar Mahila Mahavidyalaya (Arts, Commerce, Science and Home Science) Shardanagar, Malegaon (Bk.) Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 26th Jan 2015.

3.Guest lecture on "Algal Biotechnology" for Undergraduate and Postgraduate of Botany, Zoology and Microbiology students of Vidya Pratishthan's Arts, Commerce, Science and Commerce college, Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 17th Feb 2016.

4. Delivered talk on "Career Guidance" at Mahatma Phule Vidyalaye, Varkute Khurd, Tal-Indapur, Dist-Pune on 24th July 2018. 5. Delivered lecture on "Algae" for T.Y.B.Sc. (Botany) students of Adv. Mohanrao Nanashaeb Deshmukh Arts, Science and Commerce Mahavidyalaya Rajur. (Tal- Akole, Dist-Ahmednagar, Maharashtra, India on 14th Sept. 2018.

6. Guest lecture on "Anatomy of Angiosperms" for Undergraduate of Botany students of Rajarshi Chhatrapati Shahu College, Kadamwadi, Kolhapur, Maharashtra, India on 23th Feb 2019.

7.Guest lecture on "Algal Diversity of Coastal Maharashtra" for Undergraduate of Botany, students of Vidya Pratishthan's Arts, Commerce, Science and Commerce college, Tal-Baramati, Dist: Pune-413115 Maharashtra, India on 09th Sept. 2019.

8. Guest lecture on "Seaweed natural resources and its uses" for Gadre Marine Export, 3298-A, Mirkarwada, Ratnagiri, Maharashtra on 2nd April 2021.

9. Guest lecture on "Seaweed and its applications" for Undergraduate of Botany, students of S.M. Joshi college, Hadapsar, Dist: Pune-413115 Maharashtra, India on 06th June, 2021.

10. Guest lecture on "Seaweed farming" for Undergraduate of Botany, students of Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi, Tal. Atpadi, Dist. Sangli Maharashtra, India on 12th June, 2021.

11. Guest lecture on "Green Practices for Sustainable Agriculture" for Undergraduate of Botany, students of Sadguru Gadage Maharaj College, Karad, Dist: Satara, Maharashtra, India on 09th July, 2021.

12. Guest lecture on "Seaweeds: Applications and scope Green for Sustainable Agriculture" for Under and Post graduate of Botany, students of Sathaye College, Mumbai, Maharashtra, India on 26th August, 2021.

13.Guest lecture on "Herbarium preparation & identification of Algae" for Under and Post graduate of Botany, students of Shardabai Pawar Mahila Arts, Commerce & Science College, Baramati, Pune Maharashtra, India on 31st December, 2021.

14. Guest lecture on "Modern techniques in Plant breeding" for Post graduate of Botany, students of Baburaoji Gholap College Arts, Science & Commerce College, Sangvi, Pune- 411027, Maharashtra, India on 13st February, 2022.

15.Guest lecture on "Workshop on Avishkar Competition" for graduate students of Venutai Chavan Arts & Commerce, College, Vidyanagar, Karad, Dist-Satara, Pin - 415124, Maharashtra, India on 04 th October, 2022.

16. Guest lecture on "Techniques of Algal Preservation and Exploration of Fresh water Algae" for graduate and post graduate students of Karmaveer Bhaurao Patil Mahavidyaaya, Pandharpur, Dist-Solapur, Pin - 413304, Maharashtra, India on 26th November, 2022.

17. Resource person for Workshop on "Research in Plant Sciences" for under and Post graduate of Botany, students of Shardabai Pawar Mahila Arts, Commerce & Science College, Baramati, Pune Maharashtra, India on 25th August, 2023.

18. Delivered lecture at One-Day Research Training Workshop for M.Sc.I students of Yashavantrao Chavan Institute of Science, Karmaveer Bhaurao Patil, Research Foundation (KBPRF) (Section 8 Company) Satara on 28th October, 2023.

19. Delivered lecture in Biotech Day Celebration supported by Gov. of Maharashtra at Department of Biotechnology, Shivaji University, Kolhapur for M.Sc.I & M.Sc.II students on "Algal Biotechnology" on 17th January, 2024.

20. Delivered lecture in Arts, Commerce & Science College, Nashik at Department of Botany, Savitribai Phule, Pune University, Kolhapur for M.Sc. students under certificate course on "Algal for Entrepreneurs" on 15th January, 2024.

21. Delivered lecture on "Food Safety & Standards, Food Preservation" by Maharashtra Skills & Employment Development Centre (MSEDC) on 14th 2024 for Central Government Sponsored Pradhan Mantri Formalization of Micro Food Industries (PMFME) Training batch.

22.Resource person for one day Lead College Workshop on "Intellectual property right" for graduate students of Venutai Chavan Arts & Commerce, College, Vidyanagar, Karad, Dist-Satara, Pin - 415124, Maharashtra, India on 17th February, 2024.

23.Resource person for One day state level seminar on "Conservation of Biodiversity and Coastal Resources" organized by dept. of Botany, Arts, Commerce, Science College, Vaduj, Tal.Khatav Dist.Satara. Maharashtra, India on 24th Feb, 2024.

Awards (05)

1.Young Scientist award, Project Sanctioned by Department of Science and Technology, Govt. of India, Under SERB Fast Track Proposal for Young Scientist Scheme 2015-2018, entitled "Phytochemical screening of *Sargassum* Spp from West Cost of Maharashtra" under Start-up Research Grant vide Registration No. SERB/LS-138/2014 Dtd. 28th March, 2014. Total coast: 30, 50,000/-

2. Best poster presentation award in AVISHKAR 2010-2011. "Removal of heavy metal ions from wastewater using green and brown algae" (Poster) at university level (2nd Rank in Poster competition) at Shivaji University Kolhapur.

3.Best poster presentation award in National conference on "Mangroves and Coastal Resources" (2nd Rank in Poster competition) Organized by Department of Botany, Shivaji University Kolhapur in Association with Mangrove society of India Goa and Mangrove foundation, Mumbai, 12th April, 2019.

4.Lady Legend of Botany (LLB)-Appreciation by Shardabai Pawar Mahila Arts, Commerce & Science College, Baramati, Pune Maharashtra, India.

5. FEAES (Fellow of Eurasian Academy Environmental Sciences) in 2023.

Paper Published: 29

Communicated –02

Citations -149, h-index- 5, i-10-index-3

Research Gate Score: 4.78

- 1. Sabale A. B. and Waghmode A. V. (2010). Biosorption of Copper (II) by Brown Seaweed *Sargassum ilicifolium* (Turner) C. Agardh, *The Bioscan*, 5(3): 407-410.ISSN 0973-7049. An International Quarterly Journal of Life Sciences.
- Waghmode A. V. and Sabale A. B. (2011). Biosorption of Heavy Metals from Industrial wastewater by a Brown Alga Sargassum ilicifolium (Turner) C. Agardh, Advances in Plant Sciences, 24(II): 523-525. IF- 2.5 by NAAS. ISSN: 0970-3586.
- Deshmukh B. S. and Waghmode A.V. (2011). Ex-Situ Conservation of some Rare Endemic and Medicinal plant Species from Akole Taluka (MS) India. *Bioscience Discovery*, 2(2):171-173. ISSN: 2229-3469. <u>http://www.biosciencediscovery.com</u>. ISSN: 2231-024X.
- 4. Deshmukh B. S. and Waghmode A. V. (2011). Role of Wild edible fruits as a food resource: Traditional Knowledge. *International Journal of Pharmacy and Life sciences*. 2(7): 919-922. Citations- 47 ISSN: 0976-7126.

- Waghmode A. V. and Sabale A. B. (2012). Application of *Padina tetrastromatica* for removal of heavy metal ions from wastewater. *Journal of Environmental Research and Development*. 2A (07): 958-963, IF- 0.157. An international research journal of natural SCS. Technology, Social SCS, Law and Management for environment, E-ISSN 2319-5983, ISSN 0973-6921. Citations- 06
- 6. Waghmode A. V. and Sabale A. B. (2013). Biosorption of lead from aqueous solution by brown seaweeds. *Indian Journal of Applied* Research, IF-0.8215, 3(9), 58-62, ISSN-2249-555X.
- Waghmode A. V. and Kumbhar R. R. (2015). Phytochemical Screening and Isolation of Fucoxanthin content of Sargassum ilicifolium. International Journal of Pure and Applied Biosciences, 3(6):218-222, ISSN: 2320-7051, IF-1.106. DOI: <u>http://dx.doi.org/10.18782/2320-7051.2180</u>.
- 8. Waghmode A.V. and Kumbhar R. R. (2016). Study of Blue-green algae from Lonar Lake. *Indian Journal of Fundamental and Applied Life Sciences*, 6(2), 69-73. 2231–6345, IF-1.54. <u>http://www.cibtech.org/jls.htm</u>. ISSN: 2231–6345.
- 9. Waghmode A.V. and Deshmukh B. S. (2016). A New report of *Rosenvingea orientalis* (J.Ag.) Boergesen from Ratnagiri District of Maharashtra, India. *Journal of Algal Biomass Utilization*, 7(3): 70-72, ISSN: 2229–6905.
- 10. Waghmode A.V. (2017). Diversity and Distribution of Seaweeds from the West Coast of Maharashtra. *Journal of Algal Biomass Utilization*, 8(3):29-39. ISSN: 2229–6905.
- Waghmode A.V. and Khilare C. J. (2018). RP-HPLC profile of major phenolics from brown marine macroalgae. Journal of Applied Pharmacy, 10(2):1-5. DOI: 10.4172/1920-4159.1000262, IF-0.69^{*}; 0.87^{*} ISSN: 1920-4159.
- 12. Waghmode A.V. and Deshmukh B. S. (2018). A New report of *Hypnea spinella* (C.Agardh), Kutzing from Sindhudurgh District of Maharashtra, India. *Indian Journal of Geo-Marine Sciences*, 47(11):2321-2323. IF-0.289, ISSN: 0379-5136 (UGC listed).
- Bansode, P; Rashinkar, G; Somasundaram, I; Birajdar, A; Mishra, S; Patil, D; Waghmode, A. 2019. Evaluation of Chemical, Antipsoriatic and Antiangiogenic Properties of Salt from Lonar Crater Lake Water. Asian Journal of Organic & Medicinal Chemistry, 4(3), 159-165, <u>https://doi.org/10.14233/ajomc.2019.ajomc-p193</u> ISSN NO: 2456-893, CODEN: AJOMB2.
- 14. Waghmode A.V., Narayankar C.U, Nimbalkar M.S and Gaikwad D.K 2019. Exploration of fucoxanthin and astaxanthin in brown algae (*Sargassum* sp.) by high performance liquid chromatography, *Indian Hydrobiology*, 18(1&2):40-49, (UGC care list) ISSN: 0971-6548.
- 15. Manasi Patil, Nivas Desai, Ahilya Waghmode and D.K. Gaikwad 2020. Effect of Exogenous Application of Plant Growth Regulators on Physiology and Secondary Metabolite Accumulation of *Colubrina Asiatica L. Studia Rosenthaliana* (Journal for the Study of Research) Volume XII, Issue IX, September-2020 ISSN NO: 1781-7838. (UGC care list).
- Patil Manasi, V. Waghmode Ahilya, Chirag Narayankar, D. K. Gaikwad 2021. Influence of plant growth regulators on fatty acid composition of *Simarouba glauca* DC. *Current Botany*, 12: 1-3. Doi:10.25081/cb.2021.v12.6521https://updatepublishing.com/journal/index.php/cb ISSN: 2220-4822.
- 17. Ahilya V. Waghmode and Manasi S. Patil (2021) Gas chromatography-high resolution mass spectrometry analysis of *Sargassum* species. *Indian Hydrobiology* 20(1): 1–10. ISSN: 0971-6548.
- 18. Waghmode A.V, Narayankar C.U, Manasi Patil, Nimbalkar M.S and Harshada Takale (2021). Antioxidant, Antimicrobial and Cytotoxic activity of Some Common Seaweed along West Coast of Maharashtra. *Egyptian Journal of Aquatic Biology and Fisheries,* Zoology Dept, Faculty of

Science, Ain Shams University, Cairo, Egypt. ISSN 1110-6131, Vol. 25(6):129-143. www.ejabf.journals.ekb.eg (Scopus).

- 19. Manasi Patil, Poonam Panaskar, Chirag Naraynkar, Ahilya Waghmode and D.K. Gaikwad (2021) *Passiflora* a Promising medicinal plant. *Science, Technology and Development Journal,* Volume X Issue XI NOVEMBER 2021 ISSN: 0950-0707,65-76. (UGC Care list).
- 20. Manasi Patil, Poonam Panaskar, Chirag Naraynkar, Ahilya Waghmode (2021) Preliminary Phytochemical Evaluation of *Passiflora* Fruits. December| IJIRT International Journal of Innovative Research in Technology | Volume 8 Issue 7 |554-557 ISSN: 2349-6002.
- 21. Educational Configurations of Diwan Bahadur Annasaheb Latthe for Modern India's Social and Economic Upliftment in 23rd International Interdisciplinary Conference Theme (2022). "The Contribution and Achievements of Men in various spheres at National and International Levels organized by BRICS World of Traditions Moscow, Russia, Rayat Shikshan Sanstha's Sadguru Gadge maharaj College, Karad and Snehavardhan Research Institute, Pune,proceeding organized by BRICS World of Traditions Moscow, Russia, Rayat Shikshan Sanstha's Sadguru Gadge maharaj College, Karad and Snehavardhan Research Institute, Pune. Page no.125-134, ISBN 978-93-91033-96-5.
- 22. The Great Girish Karnad's Contribution to Indian English Drama in 23rd International Interdisciplinary Conference Theme (2022). "The Contribution and Achievements of Men in various spheres at National and International Levels organized by BRICS World of Traditions Moscow, Russia, Rayat Shikshan Sanstha's Sadguru Gadge maharaj College, Karad and Snehavardhan Research Institute, proceeding organized by BRICS World of Traditions Moscow, Russia, Rayat Shikshan Sanstha's Sadguru Gadge maharaj College, Karad and Snehavardhan Research Institute, proceeding organized by BRICS World of Traditions Moscow, Russia, Rayat Shikshan Sanstha's Sadguru Gadge maharaj College, Karad and Snehavardhan Research Institute, Pune. Page no.116-124, ISBN 978-93-91033-96-5.
- 23. Hingane N.N, Waghmode A.V, Gajbhye M.H and Agnihotri S.N. Antioxidant potentials and total phenolic content of brown and red seaweeds harvested from the Sindhudurg coastal area, Maharashtra. Advances in Bioresearch, Vol 14[1/2]2023. (UGC Care list) (Web of Science).
- 24. Waghmode, A.V. and Shinde, H.P. Marine algal species as biosorbents for sequestering toxic heavy metals: a review. Biological Forum-An International Journal, 15(2):1090-1096(2023).
- 25. Patil Manasi, Nivas Desai, Chirag Narayankar, Waghmode Ahilya and D. K. Gaikwad 2021. Effect of plant growth regulators on the carbohydrate accumulation in *Simarouba glauca* seedling. Journal of Stress Physiology & Biochemistry, vol.19, No.2, 2023, pp.34-39. ISSN 1997-0838.
- 26. Nikam, P.D. Shinde, H.P. and Pawar, R.P. Waghmode, A.V. Occurrence and conservation status of *Ceropegia anjanerica*, Malpure et. al. (Apocynaceae; Asclepiadoideae; Ceropegieae) in Nasik district: A review. International Journal of Plant and Environment, vol.09 (1)2023.
- Pawar, Rahul P., Nikam, Pravin D. Waghmode, A.V. and Shinde, Hemendra P. Pharmacological and ecological aspects of *Chlorophytum borivilianum* Sant. and Fern.: a review. Sustainability, Agri, Food and Environmental Research, (ISSN: 0719-3726), 11(X), 2023: <u>http://dx.doi.org/10.7770/10.7770/safer-V12N1-art704</u>.
- 28. Waghmode, A.V., Shinde, H.P. and Pavitra Chippalakatti. Exploration of Phenolic and Flavonoid content of Marine Brown Algae *Stoechospermum marginatum* and *Dictyota maxima* Accepted to Indian Hydrobiology.
- 29. Waghmode, A.V., Shinde, H.P. Pavitra Chippalakatti and Devarajan Thangadurai. Microalgae mediated nanoparticles synthesis over conventional approaches: Agricultural Perspective. Communicated Springer.

Papers/Posters Presented in Conference/Seminar (27)

Paper Presented

- 1. Biosorption of copper using brown alga *Padina tetrastromatica* (Hauck) Oral presentation, at XXXIII Conference of Indian Botanical Society and International Symposium on the New Horizons of Botany at Department of Botany, Shivaji University, Kolhapur (2010).
- 2. Biosorption of heavy metals from industrial wastewater by a brown alga *Sargassum ilicifolium* (Turner) C. Agardh Oral presentation, at National Conference on current innovations in Plant Sciences at K. J. Somaya College, Kopargaon (2012).
- Application of seaweeds for removing heavy metal ions from wastewater. Poster presented at National conference on recent trends in plant sciences 21st APSI Scientist meet, Organized by Tuljaram Chaturchand College Baramati Pune (with Sabale A. B. 2012).
- Ethno botanical survey of some medicinal plant with respect to medicinal drugs from Chandoli, Poster presented at National conference on recent trends in plant sciences 21st APSI scientist meet, Organized by Tuljaram Chaturchand College Baramati, Pune (with Kamble S. R. and Deokar R. R, 2012).
- 5. Medicinal potential of seaweeds Poster presented at national seminar on medicinal plants: status and future, Department of Botany, Shivaji University, Kolhapur (with Mole M. M, 2012).
- Ethno botanical studies of some useful herbs, shrubs and trees of Shirala Tahsil of Sangali district, M.S. India. Poster presented in national seminar on medicinal plants: status and future, at Department of Botany, Shivaji University, Kolhapur (with Deokar R. R., Kamble. S. R. and Sabale A. B. (2012)
- Removal of Cobalt (II) and Nickel (II) from aqueous medium using brown seaweeds. Poster presented in Sustainable water resource development and management at Department of Environmental Sciences, Shivaji University, Kolhapur (with Sartape S. S, Deokar R. R and Sabale A. B. (2012).
- 8. Ethnobotanical and ethno medicinal survey of Chikurde sacred grove, District Kolhapur (Maharashtra) Poster presented, UGC Sponsored National conference on Sacred groves as a repository for ethno medicinal plants organized by Department of Botany, Rajaram college, Kolhapur (with Deokar R. R, Kamble S. R and Sabale A. B. (2013).
- Cadmium biosorption by using brown marine alga Sargassum ilicifolium Poster presented, UGC Sponsored "National conference on Life Sciences: An Outlook and Challenges, organized by Department of Botany & Zoology, Dahiwadi college, Dahiwadi, Tal-Man, Dist-Satara (with Deokar R. R. (2014).

- 10. Biosorption of Cadmium (II) from aqueous solution using marine algae. Oral presentation, XII conference of society of cytologists and geneticists and national symposium on challenges for biologists in 21st century, organized by Department of Botany, Shivaji University, Kolhapur (2014).
- 11. Phytochemical Screening and Isolation of Fucoxanthin Content of *Sargassum ilicifolium*. Oral presentation, Two-day international conference on challenges and opportunities before 21st century India, at Rajarshi Chh. Shahu College, Kadamwadi, Kolhapur.
- 12. Diversity and Distribution of Brown algae from the West Coast of Maharashtra. Poster presentation, National conference on Recent trends in Physical, Chemical and Biosciences [RTPCB-2016] Organized by Department of Chemistry, Arts, Science and Commerce College Baramati, (with Patil H. S and Tabe A. R. (2016).
- 13. Study of Brown algae (Phaeophyceae) from the West Coast of Maharashtra and Phytochemical characterization of brown seaweed Sargassum cinereum. Oral presentation, 3rd International Conference on Innovative Research in Science and Technology (ICIRST-2017) Organized by Gopal Krishna Gokhale College, Kolhapur, (MS), India.
- 14. RP-HPLC profile of major phenolics from brown marine macroalgae. Poster presentation, National seminar on "Organized by Abasaheb Marathe Arts and New Commerce, Science College, Vikhare-Gothane, Rajapur. Dist-Ratnagiri, Maharashtra, (with Powar P.S and Sutar P. T. (2018).
- 15. Quantification of fucoxanthin and astaxanthin in brown algae (*Sargassum* sp.) by high performance liquid chromatography" Poster presentation, International Conference on Materials and Environmental Sciences [ICMES-2018] organized by Shri Yashwantrao Patil Science College, Solankur and The New College, Kolhapur, on 7th & 8th December, (with Narayankar C.U, Nimbalkar M.S and Gaikwad D.K 2018).
- 16. "Removal of heavy metal from aqueous medium using seaweeds" Poster presentation in the India International Seaweed Expo and Summit 2019 held at World Trade Centre, Mumbai during 22nd-24th January 2019.
- 17. "Antibacterial activity of common seaweeds from the west coast of Maharashtra" Poster presentation in National conference on Mangroves and Coastal resources organized by Department of Botany, Shivaji University, Kolhapur in Association with Mangrove society of India, Goa and Mangrove foundation, Mumbai,12th April, 2019 with Sabale A.B. (2nd Rank Poster presentation).
- 18. "Restoration and management of Mangrove ecosystem", presented a Poster in the Online International conference on "Climate Change, Mangroves and Sustainable Management" on 24th April 2020. IQAC & PG-Department of Botany of Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, (MS) University of Mumbai, Mangrove Society of India & Sahyadri Botanical Society, Kolhapur.

- 19. "GC-HRMS and NMR profile of brown algae along the west coast of Maharashtra" Oral presentation in Jointly Organizing with Sadguru Gadage Maharaj College, Karad and Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, Two days Virtual International Conference on Research Interventions and Advancements in Plant Science(RIAPS) 15th and 16th June 2020.
- 20. "Gas Chromatography-High Resolution Mass Spectrometry Analysis of *Sargassum* species". Oral Presentation in two days International E-Conference on Cutting Edge Smart Materials & Nanotechnology (ICCESMN-2020) held on 20-21st August 2020 jointly organized by Department of Physics and IQAC of Sadguru Gadage Maharaj College, Karad, Maharashtra, India. (With Manasi Patil.)
- 21. Antioxidant and Antimicrobial activity from Common Seaweeds from west coast of Maharashtra Oral Presentation in two days International E-Conference, Phycology Webinar 2021 on 28th-29th January2021organized by Probir Chatterjee Research Foundation and Dept. of Botany, University of Calcutta.
- 22. "Anticancer activity of some brown algae along west coast of Maharashtra" Oral presentation in Shri Pancham Khemraj Mahavidyalaya, Sawantwadi and with association of plant science research, Dehradun, Two days International Conference on Research Interventions and Advancements in Plant Science(RITAPS) 26th and 27th March 2021.(With Chiraj Narayankar).
- 23. Passiflora a Promising medicinal plant (2021). Poster presentation in National Conference on Advances in Plant Science Research, 4TH Plant Science Researchers Meet(PSRM-2021) 20th and 21th November 2021. (With Manasi Patil, Poonam Panaskar, Chirag Naraynkar and D.K. Gaikwad).
- 24. Antioxidant Study in Stocheospermum marginatum (2022) Poster presentation in National conference on "Panorama of Life Sciences-2022", Organized by Department of Life Sciences, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar and AOZ ASSOCIATION OF ZOOLOGISTS on 20th January, 2022. <u>https://youtu.be/5uKGaArPyyQ</u> (Individual).
- 25. FT-IR Characterization of Methanolic Extract of Marine Algae from West Coast of Maharashtra in Two days International Conference on Innovative trends in life sciences (ITLS 2022) on 11th and 12th March 2022 Organized by Sadguru Gadage Maharaj College, Karad (Individual).
- 26. Alpha Amylase Inhibition Activity of Common Seaweeds from Westcoast of Maharashtra in two days International Conference on Microbes for sustainable Agriculture, Animal husbandry and environment (MSAAHE 2023) on 3rd and 4th February 2023 Organized by Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur, Dist-Solapur-413304(Individual).
- 27. Gas Chromatography mass spectrometry analysis of *Stoechospermum* Species in the two days Interdisciplinary National conference on Environmental Sustainability in life science (INCESLS) Scheduled from 24th & 25th March 2023 by Deshbhakt Anandrao Balwantrao Naik College, Chikhali, Maharashtra, India (Oral Presentation).

Attended: (13)

- 1. Participated in XVII Annual conference of Indian Association for angiosperm taxonomy and international seminar on "Changing scenario in angiosperm systematic" at Department of Botany, Shivaji University, Kolhapur (2007).
- 2. Participated in national conference on "Integrated pest management and bioremediation" organized by Department of Botany and Agriculture Department, Lal Bahadur Shastri Mahavidyalaya, Satara (2012).
- 3. Participated in national conference on "Advanced Techniques of Teaching and Learning in Higher Education" organized by Vishwasrao Naik Arts, Commerce and Baba Naik Science Mahavidyalaya, Shirala, Jan 6th 2012.
- 4. Participated in One day seminar on "Plant Diversity Conservation" at Department of Botany, Shivaji University, Kolhapur at 25th June (2013).
- 5. Participated in "National seminar on "Envi and Bio. Terminology" organized by commission for scientific and technical terminology at Vidya Pratisthans, ASC College, Baramati, Dist-Pune (2015).
- Participated in "National seminar on "Biodiversity: An Outlook and Challenges" organized by Department of Botany and Zoology, D. P. Bhosale College, Koregaon, District- Satara (M.S) Held on 13th Feb, 2016.
- Participated in One day Multilingual National Conference on "Freedom of Expression Portrayed in Literature" on 17th January 2016, organized by Department of Languages, Rajarshi Chh. Shahu College, Kolhapur.
- 8. Participated in XXVI Annual conference of Indian Association for angiosperm taxonomy and international seminar on conservation and sustainable utilization of Biodiversity. At Department of Botany, Shivaji University, Kolhapur held on 7-9th Nov, (2016).
- 9. Participated in National conference on "Advances in Agriculture& Technologies for future "organized by Department of Agriculture and Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem.2022.
- 10. Worked as a member in National conference on "Advances in Agriculture& Technologies for future "organized by Department of Agriculture and Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem.2022.
- 11. Participated and organized in "Ranbhaja mahoshv v pakkruti saprdha-2022" Department of Botany, Sadguru Gadage Maharaj College, Karad, Maharashtra, India held on 12 Decem.2022.
- 12. Exploration of Phenolic and Flavonoid Compounds from Marine algae Symposium on "Current Perspectives in Algal and Cyanobacterial Biology (CPACB-2023)" February 20-21, 2023. Organized

by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi-221005, UP, India.

13. Participated in one day Seminar on "Plant Sciences: Challenges and Opportunities" organizes dept.of Botany, New College, Kolhapur on 16th Feb.2024.

Workshops (20)

- 1. Participated in National workshop on Research methodology and Quantitative techniques at December 2010, Department of Humanity, Shivaji University, Kolhapur.
- 2. Participated in two-day workshop on Research writing, Ethics, Plagiarism and Publishability at 26th and 27th July, 2012, organized by Internal Quality Assurance Cell (IQAC), Shivaji University, Kolhapur.
- 3. Participated in National workshop on Mangrove awareness programe on December 29th 2011, Department of Botany, Shivaji University, Kolhapur and Godutai Gambhekar Vidhyalay, Ratnagiri.
- 4. Participated in National workshop on Plants of medicinal potential from Western Ghats and pharmaceutics on March 22nd 2012, Department of Botany, Shivaji University, Kolhapur.
- 5. Participated in National workshop on The integrated fertilizer and nutrient management in botany on Feb 26th 2014, G.K.G college cluster, Department of Botany, The New College, Kolhapur.
- 6. Participated in National workshop on Rare, endangered and threatened (RET) plants of Western Ghats on Sept 4th 2015, under lead college scheme, G.K.G college cluster, Shivaji University, Kolhapur organized by Department of Botany, Shri Shahaji Chh. Mahavidyalaya, Kolhapur.
- 7. Participated in one day workshop on SET/NET guidance organized by Rajarshi Chh. Shahu College, Kolhapur in Life Sciences Subject on 6th Jan, 2017.
- Participated in One day National workshop on Bonsai for Connecting with the Nature on 7th July 2017, jointly organized by Kolhapur Bonsai Club with Department of Botany, Shivaji University, Kolhapur.
- Participated in National workshop on Science Academies Lecture Workshop on Plant Sciences: Challenges and Opportunities Organized by Department of Botany, The New College, Kolhapur on 19th and 20th December, 2017.
- 10. Participated in global initiative for academic network, a seven days GIAN course on "Deployment of Allelopathy in Sustainable Agriculture" Organized by Department of Botany, Shivaji University Kolhapur-416004 on 27th Sept. to 3rd October, 2019.
- 11. Participated in V. P. College, Baramati one day Webinar on restructuring of S.Y.B.Sc. Botany syllabus.

- 12. Participated in ONLINE KITCHEN GARDENING COURSE 23 July 8 Oct, 2020 three months course on Kitchen Gardening organized by Br. Balasaheb Khardekar College, Vengurla in collaboration with Gardens Club of Kolhapur.
- 13. Participated in One Day Online Teachers' Workshop on the revised (CBCS) syllabus of B.Sc. III Botany (Theory) 6th Feb, 2021 organized by dept. of Botany M.H. Shinde Mahavidyalaya, Tisangi.
- 14. Participated in three Day online workshop on "Skill Development Program in Seaweed Cultivation and Processing Technology (SEA-CPT), 24-26 February 2021 organized by CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat.
- 15. Maharashtra State Development of Educators and Enhancement in Delivery (MS-DEED) Program for Maharashtra State Science and Mathematics Teachers from Higher Education Institutes to be held by PMMMNMTT Centre of Excellence in Science and Mathematics Education (CoESME), at IISER Pune from 21st to 23 rd December 2021.
- 16. Participated in one day workshop on "Intellectual Property Rights Awareness" as activity organized by internal Quality Assurance Cell in Collaboration with dept. of Zoology, S.G.M. College, Karad on March 25th 2022.
- 17. Participated in one day workshop on "An Orientation of NAAC Criterion VII-Institutional values and Best practices" organized by Internal quality assurance cell under RUSA Sponsorship at S.G.M. College, Karad on July 22th 2022.
- 18. Participated in one day workshop on "National Education Policy 2020" organized by Internal quality assurance cell under RUSA Sponsorship at S.G.M. College, Karad on July 23th 2022.
- 19. Participated in one day workshop on "Research Data management tools and techniques" organized by research advisory committee and internal Quality Assurance Cell at S.G.M. College, Karad on March 28th July 2022.
- 20. Participated in the teachers training program on "Climate education and green campuses for a safer planet" jointly organized by department of Botany and internal Quality Assurance Cell of Vivekanand College, Kolhapur and climate reality project India, on Sept. 16th 2022.

Online FDP and Orientation (09)

Participated in a 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" from June 26 - July 24, 2020 and obtained "A" grade. Teaching Learning Centre, Ramanujan College, and University of Delhi under the aegis of ministry of human resource development Pandit Madan Mohan Malaviya national mission on teachers and teaching.

- 2. One Week Online Faculty Development Program on, "E-Content Development for Teaching and Learning" from 20/07/2020 to 25/07/2020, organized by IQAC and Department of Chemistry, Sadguru Gadage Maharaj College, Karad.
- Two-week faculty development programme on "Managing online classes and co-creating moocs 3.0" from July 25 - August 10, 2020 and obtained grade A+ teaching learning centre, Ramanujan College, University of Delhi under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on teachers and teaching.
- Participated in one-week online faculty development program on "Overcoming the challenges in adapting online technology in teaching learning" held during 6th -11th May 2020, organized by Jhulelal Institute of Technology, RTM Nagpur University.
- 5. Participated in "Online one week FDP on Moodle" organized by Willingdon College in Association with Spoken Tutorial IIT- Bombay, MHRD, Govt. of India on 23rd -29th May 2020.
- 6. Participated in One week faculty programme 'Academic and Professional Development" organized by IQAC and staff welfare committee under the aegis of RUSA BY Y.C.I.S College Satara, Maharashtra from 19th October, 2020 to 24th October, 2020.
- 7. Participated in Online Short-term Faculty Development Programme on Research Methodology and Data analysis of Six days (30 contact hours) duration conducted at Sadguru Gadage Maharaj College, Karad, Satara-415124, from 13/09/2021to 18/09/2021 under faculty development centre, UGC-Human resource development Centre, SPPU.
- 8. Participated in "Online Refresher course on Basic Science" held during 19th Sept.to 01th Oct, 2022, organized by UGC-Human Resource Development center, Rani Durgawati Vishwavidyalaya, Jabalpur, Madhya Pradesh.
- 9. Participated in "A Two-Day Residential Faculty Development Programme on "Enhancement of Effective Communication Skills" at Shivam Pratishthan, Gharewadi, Karad, Satara-415124, from 24/12/2022 to 18/09/2022.

Others: Co-Curricular Activities (21)

- Participated in AVISHKAR 2010-2011. "Removal of heavy metal ions from wastewater using green and brown algae" (Poster) at university level (2nd Rank in Poster competition) at Shivaji University Kolhapur.
- 2. Participated 5th inter-university research festival AVISHKAR 2010-2011. "Removal of heavy metal ions from wastewater using green and brown algae" (Poster) at Medical Health University, Nashik.

- 3. Participated AVISHKAR at Shivaji University, Kolhapur, 2011- 2012 "Adsorption mechanism of heavy metals from tannery wastes by using *Padina tetrastromatica* Biomass" (Poster), December 2011.
- Participated AVISHKAR at Shivaji University, Kolhapur, 2011- 2012 "Adsorption mechanism of heavy metals from tannery wastes by using *Padina tetrastromatica* Biomass" (Poster), 21st to 23rd January 2011.
- 5. Worked as member of organizing committee "Rayat Inspire Camp" at Dept. of Physics, Chemistry and Life Science, R. C. Shahu College Kolhapur for the School Student of M. G. Vidyalaya, Rukadi held during 1st to 5th December 2015.
- 6. Worked as Examiner in Mini Avishkar Research Competition dated on 11th Oct 2018 in Rajarshi Chhatrapati Shahu College, Kadamwadi, Kolhapur.
- 7. Worked as committee member for registration, oral and poster in National conference on Mangrove and Coastal Resources, 12th April, 2019 at Department of Botany, Shivaji University, Kolhapur in Association with Mangrove Society of India, Goa and Mangrove foundation, Mumbai.
- 8. Member Admission Committee (2020-2021), Phy Dept. for M.Sc.
- 9. Worked as Co-coordinator in Lead College Activity (2021-2022), S.G.M College Karad.
- Worked as member of organizing committee "Rayat Inspire Camp" at Dept. of Physics, Chemistry and Life Science, R. C. Shahu College Kolhapur for the School Student of M. G. Vidyalaya, Rukadi held during 1st to 5th December 2015.
- 11. Worked as member of organizing committee in RUSA Sponsored One Day International conference on "Innovative trends in Life Sciences (ITLS 2022)" organized by Sadguru Gadage Maharaj College, Karad on 10th &12 thMarch 2022.
- 12. Worked as member of organizing committee in RUSA Sponsored One Day National conference on "Practical Librarianship and quality Enhancement" organized by Sadguru Gadage Maharaj College, Karad in collaboration with Shivaji University College Librarians Association (SUCLA) ON 10th October 2022.
- 13. Worked as jury for oral presentation and chairperson of the session for "Interdisciplinary National conference on Environmental Sustainability in life science (INCESLS)" Scheduled from 24th & 25th March 2023 by Deshbhakt Anandrao Balwantrao Naik College, Chikhali, Maharashtra, India.
- 14. Worked as member in Hands on training on Bonsai Technique organized by Dept. of Botany, Sadguru Gadage Maharaj College, Karad on 16th Feb. 2023.
- 15. Worked as LIC Member for Recognition of research laboratories and research centres for food processing & Packaging in Karmaveer Bhaurav Patil University, Satara on 27 th June 2023.

- 16. Working as Co-Ordinator/Head of Food Science 2022 till date.
- 17. Chairman- BOS, Dept. of Food Science 2022 till date.
- 18. Worked as Co-Ordinator AVISHKAR Satara District 2022.
- 19. Worked as member of organizing committee in Third International Scientific Conference on "Environmental Research" Issues, Challenges and Strategies for Sustainable Development and Livelihood Security organized by Sadguru Gadage Maharaj College, Karad in collaboration with Eurasian Academy of Environmental Sciences, Association for agricultural Technology in southeast Asia, Centre for innovation in Science and Social Action, Sub-Regional Science Centre-Karwar and Karnataka Forest Department at Sub-Regional Science Centre, Karnataka, India on 1-2 December 2023.
- 20. Worked as examiner for the institutional level poster for department of B.Voc Agriculture discipline organized by Sadguru Gadge Maharaj College, Karad on 2nd March 2024.
- Worked as a chairperson of the session for "One day Multidisciplinary International seminar on "Food: Science, Culture, Marketing and Literature on 20th March 2024 In Rajarshi Shahu Arts and Commerce College, Rukadi, Maharashtra, India.

External Examiner (02)

1. Worked as External Examiner on 20th to 22th June 2022 B.Sc. II (Plant Protection) in Vivekanand College, Kolhapur.

2. Worked as External Examiner on 08th to 10th June 2022 B.Sc. II (Plant Protection) in Vivekanand College, Kolhapur.

Place: Kolhapur Date: 23/07/2024

Signature of the Applicant