



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

Faculty Profile

❖ **General information**

| | |
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| Name | : Dr. Virbhaval Madhav Nalavade |
| Designation | : Assistant Professor |
| Department | : Biotechnology |
| Educational Qualification | : M.Sc., Ph.D. |
| Date of Appointment | : 19/06/2017 |
| Teaching Experience | : UG: 6 years PG: 5 years |
| Research Experience | : 14 years |
| Research Area | : Biotechnology (Plant Biotechnology, Phycology, Bioremediation, Genetic Engineering) |



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

| Sr. No. | College/University | Degree | Subjects | Year | Class/ Percentage |
|---------|---|------------|---|------|--------------------------------|
| 1 | Yashavantrao Chavan Institute of Science, Satara, Shivaji University, Kolhapur, India | B.Sc. | <u>Botany</u> , Subsidiary: Microbiology & Chemistry | 2007 | I st class/ 62.88 % |
| | Department of Biotechnology, Shivaji University, Kolhapur, India | M.Sc. | Biotechnology | 2009 | I st class/ 61.33 % |
| 2 | Department of Biochemistry, Shivaji University, Kolhapur, India | PG Diploma | Bioinformatics | 2009 | I st class/ 63.88 % |
| 3 | Department of Biotechnology, Shivaji University, Kolhapur, India | Ph.D. | Biotechnology (Plant Biotechnology, Molecular Biology, Genetic Engineering) | 2020 | Awarded |

❖ **Academic and Administrative Responsibilities**

| Sr. No. | Position | Organization | Date/Duration |
|---------|---|--------------|------------------------|
| 1 | Member, Board of Studies (BoS) in Biotechnology | YCIS, Satara | June, 2017 – till date |
| 2 | Member, ISO Committee | YCIS, Satara | June, 2019 – till date |

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| 3 | Member, Skill Committee | YCIS, Satara | June, 2020 – till date |
| 4 | Member, ED Committee | YCIS, Satara | June, 2021 – till date |
| 5 | | | |

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

| Sr. No. | Name of the award/honor/recognition | Awarding Organization | Date and year |
|---------|--|--|-------------------------|
| 1 | Junior Research Fellow | DST, Govt. of India | 01-11-2009 - 31-03-2012 |
| 2 | Qualified GATE (Graduate Aptitude Test in Engineering) in Life Science | IIT, Delhi on behalf of National Coordination Board, Graduate Aptitude Test in Engineering | 15, March 2012 |
| 3 | Late. Madhubhau Chaudhary Fellowship | Praj Industries, Pune, India (Financial support for pursuing PhD. Degree) | 2013-2015 |

❖ **Research Projects (Ongoing/Completed)**

| Sr. No. | Title of Project | Duration | Amount Sanctioned | Agency | Status (Ongoing/Completed) |
|-------------------------------|--|----------|-------------------|---|----------------------------|
| Major Research Project | | | | | |
| Minor Research Project | | | | | |
| 1 | Isolation and characterization of decomposing micro-organisms from soil and their utilization for composting of geranium oil industry waste. | 2017-18 | 17,000 | YCIS, Satara Research Advisory Committee Financial Assistance | Completed |
| 2 | Isolation and characterization of extracellular bulk enzymes from spent mushroom substrate and production of organic compost | 2018-19 | 20,000 | YCIS, Satara Research Advisory Committee Financial Assistance | Completed |
| 3 | Development of value added products like biofertilizer and biochar for bioremediation of textile dyes from macroalgal waste | 2021-22 | 2,00,000 | YCIS, Satara Research Advisory Committee Financial Assistance | Completed |
| 4 | Development of AI based applications for integrated production of plants in solar hydroponics | 2022-24 | 50,000 | YCIS, Satara Research Advisory Committee Financial Assistance | Ongoing |

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❖ Details of Research Publications

A) Books/Book Chapters

| Sr. No. | Title | Publisher | Year of Publication | ISBN No | Type (Reference/Text) |
|---------|---|-----------------------------------|---------------------|---------|--------------------------|
| 1 | Sugarcane Transgenics: Developments and Opportunities | Springer Nature Singapore Pte Ltd | 2020 | | Reference (Book Chapter) |
| 2 | Algae as Food and Nutraceuticals | CRC Press Taylor & Francis Group | 2022 | | Reference (Book Chapter) |

B) Research papers:

| 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 | Detection of Sugarcane Mosaic Virus (ScMV) in diseased Sugarcane using ELISA and RT-PCR Technique | Journal of Pure and Applied Microbiology. 9(1):319-327. | | Scopus | 0.21 |
| 2 | Establishment of sterilization method for reducing microbial contamination for emergent quality of sugarcane (<i>Saccharum officinarum</i> L.) in an efficient micropropagation system. | Res. J. Pharm. Biol. Chem. Sci. 7(2): 1122-1135. | | Scopus | 0.12 |
| 3 | Standardization of protocol for callus induction, regeneration and genetic transformation of sugarcane (<i>Saccharum Officinarum</i> L) genotype co 86032. | Progressive Res. – An Inter. J. 11 (Special- VI): 4196-4201. | | - | - |
| 4 | Detection and eradication of major microbial contaminants during callus culture of Sugarcane (<i>Saccharum Officinarum</i> L.) genotype Co 86032. | Res. J. Pharm. Biol. Chem. Sci. 8(1): 1153-1160. | | Scopus | 0.12 |
| 5 | Leaf disc assay an important tool for early assessment of abiotic stress tolerance in transgenic sugarcane. | Multilogic in Science. 8 (27): 212-214. | | | |
| 6 | Microbial degradation of poultry feather biomass in a constructed bioreactor and application of | Environmental Science and Pollution | | Scopus | |

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| | hydrolysate as bioenhancer to vegetable crops. | Research. https://doi.org/10.1007/s11356-019-06536-6 | | | 5.19 |
| 7 | Elicitor-mediated enhancement of biomass, polyphenols, mangiferin production and antioxidant activities in callus cultures of <i>Salacia chinensis L.</i> | 3 Biotech 11: 285. | | Scopus | 2.8 |
| 8 | Low Cost Production of <i>Trichoderma viridi</i> by Using Geranium Industry Waste Biomass by Solid State Fermentation. | YCIS Science Research Journal Interdisciplinary: 1(2) 123-132. | | - | - |
| 9 | Phyco-Remediation of Sugar Mill Effluent using <i>Chlorella vulgaris</i> . | International Journal of Engineering Research & Technology (IJERT): 11(02) 491-494. | | - | - |

E) Paper Presentation in Conference /Seminar/ Symposia:

| 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 | Low cost production of <i>Trichoderma viride</i> and <i>Metarhizium anisopliae</i> for inoculum development using solid state fermentation | "National conference on Interdisciplinary Approaches in Life Sciences (NCIALS- 2020) | National | Yashvantrao Chavan Institute of Science, Satara. |
| 2 | Low cost production of decomposing microorganisms for inoculum development using solid state fermentation | "National conference on Interdisciplinary Approaches in Life Sciences (NCIALS- 2020) | National | Yashvantrao Chavan Institute of Science, Satara. |
| 3 | Green Synthesis of Silver Nanoparticles Using Fermentation Broth Containing Seaweeds <i>Sargassum Spp.</i> and their antibacterial activity and dye degradation ability | International Conference on Nanobiotechnology (ICNB'23) March 17-18, 2023 | International | Yashvantrao Chavan Institute of Science, Satara. |
| 4 | Production of Biochar From Macroalgal Waste | International Conference on Nanobiotechnology | International | Yashvantrao Chavan |

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|--|---|--|----------|--|
| | and Its Use for Bioremediation of Textile Dyes | (ICNB'23) March 17-18, 2023 | | Institute of Science, Satara. |
| | Evaluation of SoMYB18 gene transformed sugarcanelines using ISSR markers | “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (NCMALS 2018)” | National | Yashvantrao Chavan Institute of Science, Satara. |
| | Use of microalgae Chlorella vulgaris for the treatment of biomethanated distillery spent wash | “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (NCMALS 2018)” | National | Yashvantrao Chavan Institute of Science, Satara. |
| | Evaluation of seaweed liquid fertilizer for abiotic stress tolerance in Fenugreek | “Multidisciplinary Approaches in Life Science: Research and Application for Sustainable Development (NCMALS 2018)” | National | Yashvantrao Chavan Institute of Science, Satara. |

F) Citation Index

| | Google Scholar | Scopus | Web of Science |
|------------------|----------------|--------|----------------|
| Citations | 75 | | |
| h-index | 5 | | |
| i10-index | 4 | | |

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

| Sr. No. | Name of the programme | Organizing institute | Date |
|---------|---|--|--------------------------|
| 1 | Faculty Development Programme on Entrepreneurship | Yashvantrao Chavan Institute of Science, Satara. | 28-01-2019 to 07-02-2019 |

❖ Participation in Conference/Seminar/Symposia/Workshop/Any other programs:

| Sr. No. | Name of the event | Organizing institute | Level (Intl/Natl/State/Uni/Local etc.) | Date |
|---------|---|--|--|----------------------|
| 1 | Workshop on Abroad Research Opportunities for Students | Savitribai Phule Mahila Mahavidyalaya, Satara | International | 08-03-2017 |
| 2 | Workshop on Innovative Research and Patenting Methodology | Yashvantrao Chavan Institute of Science, Satara. | Local | 10-02-2018 |
| 3 | Recent Advances in Renewable Energy and | Yashvantrao Chavan Institute of Science, | International | 05-03-2018 to 06-03- |

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|---|---|--|---------------|--------------------------|
| | Hygiene Devices (RAREHD-2018) | Satara. | | 2018 |
| 4 | National conference on Interdisciplinary Approaches in Life Sciences (NCIALS- 2020) | Yashvantrao Chavan Institute of Science, Satara. | National | 02-03-2020 to 03-03-2020 |
| 5 | Workshop on Rayat Idea Presentation | Yashvantrao Chavan Institute of Science, Satara. | Local | 04-03-2020 |
| 6 | Seminar on National Education Policy-2020 | Yashvantrao Chavan Institute of Science, Satara. | National | 23-01-2021 |
| 7 | "Current Approaches in Life Sciences for Sustainable Development (ICCALSSD - 2021) | Yashvantrao Chavan Institute of Science, Satara. | International | 19-03-2021 to 20-03-2021 |
| 8 | Eat Right Millet Mela | Yashvantrao Chavan Institute of Science, Satara. | Local | 13-04-2023 |

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

| S. No. | Title of the event | Level (Intl/Natl/ State/Uni./local etc.) | Organizer | Date |
|--------|--------------------|--|-----------|------|
| 1 | | | | |
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❖ **Chaired Sessions in Conference/Seminar/Workshop etc.:**

| S. No. | Title of the event | Level (Intl/Natl/ State/Uni./local etc.) | Organizer | Date |
|--------|--------------------|--|-----------|------|
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Signature of Faculty