

Matoshri Bayabai Shripatrao Kadam Kanya Mahavidyalaya, Kadegaon, Dist-Sangli.

### DEPARTMENT OF MICROBIOLOGY

#### **❖** Vision:

To create a learning environment that excites and informs undergraduates about microbiology and its many applications in everyday life; Undergraduates who will become future leaders in science, medicine, industry, and technology will be provided with fundamental microbiology knowledge. and to channel their expertise to play pivotal roles in our community as well as nationally in sectors such as health, economy, the sustainability of our natural resources; and Microbiology research that pushes the boundaries of knowledge.

### **❖** Mission:

- 1. Provide compelling and relevant undergraduate courses that teach science literacy to all MBSSKM students and the fundamental knowledge required for our majors to succeed in their careers.
- 2. Provide an engaging and relevant Microbiology curriculum that will train students to a high level of scientific literacy and impart appropriate skill sets, allowing students to gain valuable skills and engaging learning experiences.
- 3. Provide appropriate teaching facilities that allow students to have a positive learning experience.
- 4. Provide training through unconventional, innovative coursework that emphasizes inquiry-based learning.
- 5. Prepare underprivileged students with diverse life experiences for future careers or further educational opportunities through our majors.
- 6. Improve the timely progression of majors from all backgrounds to higher education.
- 7. Increase exposure to a diverse scientific community where there are increased opportunities for students.

#### **Department:**

- 1. Year of Establishment of Department: 1990
- 2. Programs: UG B. Sc. (Microbiology)
- 3. Pattern: Semester (CBCS)
- ❖ UG Course: B.Sc. (Microbiology)
  - i. UG B. Sc. I (Microbiology)
  - ii. UG B. Sc. II (Microbiology)
  - iii. UG B. Sc. III (Microbiology)
- ❖ Skill-Based Short-Term Certificate Course:
  - i. Milk Microbiology
  - ii. Advanced Techniques in Clinical Microbiology



## Matoshri Bayabai Shripatrao Kadam Kanya Mahavidyalaya, Kadegaon, Dist- Sangli.

## **\*** Faculty Profile:

Sr. No	Name of Faculty	Qualification	Designation	Specialization	Experience in Years
1.	Mr. S. S. Shinde	M.Sc.	Head & Assistant Professor	Microbiology	32 Years
2.	Mr. J. V. Kuwar	M.Sc., SET, NET, Ph. D (Reg.)	Assistant Professor	Microbiology	06 Years
3.	Dr. A. S. Pawar	M.Sc. Ph.D.	Assistant Professor (CHB)	Microbiology	08 Years
4.	Miss. T. A. Jadhav	M.Sc. SET	Assistant Professor (CHB)	Pharmaceutical Microbiology	01 Year
5.	Mrs. S. Y. Pawar	M.Sc.	Assistant Professor (CHB)	Microbiology	01 Year

## \* Research Project Completed/Ongoing: Minor/Major Research Project

Sr. No	Faculty	Title of the project	Funded by	Period	Amount Utilized
1.	Dr. G.V. Mali	Effect of combined inoculation with native species of <i>Azotobacter</i> and <i>Rhizobia</i> on various parameters in groundnut from Sangli District.	UGC	2005- 2007	47,000/-
2.	Mrs. R. S. Pawar	Antimicrobial studies of some ortho hydroxy naphthoquinone derivatives and their magnesium (II) and Calcium (II) chelates.	UGC	2010- 2012	95,000/-
3.	Dr. G.V. Mali	Studies on phytohormones and antifungal metabolites producing Azotobacter chroococcum strains from groundnut (Arachis hypogea L.) rhizospheres".	UGC	2012- 2014	1,40,000/-
4.	Mr. J.V. Kuwar	Isolation of agarase-producing bacterial strain to reduce biowaste of solid media produced in laboratories.	Shivaji University	2022- 2024 (Ongoing)	2,00,000/-



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## Other Publications (Chapters / Papers in Conference Proceeding Books)

Sr. No.	Title	Name of Book	Published By	Year & Page No	Level / ISBN
1.	Biodegradation of diesel oil by newly isolated bacterial culture	Advances in Environmental Sciences	Oxford Publication, New Delhi	2013: 72 -78	International 978-93-5030- 155-5
2.	Diagnosis of Infectious Diseases (Microbial Infections)	ACLAP Educon - 2013	Association of Clinical Laboratory Analysts & Practitioners & BVDU Medical College & Hospital, Sangli	2013: 57-59	Sate
3.	Soil microorganism s and climate change	Global Warming (Climate Change)	BVPs MBSK Kanya Mahavidyalaya, Kadegaon	2014: 30 -31	National 978-93-5156- 228-3
4.	Microbial Biotechnology	Inspire Vidnyanbharati	Dr. P.K. Mahavidyalaya, Sangli	2014: 79 -82	National 978-81-25021- 2-0
5.	Risk and Management of Infectious Diseases in Natural Calamities	Natural Calamities and Its Management in India	BVPs MBSK Kanya Mahavidyalaya, Kadegaon	2014: 81- 86	National 978-93-5196- 491-9
6.	Screening of Cypermethrin, Deltamethrin, and Bifenthrin pesticideresistant bacteria from Contaminated Soil.	Biodiversity, Climate Change & Sustainable development	KNP College, Walva	2015, 253-257	National 978-93-5235- 969-1



# Matoshri Bayabai Shripatrao Kadam Kanya Mahavidyalaya, Kadegaon, Dist- Sangli.

## ❖ Books Written / Edited

Sr. No.	Name of the Book	Author / Co-author / Editor / Co-editor	Published By	Year	Level / ISBN
1.	Home Parenteral Nutrition	Co-author	Oxford Publication, New Delhi	2015	International 978-93-5030-240-8
2.	Microbiology - I (For B. Sc. I)	Co-author	Phadake Prakashan, Kolhapur	2018	National 978-93-86703-58-3 978-93-86703-62-0
3.	Microbiology - II (For B. Sc. I)	Co-author	Phadake Prakashan, Kolhapur	2019	National 978-93-86703-94-1 978-93-86703-95-8
4.	Microbiology - III	Co-author	Phadake	2007,	National
	(For B. Sc. II)		Prakashan,	2010,	978-93-84123-66-6
			Kolhapur	2011,	978-93-89435-27-6
				2014, 2019	978-93-89435-18-4
5.	Microbiology - IV	Co-author	Phadake	2006,	National
	(For B. Sc. II)		Prakashan,	2007,	978-93-84123-99-4
			Kolhapur	2010,	978-93-89435-74-0
				2012,	978-93-89435-72-6
	D 1 D 1 C	- A	DVID II	2015, 2020	N
6.	Proceeding Book of	Co-editor	BVPs Kanya	2014	National
	National Conference		Mahavidyalaya,		978-93-5156-228-3
	on Global Warming (Climate Change)		Kadegaon		
7.	Proceeding Book of	Editor	BVPs Kanya	2014	National
, ,	National Conference		Mahavidyalaya,		978-93-5196-491-9
	on Natural		Kadegaon		
	Calamities and Its		J		
	Management in				
	India				



### Matoshri Bayabai Shripatrao Kadam Kanya Mahavidyalaya, Kadegaon, Dist-Sangli.

#### **❖** Research Publications

Sr. No.	Name of Faculty	Total
1.	Dr. G. V. Mali	28
2.	Mr. A. S. Pawar	05
3.	Mr. J. V. Kuwar	01

### **\*** Research Paper Presentations in Seminars and Conferences

Sr. No.	Name of Faculty	Total
1.	Dr. G. V. Mali	15

#### \* Research Guidance for Ph.D.

Dr. G. V. Mali: Awarded-03, Registered - 04

### \* Research Output

New Bacterial Strains Based on GENE SEQUENCING Study

Dr. G. V. Mali & Mr. A. S. Pawar - Submitted 16S rRNA Sequence Information of Four Bacterial Strains to the National Centre for Biotechnological Information (NCBI), USA.

- 1. Pseudochrobactrum sp (Accession No. KT427393)
- 2. Acinetobacter sp. Accession No. KT427394)
- 3. Sphingobacterium sp (Accession No. KT 427395)
- 4. Paracoccus siganidrum strain APGM1(Accession No. KY 363936.1)

#### **❖** Patents Published

Sr.	Title	Journal	Date	Application No
No.		No.		
1.	Vaginal Cream for Controlling	46 / 2011	18/11/2011	2616 / MUM / 2011
	Microbial Infections.			dated 15 / 09 / 2011
2.	Detachable autoclavable cap for	49 / 2019	06/12/2019	201921048529 dated
	test tube and flask.			22/11/2019
3.	A Bacteriological Spreading Device.	30 / 2021	23/07/2021	202121028179 A
				dated 23/06/2021
4.	A method for the isolation of agar	39 / 2021	24/09/2021	202121038762 A
	from used solid culture media.			dated 26/08/2021

### Resource Person/Invited Talks in Seminars/Conferences/Workshops

Sr. No.	Name of Faculty	Total
1.	Dr. G. V. Mali	15
2.	Mr. J.V. Kuwar	02



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## Membership in Professional Bodies

Sr. No.	Name of Faculty		
1.	Dr. G. V. Mali	a)	Fellow Member of World Researchers Associations.
		b)	Life Member of the Association of Microbiologists of India
		c)	Life Member of the Microbiologists Society of India
		d)	Regional Coordinator (Shivaji University) of Microbiologists
			Society of India
		e)	Life Member, Shivaji University Teachers Association
		f)	Life Member, Institute of Scholars, Bangalore

## **\*** Membership in Academic Bodies

Sr. No.	Name of Faculty		
1.	Dr. G. V. Mali	a)	Member, Board of Studies in Microbiology of Shivaji
			University, Kolhapur (From Nov.2007)
		b)	Member, Board of Studies in Microbiology of Vivekanand
			College, Kolhapur (Autonomous)
		c)	Member, Board of Studies in Microbiology of Walchand
			College, Solapur (Autonomous)

## **❖** Other Academic / Professional Experience and Achievements

Sr. No.	Name of Faculty		
1.	Dr. G. V. Mali	a)	Expert Author in Microbiology for 'Marathi Vidnyan
			Vishwakosh' appointed by Maharashtra. State Marathi
			Vishwakosh Nirmiti Mandal.
		b)	Reviewer for National and International Scientific Journals
		c)	The referee for Ph. D thesis in Microbiology of Sant
			Gadagebaba Amarawati Univerity.
		d)	Paper Setter, Moderator, and Examiner in Theory & Practical
			Examinations at B.Sc. & M.Sc. examinations of Shivaji
			University Kolhapur, Bharati Vidyapeeth Deemed University,
			Pune, Solapur University, Solapur, and Krishna Institute of
			Medical Sciences, Karad for the last 25 years.
		e)	Observer for SET Examinations of Maharashtra State,
			appointed by SET Examination cell, SPPU, Pune
		f)	Observer for UGC-NET, CSIR-NET, JEE, and NEET
			Examinations conducted by National Testing Agency New
			Delhi.
2.	Mr. J.V. Kuwar	a)	Observer for NEET Examinations conducted by National
			Testing Agency New Delhi.