



# **DEPARTMENT OF ZOOLOGY** SHIVAJI UNIVERSITY, KOLHAPUR

UGC –SAP, DST-FIST, DBT- IPLS and DST-PURSE



Faculty of Science and Technology

Established: 14<sup>th</sup> June, 1964

# **DEPARTMENTAL PROFILE**

2020

# **Department Profile**

### Name of the Department: Zoology Year of Establishment: 14<sup>th</sup> June, 1964 1) From the Desk of Head



It gives me an immense pleasure to lead this prestigious department that has produced eminent scholars. Over a time span of 56 years, the Department has imparted excellence in Education and Research. The faculty members are devoted and brought spectacular achievements in the field of Cell Biology, Animal Physiology,

Entomology, Environmental Biology, Fisheries and Sericulture. We always make a point with our students to provide them Hands on Training in Cell culture, Silkworm rearing, Apiculture and Fisheries. To inculcate the Research skills in Post Graduate and Doctoral students, we assign topics in the fields of Cellular and Molecular aspects of Neuro degeneration, Therapeutic potential of Phyto-nanoparticles on Diabetes and Aging, Biodiversity & Biosystematics, Avian studies, Fish & Molluscan Toxicology, Eco-friendly Pest Management and Sericulture. This Department is blessed with well-equipped laboratories and an Animal House with the State of Art infrastructure. To showcase the biodiversity and conservation, Butterfly park is established in the campus with 80 species of host and nectar plants. So far 40 species of Butterflies are sighted in the park.

For promoting entrepreneurship, we have initiated two job-oriented courses, viz., Diploma in Sericulture and Post Graduate Diploma in Sericulture. Further, to provide a Niche for budding Entrepreneurs and Technocrats for venturing in Sericulture & Apiculture, "Centre of Excellence & Incubation in Sericulture" is established. To explore the new avenues in marine research, this department has taken the possession of 'Marine Environmental Research Centre' at Malvan, District Sindhudurg.

Situated in the midst of Northern-Western Ghats, Department has made several outstanding contributions in the fields of biodiversity of Insects, Molluscs, Fishes, Amphibians and Reptiles. In their endeavour to achieve the excellence in Research, faculty members have reported several species of Insects, amphibians and reptiles for the first time from Maharashtra. It's not only the Research area, that my colleagues have put up spectacular contributions, they have also proved their mettle in Transfer of Technology in the disciplines of Agriculture, Apiculture, Fisheries, Sericulture and Conservation of Biodiversity.

Prof. (Dr.) V. S. Manne Head

#### 2) Brief History of the department along with present focus in academic & research: -



**Department of Zoology** 

Started with a student strength of 15 for M.Sc. in 1964 by Dr. E.N. Das, then the Principal of Rajaram College, Kolhapur, this Department has produced eminent Zoologists and contributed greatly for the advancement of the subject. Students of this Department excelled as Vice-chancellors of prestigious Universities and are serving in senior positions at

Foreign Research Institutes and Universities. Presently, this Department is imparting M.Sc. for 60 students, 40 for Ph.D. and 15 for M.Phil. During the latter part of M.Sc., students are allowed to opt among five specializations, viz., Cell Biology, Animal Physiology, Entomology, Aquatic Biology & Fisheries and Sericulture. This premier Department is following Choice Based Credit System pattern for M.Sc. program. Post Graduate students are being provided with hands on training in various Entrepreneurship activities viz., silkworm rearing, Kisan nurseries, preparation of handicrafts from silkworm cocoons, fabrication of aquarium, rearing of ornamental fishes, Apiculture etc. through Value Added Courses funded by Department of Science & Technology, New Delhi. Students are encouraged to take up project works in order to inculcate research skills under the guidance of faculty members. To infuse confidence and determination in slow learners, faculty are continuously monitoring and motivating through remedial classes. The holistic efforts of our faculty members ensured great success of our students in competitive examinations, viz., NET, GATE, SET. From this Department, so far, 205 students were awarded with Ph.D. Degree.

With active funding of over 4.50 crores from several National funding agencies, this Department has put up excellent contributions in the fields of Biodiversity and Bio resources Management (UGC-SAP, CSIR, UGC, DBT-IPLS), Animal Physiology and Toxicology (DST – SERB, UGC, DBT), Cell Stress, Hormesis, Cellular and Molecular aspects of neurodegeneration, Therapeutically potential phyto nanoparticles on diabetes and Aging (DST, UGC, ICMR), Pest Management (UGC), Dissemination of Tasar culture and Silkworm disease management (UGC-SAP, CSIR). As a recognition to the spectacular contributions made by this premier Department, District Planning and Development Council, Government of Maharashtra, Kolhapur has granted Rs. 1.34 crores for establishment of Demonstration cum Training Centre in Sericulture, Mass production units for biological control agents of pests of agriculture and Public health. Several of our Researchers are recipients of awards at National & International arena for their research

excellence. One of our faculty members has filed for a Patent on "Nano encapsulation of Trigonelline: A novel remedy to treat Type 2 *Diabetes mellitus* in mice model".

Several **Transfer of Technology Programmes** have been taken up by the researchers of this Department in Sericulture and Aquaculture. Faculty members regularly provide their technical expertise in the fields of Apiculture, Biodiversity, Sericulture, Agriculture especially Pest Management and Pisciculture to Agricultural Officers, Sericulture Officers, farmers by dissemination of technologies through Trainers' Training Programmes, Workshops, Group Discussion, Awareness Programmes, Crisis Management programs, Exhibitions and KrishiMela etc.

To enhance the Entrepreneurship activities among our students and farmers, we are conducting two courses, viz., Post Graduate Diploma in Sericulture (PGDS) and Diploma in Sericulture (DS). Through these structured courses we are promoting the Entrepreneurship activities. These entrepreneurs are registering as Incubates under our "Centre of Excellence and Incubation in Sericulture". The University is providing all kinds of technical and infrastructural support to these incubates. Several alumni have achieved great success in the fields of Commercial rearing of Silkworms, Production of Silkworm Seed Cocoons, Kisan Nurseries, Chawki Rearing (Young silkworm rearing). Department is having International collaboration with Ministry of Agriculture, Havana, Cuba and National collaboration with National Institute of Oceanography, Goa. Our Faculty members take active part in various Advisory Bodies viz., Maharashtra State Biodiversity Board (Directorate of Forests, Govt. of Maharashtra), Nagpur and Directorate of Sericulture, Govt. of Maharashtra, Nagpur.

We arrange regular interaction sessions with external faculty members, Scientists, Government Officers and Technocrats from Industries to interact with our students through **Invited Lectures**. In collaboration with National Academy of Sciences India, Bangalore Chapter, we have organized **Lecture series in Biology** at this Department in 2017.

As Western Ghats are the Hot spot for faunal biodiversity, every year we conduct **workshops on Awareness on Biodiversity and its conservation**. These workshops are sponsored by Maharashtra State Biodiversity Board, Ministry of Forests, Govt. of Maharashtra, Nagpur. During these programs eminent personalities from Forest Department deliver lectures on the importance of Biodiversity and its conservation. During the deliberations, they narrate the students about the threatened species and their conservation techniques. Faculty members takes active part in conducting such programs in affiliated colleges with active funding from Maharashtra State Biodiversity Board.

Faculty members impart corporate training to Sericulture farmers on "Integrated Sericulture Farming". Under this programme 55 farmers from Osmanabad district were trained during October, 2018. This program was sponsored by Agriculture Technology Management Agency (ATMA) and District Sericulture Officer, Directorate of Sericulture, Govt. of Maharashtra, Osmanabad. The second batch of "Integrated Sericulture Farming" is conducted for 25 farmers from Radhanagari village of Kolhapur District during 11.02.2020 to 20.02.2020 in collaboration with D. Y. Patil Krishi Vigyan Kendra sponsored by Agriculture Skill Council of India, Indian Council of Agriculture Research, Govt. of India, Guragaon, Haryana.

**3**) **Vision:** To spread higher education in the subject of Zoology including recent advances for the welfare of Society.

**Mission:** To create expertise in the field of research in various disciplines of zoology like Animal Physiology, Environmental Pollution, Aquaculture and Fishery Technology, Entomology, Insect Pests and Disease management, Sericulture, Cell and Molecular biology and Animal diversity.

### Goal:

To make efforts in utilization of the output of the researches in fulfilling the needs of the society of this region and the Nation as well.

### Core Values of the Department.

- I. Respect to all students in equality of learning by providing good facilities and services.
- II. Conduct various activities honestly for students, faculty members, staff and community.
- III. Strive to ensure the teaching and supporting systems works appropriately and in time.
- IV. Provide quality teaching that will lead to perceive knowledge and skills necessary for achieving success in research, entrepreneurship, carrier and leadership.

Sr. No.	Program	Year of Inception	Intake
1.	M. Sc.	1964	60
2.	M. Phil.	1964	05
3.	Ph. D.	1964	41
4.	Diploma	·	
	a. Post Graduate Diploma in Sericulture	2017	40
	b. Diploma in Sericulture	2017	40

#### 4) Academic Programs offered with Intake.

## 5) CBCS with course Structure

M.Sc. Programme Structure of Zoology Part – I (CBCS pattern) (2019-2020)

					S	EMES	TER – I	I (Dur	ation	6 mont	hs)							
Sr.	Course										,	Exan	nination	Scheme		I		
No	Code		r	Feaching	Scheme						Th	eory					Practic	
			Theory			Practical		TI	neory (I	JA)	In	ternal (	IA)	To	Total		(CPPR) Total	
		No. of Lectures	Hours	Credit	No. of Lectures	Hours	Credit	Max.	Min.	Hours	Max.	Min.	Hours	Max.	Min.	Max.	Min.	Hours
1	CC-101	4	4	4				80	40	3	20	8	1	100	40			
2	CC-102	4	4	4	16	16	8	80	40	3	20	8	1	100	40	Drooti	ool Evo	mination
3	CC-103	4	4	4	10	10	0	80	40	3	20	8	1	100	40		is Ann	
4	CC-104	4	4	4				80	40	3	20	8	1	100	40	_	15 / 1111	<i>a</i> u1.
	Total	16	16	16	16	16	8					-		400	-			
5	AEC-I										20							
						SEM	ESTER	– II (D	uration	6 mont	ns)							
6	CC-201	4	4	4				80	40	3	20	8	1	100	40			
7	CC-202	4	4	4	1.6	16	0	80	40	3	20	8	1	100	40	Practi	cal Exa	mination
8	CC-203	4	4	4	16	16	8	80	40	3	20	8	1	100	40		is Ann	ual.
9	CC-204	4	4	4				80	40	3	20	8	1	100	40			
10	CCPR-205			-	1				1			-				200	80	
11	CCPR-206			-								-				200	80	As per
	Total	16	16	16	16	16	8				80			400		400	-	BOS guideli
12	SEC-I	2	2	2	-	-	-	-	-	-	-	-	-	50	20	-	_	nes
Gr	and Total	32	32	32	32	16	16				160			800		400	-	

# M.Sc. Programme Structure of Zoology Part – II (CBCS pattern) (2020-2021)

						SEMES	STER – I	III (Dui	ration (	6 months	5)									
Sr.	Course											Exan	ninatio	n Schem	e					
No	Code	Teaching Scheme									Theory						Practical (CPPR)			
			Theory		]	Practical		T	heory (I	JA)	In	ternal (l	A)	To	tal		Total			
		No. of Lectures	Hours	Credit	No. of Lectures	Hours	Credit	Max.	Min.	Hours	Max.	Min.	Hour s	Max.	Min.	Max.	Min.	Hours		
1	CC-301	4	4	4				80	40	3	20	8	1	100	40					
2	CBE-302	4	4	4	16	16	8	80	40	3	20	8	1	100	40					
3	CCS-303	4	4	4	10	10	0	80	40	3	20	8	1	100	40		1 5	• ,•		
4	CCS-304	4	4	4				80	40	3	20	8	1	100	40		Practical Examination is Annual.			
	OE- II/SWM-II	2	2	2												is Annual.				
	TOTAL	16	16	16	16	16	8	320			80	-		400	-					
					·	SEM	ESTER ·	– IV (D	uratio	n 6 mont	hs)									
5	CC-401	4	4	4				80	40	3	20	8	1	100	40					
6	CBE-402	4	4	4	16	16	8	80	40	3	20	8	1	100	40	Practic	cal Exa	mination		
7	CCS-403	4	4	4	10	10	0	80	40	3	20	8	1	100	40	i	is Annu	al.		
8	CCS-404	4	4	4				80	40	3	20	8	1	100	40					
	OE- II/SWM-II	2	2	2																
9 CCPR-405 -									200	80	16									
10	CCPR-406			-								-				200	80	16		
,	TOTAL	16	16	16	16	16	8	320			80			400		400	-	-		
Gr	and Total	32	32	32	32	16	16	640			160			800		400	-	-		

### 6) Outcome base Education

### a. Programme Outcomes:

### PROGRAMME OUTCOMES OF M. Sc. ZOOLOGY

- PO1: Apply the knowledge of zoology in day today life.
- PO2: Students are able to understand animals from their sub-cellular to ecosystem level.
- PO3: Gain knowledge of agro based entrepreneurship like Sericulture, aquaculture, apiculture and lac culture for providing lab-to-land benefits to Society.
- PO4: Students are able to frame hypothesis, design experiment, analyse data & generate conclusions.
- PO5: Students are able to work to work in animal cell culture lab, taxonomy, able to operate different instruments in biological sciences like toxicity studies.
- PO6: Students are able to work in different fields of biological sciences like animal cell culture, toxicology, enzymology, bio-instrumentation and taxonomy.
- PO7: Students are able to address societal issues like pollution, health awareness, pest-parasite management and biodiversity conservation.
- PO8: Students are able to gain knowledge on applied science and its application to sustainable development.

### PROGRAMME SPECIFIC OUTCOMES OF M. Sc. ZOOLOGY

- PSO 1: Students are capable to get positions in the various fields of life sciences such as scientists, academic and administrative, industries, corporate, entrepreneurs, animal conservator, entomologists and taxonomists.
- PSO 2: Perform procedures in laboratory areas of taxonomy, physiology, cell biology, ecology, genetics, applied Zoology, tools and techniques of Zoology, toxicology and pest control.
- PSO 3: Groom and encourage the students for examinations like NET, SET, GATE and for their research careers.
- PSO 4: Developing academically sound researchers and manpower in the field of Cell biology, Physiology, entomology, fisheries-aquaculture and Sericulture.

### PROGRAMME OUTCOMES OF POST GRADUATE DIPLOMA IN SERICULTURE

- PO1: Students are able to understand silkworms and silkworm rearing.
- PO2: apply knowledge to develop healthy sericulture practices.

- PO3: Students are able to address issues of sericulture farmers like disease and pest management of silkworm and mulberry.
- PO4: Gain knowledge of agro based entrepreneurship in Sericulture for providing lab-to-land benefits to sericulturists.
- PO5: Students are able to take up sericulture as a very good avocation.

# PROGRAMME SPECIFIC OUTCOMES OF POST GRADUATE DIPLOMA IN SERICULTURE

- PSO1: Students are capable to get positions in the field of sericulture such as scientists, academic and administrative, industries, corporate, entrepreneurs, and sericulturists.
- PSO1: Perform practices in sericulture laboratories and take it to farmers for healthy sericulture practices.
- PSO3: Shape the students to take up sericulture as successful career.

### PROGRAMME OUTCOMES OF DIPLOMA IN SERICULTURE

- PO1: Farmers and common people are able to understand silkworms and silkworm rearing.
- PO2: Farmers are able to apply knowledge to develop healthy sericulture practices.
- PO3: Common man is able to understand issues of Sericulture like disease and pest management of silkworm and mulberry.
- PO4: Gain knowledge of agro based entrepreneurship in Sericulture for providing lab-to-land benefits to sericulturists.
- PO5: Farmers are able to perform healthy and common sericulture practices.

### PROGRAMME SPECIFIC OUTCOMES OF DIPLOMA IN SERICULTURE

- PSO1: Students are capable to get positions in the field of sericulture such as Field Assistant, Technical Assistant, Grainage Assistant, Reeler etc. in academic institutions, administrative organizations, industries related with Sericulture, corporate, entrepreneurs, and can become sericulturists.
- PSO1: Perform healthy practices of sericulture in the field.
- PSO3: Motivate the farmers to take up sericulture as successful career.

# 7) Faculty Details

Name	DR. VENK	ATA SANTH	A K	UMAR MA	NNE			
				M. Sc., P	h. D.			
Designation	Professor &	: Head						
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Email ID	mvs_zoo@	unishivaji.ac.in;	; mv	drsanthaku	nar@gmail.	con	1	
Research Areas		y, Sericulture, Iı Aanagement	nteg	rated Pest N	lanagement,	, Tra	ansfer of Tec	hnology,
No. of Research		Total				st 5	years	
Papers Published	National	Internationa	1	N	ational		Interna	ational
(National and International)	75	35			14		1	0
Research Projects	Projects' Tit	le		Funding Age	ency	O	atus ngoing/Com eted	Amount (Rs. Lakh)
	associated v	control agents with vegetable co-friendly Pest nt		Shivaji Uni Kolhapur	versity,		Ongoing	2.20
	Establishme	ent of ion cum Trainir	ng	DPDC, Govt., of M	laharashtra		Ongoing	94.00
	Establishme production Biological ( of Agricultu	unit for Control Agents		DPDC, Govt., of Maharashtra			Ongoing	20.00
	Establishme environmer	ent of ht friendly ht of housefly in	L	DPDC, Govt., of M	Iaharashtra		Ongoing	20.00
No. of Books/	National							
Chapters Published		03						
Research Impact	Citations	h-Index	i10	0-Index RG Score		t	Highest Impac he paper as pe Reuters	
	329	4		1	2.78 1			
Total No. of Ph.		Awarded	Working					
D. Students		02				06	j	
National/ International Fellowships		R – JRF during 19 napur	986	– 1989 at De	partment of Z	Zool	ogy, Shivaji U	Jniversity,

Top 10	1. Santha Kumar, M.V., Bandyopadhyay, U.K., Lalitha, N. and Saratchandra, B.
Publications	(2018). Biology and feeding efficacy of <i>Micraspis discolor</i> , a potential biological
	control agent of whitefly, Dialeuropora decempuncta. Journal of Entomology and
	Zoology Studies :6(1): 938-941.
	2. Santha Kumar, M.V., Dutta, P., Chakrabarty, N., Das, N.K. and A. D. Jadhav
	(2017). Critical factors influencing the incidence of a native predator of whitefly in
	mulberry. International Journal of Advance Research and Innovative Ideas in
	Education.3(6):1744-1748.
	3. Santha Kumar, M.V. and Bandyopadhyay, U.K. (2017). Studies on biology of
	Scymnus bourdilloni Kapur (Coleoptera: Coccinellidae), the native predator of pink
	mealy bug, Maconellicoccus hirsutus (Green) (Hemiptera: Pseudococcidae).
	Bulletin of Indian Academy of Sericulture. 21(1&2):15-19.
	4. Santha Kumar, M.V., U. K. Bandyopadhyay, Das, N.K. and P. Mitra (2017).
	Development of weather-based forecasting models for major mulberry pests in
	Malda district of West Bengal. Bulletin of Indian Academy of
	Sericulture.21(1&2):25-32.
	5. Lalitha, N., Santha Kumar, M.V. and Nirmal Kumar, S. (2018). Species diversity
	of predators on sucking pest complex in mulberry gardens of West Bengal. Journal
	of Entomology and Zoology Studies., 6(1):523-528.
	6. Lalitha, N., HirakChatterje, <b>Santha Kumar</b> , M.V. and Nirmal Kumar, S. (2018).
	Predatory potential of new species of Scymnus Kuglann, Scymnus latifolius Poorani
	sp. nov (Coleoptera: Coccinellide) on papaya mealy bug, Paracoccus marginatus
	infesting mulberry. Journal of Entomology and Zoology Studies,6(4):1803-1807.
	7. Santha Kumar, M.V., Datta, P. Chakrabarti, S., Das, N.K., Mukhopadhyay, S.K.,
	Saha, A.K. and Bindroo, B. B. (2012). Biology and feeding efficacy of Brumoides
	suturalis, a native predator of whitefly, Aleuroclava pentatuberculata. Pp. 214 –
	224. In the Proceedings of the UGC sponsored state level seminar on "Advancement
	of Biological Science Towards Sustainable Development", 29th& 30th March, 2012.
	8. Santha Kumar, M.V., Dutta, A.K., Sarkar, J., Das, D., Mukhopadhyay, S.K. and
	Bindroo, B.B. (2012). Cluster Promotion Programme: A trendsetter for success
	through participatory mode. Indian Silk, 3(7 & 8): 20-22. (2.5)
	9. Lalitha, N., Santha Kumar, M.V., Saha, A.K. and Nirmal Kumar, S. (2015).
	Avoidable leaf yield loss due to Pink mealy bug, Maconellicoccus hirsutus (Green)
	in mulberry Annals of plant protection 23(1):171-172. (International).
	10. Lalitha, N., Santha Kumar M.V., Saha, A.K. and Nirmal Kumar, S. (2015). Report
	of Papaya mealy bug, Paracoccus marginatus in mulberry in West Bengal. Current
	Biotica. 9 (1): 82-85.

Name	DR. ASHIS	H AMBADAS DE	ESHMU	KH			(me	
		M. Sc., Ph. D.,						
Designation	Professor							h h
Contact No.	9822230905							
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Research Areas	Hormesis.	eration in vitro and	in vivo	, Cellular S	tress respo	onse	e, Cell sene	escence,
No. of Research	,	Total = 41			Las	t 5	years	
Papers Published (National and	National	International	l	Nati	onal		Inte	rnational
International)	18	23						
Research Projects	Projects' Titl			Funding A	Agency	Oı	atus ngoing/ ompleted	Amount (Rs. Lakh)
	2'deoxy gluc markers of co Glycogen syn (GSK3β), cy (cdk5), reelin	loric restriction mi cose on molecular ognitive function: hthase kinase3β clin dependent kin h and phosphorylat ouse primary cultur neurons.	ase5 ed Tau	DST-CSF	RI	Completed		26.59
	on preservati mouse cortic	ects of dietary rest on of cytoarchitec al and hippocampa outhful conditions	ture of al	UGC			ompleted	12.38
	Effect of mil localization a and Hsp70 ir	d heat stress on and expression of S a the primary cultu ontal cerebrocortica	re of	Shivaji Universit Kolhapur	•	(	Ongoing	2.75
Research Impact	Citations	h-Index	i10	)-Index	RG Scor	re	Highest In of the pap Thomson	
	89	7		2	5.26			.665
Total No. of Ph. D. Students		Awarded			W		king	
Total No. of M.	Awarded	04				02	٤	
Phil. Students	01							
Top 10 Publications	stress Journa	NR, Gajare KA an on the primary cu l of Basic and App NR, Gajare KA an	lture of lied Zoo	f mouse pro plogy (2020	efrontal ce ) 81:25 ( <b>S</b>	ereł b <b>pri</b>	procortical inger Natu	neurons The <b>ire</b> )

	cerebrocortical neurons from neuropathological alterations. <i>IBRO reports</i> ; 5: 110-115. (Elsevier)
4.	Pathan KH, Gajare KA, Deshmukh AA (2016) Mouse cerebral cortex is more
	vulnerable to age related deposition of senile plaques than the hippocampus: a neuropathological study of amyloid plaques in the normal process of brain aging <i>Acta Biomedica Scientia</i> ;3(1):32-37.
5.	Pathan KH, Gajare KA and <b>Deshmukh AA</b> (2015). Ultrastructural study reveals that mouse hippocampal neurons are more protected than the cerebrocortical neurons from age related cytological alterations. Cell Science and Report <i>MOJ Cell Sci Rep</i> 2(5): 00039 DOI: 10.15406/mojcsr.2015.02.00039
6	Bele MS, Gajare KA and <b>Deshmukh AA</b> (2015). Caloric restriction mimetic 2-
0.	deoxyglucose maintains cytoarchitecture and reduces tau phosphorylation in primary culture of mouse hippocampal pyramidal neurons. <i>In Vitro Cell Dev Biol</i> <i>Anim.</i> 51(6): 546-55. (Springer)
7.	Pathan K.H., Yadav RB, Gajare KA and <b>Deshmukh AA</b> (2014). Effect of 40% dietary restriction on Periodic Acid Schiff (PAS) positive material and cytoplasmic lipid staining in the mouse hepatocytes Indian <i>Journal of Fundamental and Applied Life Sciences</i> 4(4) :465-469.
8.	
9.	
10	<b>Deshmukh AA,</b> Gajare K A and Pillai M M (2006). D-Galactose induced ageing
	in short duration: A quick model of accelerated ageing in mice. <i>J. Cell Tissue Res.</i> 6 (2):753-756.

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Email ID	dryankanchi@gmai	il.com; sry	_zoo@unish	nivaji.a	c.in		
Research Areas	Biopesticides, Biol	ogical Inse	ect Control, I	Pest In	sect Biology		
No. of	T	otal			Last	t 5 y	vears
Research Papers	National	Intern	national		National		International
Published (National and International)	26						05
	Projects' Title		Funding		s Ongoing/		Amount
Research Projects	"Bioefficacy of diff Clerodendrum spec Western Ghats aga Helicoverpa armig Spodoptera litura"	cies from inst <i>era</i> and	Agency UGC	Com	Completed		(Rs. Lakh) 8.9
	Synergistic efficacy certain plant essent against stored grain pests	ial oils	SUK	Ongoing			1.8
Research Impact	Citations	h-Index	i10-Index		RG Score	Fa as	ighest Impact actor of the paper s per Thomson euters
	219	7	7	1	11.13		0.97
Total No. of Ph. D.		arded			W	orki	ing
Students		04				03	
Top 10 Publications	1. Devarshi A. A. and Yankanchi, S. R. (2017) Ovicidal and toxic effects of certa						

	rouxii (Sauria: Agamidae) in the sacred grove of the northern Western Ghats,
	International Journal of Zoological Research, 12: 18-24. DOI:
	10.3923/ijzr.2016.18.24.
5	. Yadav Omkar and Yankanchi, S. R. (2015) Occurence of Ophiophagus hannah
	Cantor, 1836 (Squamata, Elapidae) in Tillari, Maharashtra, India, Herpetology
	Notes, 8: 493-494.
6	<b>Yankanchi, S. R.</b> , Holihosur, S. N. and Kallapur, V. L. (2015) <i>In vitro</i> and <i>in vivo</i>
	inhibition of hemolymph juvenile hormone esterase activity by the ethanol
	extract of <i>Clerodendrum inerme</i> in fifth instar larva of castor semilooper, 102(2), $151(-1520)$
	Achaea janata (L.). Current Science, 108(8), 1516-1520.
1	. Yadav, O. V. and Yankanchi, S. R. (2014) Raorchestes bombayensis (Bombay
	Bush Frog) and Microhyla ornata (Ornate Narrow Mouthed Frog) interspecies
	amplexus, <i>Herpetological Review</i> 45(4), 683.
8	. Yankanchi, S. R., Yadav, O. V. and Jadhav, G. S. (2014) Synergistic and
	individual efficacy of certain plant extracts against dengue vector mosquito,
	Aedes aegypti. Journal of Biopesticides 7(1), 22-28.
9	. Yankanchi, S. R. and Gadache, A. H. (2010) Grain protectant efficacy of certain
	plant extracts against rice weevil, Sitophilus oryzae L. (Coleoptera:
	Curculionidae). <i>Journal of Biopesticides</i> , 3(2): 511-513.
	0. Yankanchi, S. R., Koli, S. A. and Patil, P. A. (2009) Insecticidal activity of
	certain plant extracts against pulse beetle, <i>Callosobruchus chinensis</i> L.
	(Coleoptera: Bruchidae). Entomon, 34(4): 263-266.

Name	DR. NITI	N ANANDRAO KAMI	BLE				
		M. Sc., Ph.D., S	ЕТ				
Designation	Professor				0421.00		
Contact No.	(91) 98501	148586 (Mobile), (0231)	2609247 (offic	e)			
Email ID	nak_zool@	Dunishivaji.ac.in, drkniti	nkumar@yahoo	o.in			
Research Areas	Animal ph	ysiology, Toxicology an	d Aquatic biolo	ogy			
No. of		Total = 102		Last 5 years	s = 37		
Research Papers	National	International	Nati	ional	Inte	rnational	
Published (National and International)	48	54	1	2		25	
Research Projects	Projects' 7	Title	Funding Agency	Status Ongoing/Co	mpleted	Amount (Rs. Lakh)	
	managem pollution	ssment and ent of Industrial on molluscan fauna of , Sangli And Satara	SERB	Comple	eted	15.68	
	Comparat toxicity a mechanis with circu	tive study of metal nd molecular m of immune defense alatory, excretory and ysiology in Mollusca	UGC	Comple	eted	6.17	
	Bioassess Immunoh Compone		SUK	Ongoi	ing	2.75	
No. of	National =	:01	International =	= 01			
Books/ Chapters Published	organs of f Bellamya i toxicity of	ctivity in digestive freshwater snail bengalensis against Copper sulphate and uate (Book Chapter)	Metal toxicity <i>L. Corrianus</i> , Publishing, G 1	LAP Lambert	Academi	с	
Research Impact				RG Score	Highest Factor of as per TI Reuters	of the paper	
	72	05	03	19.75		1.05	

<ul> <li>neurosciences, 13: 179-188.</li> <li>6. N. A. KAMBLE AND S. R. LONDHE (2014) Mucin reactivity after exposure of mercury and zinc chloride in neurocytes of freshwater snail Bell bengalensis: a histochemical study, Journal of Environmental Chemistry, 1-17.</li> <li>7. N. A. KAMBLE AND S. R. LONDHE (2015) Effect of mercuric chlorid terrestrial slug <i>Semperula maculate</i> and histopathology of reproductive orga comprehensive study, Toxicological and Environmental Chemistry, 97(5):</li> </ul>	Total No. of	Awarded	Working
<ul> <li>Students</li> <li>Top 10</li> <li>Publications</li> <li>1. S. R. LONDHE AND N.A. KAMBLE (2014) Acute effect of mercury and Chloride on Gastrin/CCK 8 Neuropeptide in relation with behavior of fresh snail <i>Bellamya bengalensis</i>: a microscopic study, International Journal of Cu Microbiology and Applied Sciences, 3(4): 1052-1065,</li> <li>2. N. A. KAMBLE AND S. S. GAIKWAD (2012) "embryogenesis and development of two molluscan species <i>Physa acuta</i> and <i>Lymnea stagna</i> comparative study" Asian journal of Microbiology, Biotechnology Environmental sciences, 14(1): 01-06.</li> <li>3. N. A. KAMBLE AND S.R. LONDHE (2012) Epileptic activity in neuronal induced by hgcl2 and cdcl2 in terrestrial slug <i>Semperula maculata</i>: fine stru investigated by histology and histochemistry, Toxicological and Environm Chemistry, 94(1): 109-120.</li> <li>4. N. A. KAMBLE AND S.R. LONDHE (2012) Neurohistochemistry in moll focus on extracellular matrix, Invertebrate neurosciences, 12:129-138.</li> <li>5. N.A. KAMBLE AND S. R. LONDHE (2013) Mercuric chloride-induced Ga Cholecystokinin 8 immunoreactivity in the central nervous system of the terrer slug <i>Semperula maculata</i>: an immunohistochemical study, Inverte neurosciences, 13: 179-188.</li> <li>6. N. A. KAMBLE AND S. R. LONDHE (2014) Mucin reactivity after exposure of mercury and zinc chloride in neurocytes of freshwater snail Bell. bengalensis: a histochemical study, Journal of Environmental Chemistry, 1-1</li> <li>7. N. A. KAMBLE AND S. R. LONDHE (2015) Effect of mercuric chloride terrestrial slug <i>Semperula maculate</i> and histopathology of reproductive orga comprehensive study, Toxicological and Environmental Chemistry, 97(5):</li> </ul>		06	06
<ul> <li>Publications</li> <li>Chloride on Gastrin/CCK 8 Neuropeptide in relation with behavior of fresh snail <i>Bellamya bengalensis</i>: a microscopic study, International Journal of Cu Microbiology and Applied Sciences, 3(4): 1052-1065,</li> <li>N. A. KAMBLE AND S. S. GAIKWAD (2012) "embryogenesis and development of two molluscan species <i>Physa acuta</i> and <i>Lymnea stagna</i> comparative study" Asian journal of Microbiology, Biotechnology Environmental sciences, 14(1): 01-06.</li> <li>N. A. KAMBLE AND S.R. LONDHE (2012) Epileptic activity in neuronal induced by hgcl2 and cdcl2 in terrestrial slug <i>Semperula maculata</i>: fine struinvestigated by histology and histochemistry, Toxicological and Environment Chemistry, 94(1): 109-120.</li> <li>N. A. KAMBLE AND S.R. LONDHE (2012) Neurohistochemistry in moll focus on extracellular matrix, Invertebrate neurosciences, 12:129-138.</li> <li>N.A. KAMBLE AND S. R. LONDHE (2013) Mercuric chloride-induced Ga Cholecystokinin 8 immunoreactivity in the central nervous system of the terre slug <i>Semperula maculata</i>: an immunohistochemical study, Inverte neurosciences, 13: 179-188.</li> <li>N. A. KAMBLE AND S. R. LONDHE (2014) Mucin reactivity after exposure of mercury and zinc chloride in neurocytes of freshwater snail Bell bengalensis: a histochemical study, Journal of Environmental Chemistry, 1-1</li> <li>N. A. KAMBLE AND S. R. LONDHE (2015) Effect of mercuric chloride terrestrial slug <i>Semperula maculata</i> and intervoly of reproductive orga comprehensive study, Toxicological and Environmental Chemistry, 1-1</li> </ul>			
<ul> <li>ISSN:1029-0486.</li> <li>8. S. S. SAKHARE AND N. A. KAMBLE (2016) Gametogenic decline of testi Cells in <i>Barytelphus acunicularis</i> Against domestic discharge and indu effluents. World Journal of Pharmacy and Pharmaceutical Sciences, 5 (10):1 1432. ISSN- 2278-4357.</li> <li>9. P. CHAVAN, N. A. KAMBLE AND S. S. GAIKWAD (2018) Checkl freshwater mollusks from Panchaganga River, Kolhapur, (MS) India. A Multidisciplinary International Education Research Journal, 7(9):15-20.</li> <li>10. SUTAR V. S. AND N. A. KAMBLE (2019) Phytoremideation of Ethylene G induced Renal Calculi in the vertebrate Model <i>Rattus norvigicus</i>, GSC Biology</li> </ul>	Top 10	<ol> <li>S. R. LONDHE AND N.A. KA Chloride on Gastrin/CCK 8 Ne snail <i>Bellamya bengalensis</i>: a m Microbiology and Applied Scient</li> <li>N. A. KAMBLE AND S. S development of two molluscan comparative study" Asian Environmental sciences, 14(1):</li> <li>N. A. KAMBLE AND S.R. LO induced by hgcl2 and cdcl2 in investigated by histology and Chemistry, 94(1): 109-120.</li> <li>N. A. KAMBLE AND S.R. LO focus on extracellular matrix, In</li> <li>N.A. KAMBLE AND S. R. LO cholecystokinin 8 immunoreact slug <i>Semperula maculata</i>: neurosciences, 13: 179-188.</li> <li>N. A. KAMBLE AND S. R. LO Cholecystokinin 8 immunoreact slug <i>Semperula maculata</i>: neurosciences, 13: 179-188.</li> <li>N. A. KAMBLE AND S. R. exposure of mercury and zinc c bengalensis: a histochemical study.</li> <li>N. A. KAMBLE AND S. R. terrestrial slug <i>Semperula macul comprehensive study</i>, Toxicolo ISSN:1029-0486.</li> <li>S. S. SAKHARE AND N. A. K Cells in <i>Barytelphus acunicul effluents</i>. World Journal of Pha 1432. ISSN- 2278-4357.</li> <li>P. P. CHAVAN, N. A. KAMI freshwater mollusks from Par Multidisciplinary International I 10. SUTAR V. S. AND N. A. KAMI</li> </ol>	<ul> <li>AMBLE (2014) Acute effect of mercury and Zinc uropeptide in relation with behavior of freshwater nicroscopic study, International Journal of Current nces, 3(4): 1052-1065,</li> <li>GAIKWAD (2012) "embryogenesis and early n species <i>Physa acuta</i> and <i>Lymnea stagnalis</i>, a journal of Microbiology, Biotechnology and 01-06.</li> <li>DNDHE (2012) Epileptic activity in neuronal cells, terrestrial slug <i>Semperula maculata</i>: fine structure histochemistry, Toxicological and Environmental ONDHE (2012) Neurohistochemistry in mollusca: overtebrate neurosciences, 12:129-138.</li> <li>DNDHE (2013) Mercuric chloride-induced Gastrin/ivity in the central nervous system of the terrestrial an immunohistochemical study, Invertebrate</li> <li>LONDHE (2014) Mucin reactivity after acute hloride in neurocytes of freshwater snail Bellamya idy, Journal of Environmental Chemistry, 1-11.</li> <li>LONDHE (2015) Effect of mercuric chloride on <i>llate</i> and histopathology of reproductive organs: a bgical and Environmental Chemistry, 97(5):1-16.</li> <li>AMBLE (2016) Gametogenic decline of testicular <i>laris</i> Against domestic discharge and industrial urmacy and Pharmaceutical Sciences, 5 (10):1407-BLE AND S. S. GAIKWAD (2018) Checklist of nehaganga River, Kolhapur, (MS) India. Aarhat Education Research Journal, 7(9):15-20.</li> </ul>

Name	DR. (SMT	) MADHUR	RI V	VASANT V	VAL	<b>.VEKA</b>	R				
				Μ	[ <b>. Sc</b> .	., Ph. D	•		E		
Designation	Associate p	rofessor									
Contact No.	885699683	1									
Email ID	mvw_zoo@	unishivaji.a	c.in	l							
Research	Phytonanor	nedicines in	dia	betes and a	ging	, Endoc	rine ro	le of su	ıbmand	ibular gland	
Areas				1							
No. of		<u>`otal</u>	•				Last 5	years	T		
Research Papers	National	Internation	al		N	ational			Inte	ernational	
Published (National and	28 24 13								16		
International)	D . () T	tts' Title Funding Status									
Research Projects	Projects' Ti	tle		Agency Ongo ompl					ing/C	Amount (Rs. Lakh)	
	Myofibrilla skeletal mu adenectomi offsprings o mother	male		UGC I Delhi	New	Com	pleted	11.82			
	Effect of Salivary secretions o development of thymus gland of offsprings of sialoadenectomised n mice				nale	le DBT New Cor			pleted	26.21	
	nanoparticl	Injectable sustained release of nanoparticles in the expression IRS2 and TNF alpha in type				Shivaj Unive Kolha	rsity	Ongoing		2.90	
No. of	National			Internatio	nal						
Books/ Chapters Published		02									
Patents/ IPR	Filed-01			1							
	Nanoencapsulation of Trigonelline- A novel remedy to treat type 2 Diabetes mellitus in mice model							lbetes			
Research Impact	Citations	h-Index	i1(	0-Index	RG	Score	paper	r as per		ctor of the son Reuters	
	100	6		3	1	1.77	0.879				
	Av	varded			-		Work	xing			

Total No. of Ph. D. Students	8	4					
Total No. of	Awarded						
M. Phil. Students	01						
Visits Abroad (Last 5 years; Give Details)	challenges in Sciences and	ented paper in the "International conference on Emerging trends and enges in Sciences and technology" <b>Bangkok , Thiland</b> on 3 <sup>rd</sup> to 8 <sup>th</sup> Nov,2014					
Details) Top 10 Publications	<ul> <li>effect of curcumin ( lipofuscinogenesis i male mice, Journal 4</li> <li>M.V. Walvekar, N glycowithanolides of reproductive organs 11(9), 711-716.</li> <li>M. Deshmukh, M. V of <i>Trigonella Foemu</i> lipofuscinogenesis i Pharma and Bio Sci</li> <li>Nilofar H. Shaikh, V Alteration in testicu glycowithanolides t and clinical research</li> <li>M. V. Walvekar V cytochemical study administration in ox pharmacognosy and</li> <li>M. V. Walvekar, S Role of salivary gla CD3and CD5 cells Biotechnology and 3</li> <li>M. V. Walvekar, S of fenugreek loaded of alloxan induced of and clinical research</li> <li>Walvekar M V, Po Histological studies after curcumin admi clinical research 8(9</li> <li>S. S. Desai S. P. Kh scavenging activity diabetic mice, Intern 9(2)(B):127-132.</li> <li>S.P. Khairmode, S.</li> </ul>	<ul> <li>Vidhya M. Deshmukh, Madhuri V. Walvekar, (2015) lar morphology and sperm count due to reatment during aging. Asian journal of pharmaceutics h, 8(3), 72-76.</li> <li>M. Deshmukh, and S. B. Pol, (2015) Structural and of salivary glands after fenugreek seed extract kidatively stressed mice, International journal of l phytochemical research, 7(3), 395-400.</li> <li>S.R. Desai ,S. P. Khairmode and M. M. Pillai, (2016) ands secreted growth factors on differentiation of of thymus in mice, Asian Journal of microbiology, Environmental sciences, 18(1), 245-252.</li> <li>B.Pol and V. M. Deshmukh, (2016) Modulatory effect l PLGA nanoparticles on lipofuscinogenesis in pancreas diabetic mice. International journal of pharmaceutical h 8(1), 22-25.</li> <li>tphode N D, Desai S S, Deshmukh V M (2016), on islets of Langerhans of pancreas in diabetic mice inistration. International journal of pharmaceutical and</li> </ul>					
	Salivariadenectomiz	zed Male Mice (Mus musculus Linn.), Journal of Reproduction, 22(2): 37-41.					

Name	DR. MADHAV PRALHAD BHILAVE					
	M. Sc., Ph. D.					
Designation	Associate Pr	ofessor			1 103	
Contact No.	9822874909					
Email ID	mpb_zoo@u	nishivaji.ac.in				
Research Areas	Aquatic Tox	icology, Fisheries Science.				
No. of Research		Total = 95		Last	5  years = 39	
Papers Published	National	International	Nati	onal	Inter	national
(National and International)	26	69	1	1		28
Research Projects	Projects' Title	2	Funding Agency	Status Ongoin	g/Completed	Amount (Rs. Lakh)
	Effect of Ch fingerlings o <i>mrigala</i>	SUK	Ongoing		1.05	
	Biodiversity	of fishes of Satara Tahasil	UGC	Completed 0.4		0.40
		ormulated fish feed on lisease resistance.	UGC	Completed 8		8.39
	molecular m with circulat	e study of metal toxicity and echanism of immune defense ory, excretory and logy in Mollusca	UGC	Co	ompleted	5.76
Research Impact	Citations	h-Index	i10-Index	RG Score	Highest Impact the paper as p Reuters	
	173	6	5	13.82	1.	05
Total No. of Ph.		Awarded			Working	
D. Students		05			04	
Top 10 Publications	<ol> <li>Bhosale S V, Bhilave M. P. and S B Nadaf (2010) Formulation of Fish Feed using Ingredients from Plant Sources. Research Journal of Agricultural Science 1(3) 284- 287 ISSN: 0976-1675</li> <li>Muley. D.V., Kamble G.B. and M. P. Bhilave (2000) Effect of heavy metals on Nucleic acids in <i>Cyprinus carpio</i>, Journal of Environmental Biology 21 (4) 367-70 ISSN: 0254-8704 (IF 0.64)</li> <li>Bhosale S.V., Bhilave, M.P, and S. B Nadaf. (2012) Protein Efficiency Ratio (PER) of <i>Ctenopharengedon idella</i> fed on soyabean formulated feed Biological forum 4 (1) 44-47 ISSN:0975-1130</li> <li>M. P. Bhilave, V.B Nalawade and J.J. Kulkarni, (2014) Amylase activity of fingerlings of freshwater fish <i>Labeo rohita</i> fed on formulated feed. International Journal of Fisheries and Aquatic Studies, 2(1): 53-56 ISSN: 2347-5129</li> </ol>					

<b>5 DIN M D</b> N 1 C C D DI 1 C M 1 M D N 1 $=$ 1 (2012) N $+$ 1
5. Bhilave, M. P., Nadaf. S. B, Bhosale S.V and V.B Nalawade (2013) Nutritional
Analysis of Plant Formulated Feeds. Research Journal of Agricultural Sciences 4(4):
480-483 ISSN: 0976-1675
6. Nalawade, V.B. and M. P. Bhilave (2011) Protein Efficiency Ratio (PER) and Gross
Food Conversion Efficiency (GFCE) of freshwater fish Labeo rohita fed on
formulated feed The Bioscan 6(2): 301-303 ISSN:0973-7049
7. Bhilave, M. P., Nadaf.S.B and S.V. Bhosale (2010) Gross Conversion Efficiency
(GCE) of Labeo rohita fed on formulated feed The Bioscan 5(3) 483-485
ISSN:0973-7049
8. Kulkarni JJ and M. P. Bhilave (2015) Response of Organophosphate Pesticide
Acephatase Induced Stress in Biochemical and Haematological Indices of Labeo
rohita International Journal of Innovative Science, Engineering and Technology,
Vol 2 Issue 2, 222-226 ISSN 2348-7968
9. Deshpande V.Y, M. P. Bhilave, D.V. Muley and G.B. Kamble (1999) Pesticides
induced alternations in alkaline and acid phosphatases in liver and intestine of Labeo
rohita Journal of Aquatic Biology 14 (1 & 2) 71-74 ISSN:0971-4235
10. M. P. Bhilave (2018) Study of shelf life of formulated fish feed. International
Journal of Fisheries and Aquatic Studies Volume VI Issue I: 174-176 ISSN: 2347-
5129

Name	DR. SUNIL	MADUKAR GAI	KWAD					
	M. Sc., Ph. D.							
Designation	Associate P	rofessor					W 1 2)	
Contact No.	960426046	0						
Email ID	smg_zoo@	unishivaji.ac.in						
Research Areas	Biodiversit	y, Insect Taxonon	ny and Phys	siology.				
No. of		Total			Last 5 y	/ears		
Research Papers	National	International		Natio			rnational	
Published (National and International)	27	52		09			13	
Research Projects	Projects' Ti	tle	Funding Agency		Ongoing/Completed (Rs.		Amount (Rs. Lakh)	
	Diversity of Coleopteran fauna of Kolhapur district.		CSIR, Ne Delhi	CSIR, New Delhi		d	18.73	
	Faunal dive Orthopteroi Kolhapur au Districts.	d Insects from	UGC, Ne Delhi	W	Complete	d	9.198	
	Vertebrates University	Diversity of in the Shivaji Campus, Maharashtra,	Shivaji Universit <u>y</u> Kolhapur	University, Ongoing			2.25	
No. of Books/	National		Internati	onal				
Chapters Published	Books-1; C	hapters- 5						
Research Impact	Citations	h-Index	i10- Index	dex of		of the pape	Highest Impact Factor of the paper as per Thomson Reuters	
	114	5	3	1	12.44	1	.32	
Total No. of	A	warded	·		Work	ing		
Ph. D. Students	05 04							
Visits Abroad (Last 5 years)		e: Best Paper lology at Paris, C			h Internat	ional Con	ference on	
Top 10 Publications	Mantis India.	Raut and <b>S. M. C</b> Gonypetyllis sen Journal of 7/jbnhs/2017/v11	uncialis W Bombay	,	lason, 1891	from We	stern Ghats,	

	$\mathbf{C} = \mathbf{A} \cdot \mathbf{D} = \mathbf{C} \cdot \mathbf{A} \cdot \mathbf{C} = \mathbf{C} \cdot $
4	2. G.A. Raut and S. M. Gaikwad (2017). A new record of <i>Tenodera fasciata</i>
	(Oliver, 1792) (Insecta: Mantodea: Mantidae: Mantinae) for western India.
	Journal of Threatened Taxa 9 (6): 10351–10354;
	https://doi.org/10.11609/jott.2908.9.6.10351-10354
	B. S.H. Waghmare and S. M. Gaikwad (2017). First Record of the Predatory Stink
	bug Eucanthecona concina (Walker, 1867) (Pentatomidae: Asopinae) from
	India. Journal of Threatened Taxa. 9(2): 9870-9873.
	https://doi.org/10.11609/jott.3051.9.2.9870-9873
4	4. S. M. Gaikwad, Y.J. Koli, G.A. Raut, S.H. Waghmare and G.P. Bhawane
	(2016). Long-horned grasshoppers (Orthoptera: Tettigoniidae) in Radhanagari
	Wildlife Sanctuary, Maharashtra, India. Journal of Threatened Taxa 8 (2):
	8533-8537. https://doi.org/10.11609/jott.2574.8.2.8533-8537
	5. S. M. Gaikwad, Y.J. Koli and G.P. Bhawane (2015). A first record
	of <i>Hemithyrsocera</i> palliata Fabricius, 1798 (Blattodea: Blattellidae:
	Blattellinae): An addition to the fauna of Maharashtra, India. Journal of
	Threatened Taxa 7 (8): 7487-7489.
	http://dx.doi.org/10.11609/JoTT.o4282.7487-9
	Manoj Jadhav, P. Girish Kumar and S. M. Gaikwad (2014). A new record of
	<b>5</b>
	Scolia (Discolia) fasciatopunctata dunensis Betrem (Insecta: Hymenoptera:
	Scoliidae) from the Western Ghats of Maharashtra, India. Journal of
	<i>Threatened Taxa.</i> 6(14): 6715-6718.
	https://doi.org/10.11609/JoTT.03704.6715-8
	7. S. M. Gaikwad, Y.J. Koli and G.P. Bhawane (2014). Blattodea of Kolhapur
	District with First Record of Supella (Supella) longipalpa (Blattodea:
	Blattellidae) for the State of Maharashtra, India. <i>Florida Entomologist</i> . 97(1):
	80-84. IF. 1.052. https://doi.org/10.1653/024.097.0110
8	3. S. M. Gaikwad, Y.J. Koli, G.P. Bhawane (2014). Histomorphology of the
	Female Reproductive System in Papilio polytes polytes Linnaeus, 1758
	(Lepidoptera: Papilionidae). Proceedings of the National Academy of Science,
	India Section B: Biological Sciences.84 (4): 901-908.IF. 0.396.
	https://doi.org/10.1007/s40011-014-0322-y
9	9. S. M. Gaikwad and Y.J. Koli (2013). First record of Clonacris kirbyi Finot
	1903 (Insecta: Orthoptera: Acrididae) in Maharashtra State, India. Florida
	<i>Entomologist.</i> 96(3):1193-1195.IF. 1.052.
	https://doi.org/10.1653/024.096.0365
1	0. Y.B. Gaikwad, S. M. Gaikwad and G.P. Bhawane (2010) Effect of induced
	oxidative stress and herbal extracts on acid phosphatase activity in lysosomal
	and microsomal fractions of midgut tissue of the silkworm, Bombyx mori.
	Journal of insect science, 10 (1): Article. 113. IF. 1.357
	https://doi.org/10.1673/031.010.11301

Name	DR. ADHI	KRAO E	OHANAJI .	JADHAV			( and the second		
	<b>M.</b> S	Sc., Ph. D	., PGDS, P	GDAEM					
Designation	Assistant P	rofessor							
Contact No.	(91) 98227	01925 (M	obile), (023	31) 260925	0 (offic	e)			
Email ID	adj_zoo@u	nishivaji.	ac.in, dradj	adhav@yał	100.CO.	in			
Research Areas	Animal Phy	vsiology,	Sericulture,	Entomolog	gy				
No. of			l = 71			La	st 5 year	s = 24	4
Research Papers	National		Internation	al		Nationa	-		ernational
Published (National and International)	51		20			15			09
Research Projects		Project	ts' Title		Fundi Agen	-	Status Ongoin Comple	-	Amount (Rs. Lakh)
	Studies on field performance of some silkworm breeds (FC1 &FC2) of Bombyx mori L. with reference to Western Maharashtra conditions				Univ	ivaji ersity, hapur	Ongoing 2.70		2.70
	socioecono economical	Impact of wild sericulture on socioeconomic development of tribal and economically weaker sections and women empowerment from western		nd		R New elhi	Compl	eted	19.46
	Biodiversit from Satara					R New elhi	Compl	eted	10.81
	Amorphous state pharm					R New elhi	Completed		17.47
	Establishment of Demonstration cum Training Centre in Sericulture,				DPDC, Govt., of Ongoing Maharashtra		ing	94.00	
	Establishment of mass production unit for Biological Control Agents of Agricultural pests			DPDC, Govt., of Ongoing Maharashtra		ing	20.00		
	Establishme managemer			•		C, /t., of rashtra	Ongo	ing	20.00
No. of Books/	National				Interr	national			
Chapters Published		Books Book Cha	= 05 apter $= 02$						
Research	Citations	h- Index	i10- Index	RG Score	•	-	-		or of the on Reuters
Impact	115	5	3	20.9	6	- paper (		.162	

	Awarded	Working				
Total No. of Ph. D. Students	02	03 = 01 (Hard bond Thesis submitted Viva awaited); 02 (Spiral thesis submitted)				
Visits Abroad	Cuba (2015, 2016 and 2018): National Institute of Agriculture Science, Cuba Thailand (2016): Queen Sinikit Department of Sericulture, Govt. of Thailand. Nepal (2018): Department of Agriculture, Govt. of Nepal. Japan (2019): National Agriculture and food Research Organisation, Ministry of Agriculture, forestry and fisheries, Tsukuba, Japan.					
National/ International Fellowships (Give Details) Top 10	<ul> <li>Advisor: National Sericulture Project, Govt., of Cuba.</li> <li>International Expert: Black Caspian Seas Central Asia Silk Association, Bulgaria</li> <li>Member: Maharashtra State Biodiversity Board, Ministry of Revenue &amp; Forests,</li> <li>Govt., of Maharashtra</li> <li>Member (Expert): Maharashtra State Sericulture Advisory &amp; Development</li> <li>Committee, Ministry of Cooperation, Textile&amp; Marketing, Govt., of Maharashtra.</li> <li>Member: Animal Expert Committee, MSBB, Ministry of Forests, Maharashtra.</li> <li>1. RP Bagade, A. D. Jadhav, RV Chavan (2020) Toxicity and repellency of four</li> </ul>					
Publications	<ul> <li>plant essential oils against <i>Triboli</i> Tenebrionidae), International Journal of</li> <li>Gophane A., T. V. Sathe and A. D. Jadl wild Silkmoths (Lepidoptera: Saturniid Indian Acad. Seri., 21 (1&amp;2): 1-6. ISSN</li> <li>Anna Gophane, A. D. Jadhav, M. V. Influence of climatic regions on species wild Silk moths in Maharashtra, India Research 7(2): 495-502. ISSN 2348-314</li> <li>N H Salunkhe, NR Jadhav, H N More, sericin solid dispersions for improved journal of biological macromolecules 14</li> <li>Belgumpe, S. J. and A. D. Jadhav (20) Nesolynx thymus Girault for biological Sericulture farming system of Maharas 33-36. ISSN 0972-1657.</li> <li>R. A. Sandi and A. D. Jadhav (2016) profile of sericulture industry workers International Journal of Pharma and Bio</li> <li>T A Jadhav, A C Attar, S Verma, A. engineers in construction of geotherma house, International Journal of Advan Technology, 5(3):1344-1347.</li> <li>Sujit Nade, J. B. Narendra Kumar, S Sivaprasad (2017). Freeze killed house <i>thymus</i> Girault (Hymenoptera: Euloph silkworm uzi fly, <i>Exorista bombycis</i> (L</li> <li>Jadhav A. D. and T. V. Sathe (2010) <i>bombycis</i> L. in pure line bivoltine bree Economical loss in seed cocoon produc 10. T A Jadhav, A. D. Jadhav A C Attar, J</li> </ul>	<ul> <li><i>um castaneum</i> (Herbst) (Coleoptera: f Tropical Insect Science, 1-8.</li> <li>hav (2017). Diversity and Distribution of lae) in State of Maharashtra, India. Bull. V 0972-1657</li> <li>Santhakumar and T. V. Sathe (2019).</li> <li>s richness, distribution and abundance of , International Journal of Life Sciences 48.</li> <li>A. D. Jadhav (2018) Screening of drug- solubility and dissolution, International 07(B):1683-1691. (Springer).</li> <li>017) Mass production and utilization of l control of uzi fly Exorista bombycis in htra, Bull. Indian Acad. Seri., 21 (1&amp;2):</li> <li>Occupational health and physiological with respect to workplace environment, o Sciences, 7 (4):137 – 143.</li> <li>D. Jadhav (2019). Intervention of civil l ventilation system in silkworm rearing nee Research, Ideas and Innovations in</li> <li>J. Belgumpe, A. D. Jadhav and V. efly pupa for multiplication of <i>Nesolynx</i> hidae), an ecto-pupal parasitoid of the ouis), <i>Indian J. Seric.</i>, 56(1-2): 30-34.</li> <li>Host preference by Uzifly <i>Exorista</i> eds FC1 and FC2 (<i>Bombyx mori</i> L.) and tion, <i>Biolife</i> 4 (1): 88-93.</li> </ul>				

DR. ANNA DNYANADEO GOPHANE					
M. Sc, Ph. D., PGD Bioinfo., SET, NET, GATE					
Assistant P	rofessor				
988142787	3				
anna.gopha	ne@gmail	.com			
Cell Biolog	y, Ecology	, mole	cular phylogeny,	Toxicology	
Tot	tal = 15			Last 5 year	rs = 14
National	Internati	onal	Nation	al	International
03	12		02		12
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Nanocomposite with Enhanced Photocatalytic Performance under Sunlight. Ind.					
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of wil	d Silkmot	hs (Le	pidoptera: Saturn	iidae) in Sta	te of Maharashtra, India.
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-	•	Mater	: Sci. Mater. Elec	etron. 30:113.	3-1147. ISSN 0957-4522.
	M. SE Assistant P. 988142787 anna.gopha Cell Biolog Cell Biolog Containal 03 Citations 183 1. INS 2. The 1. Goph Triung (Hym 2. Sathe, occurr 546. I 3. Kadar Temp visible Photo 4. Gavac (2017 Nanoc Eng. C 5. Goph of wil Bull. I 6. Babar A.; G	M. Sc, Ph. D SET, NET, O SET, NET, O SET 9881427873 anna.gophane@gmail Cell Biology, Ecology Total = 15 National Internati 03 12 Citations h-Index 183 06 1. INSPIRE Fello 2. The Earthwatc 1. Gophane, A., Sa Triungulin occur (Hymenoptera: 2 2. Sathe, T. V., Go occurrence of sc 546. ISSN 2320- 3. Kadam, A., Dha Template free si visible active ph Photobiol. B, Bio (2017). Fabrica Nanocomposite Eng. Chem. Res. 5. Gophane A., T. of wild Silkmot Bull. Indian Aca 6. Babar S.; Gavad A.; Garadkar K Carbon Nanocom	M. Sc, Ph. D., PGI SET, NET, GATESET, NET, GATEAssistant Professor $9881427873$ anna.gophane@gmail.comCell Biology, Ecology, moleTotal = 15National International0312Citations h-Index i10- IndexIndex18306041. INSPIRE Fellow, DS2. The Earthwatch Fellow, DS2. Sathe, T. V., Gophane occurrence of some ce 546. ISSN 2320-4257.3. Kadam, A., Dhabbe, H Template free synthes visible active photocata Photobiol. B, Biol., 1544. Gavade N. L., Babar S. (2017). Fabrication of Nanocomposite with Ea Eng. Chem. Res. 56 (495. Gophane A., T. V. Sat of wild Silkmoths (Le Bull. Indian Ac	M. Sc, Ph. D., PGD Bioinfo., SET, NET, GATE         Assistant Professor         9881427873         anna.gophane@gmail.com         Cell Biology, Ecology, molecular phylogeny,         Total = 15         National       International         03       12         03       12         04       19.86         1.       INSPIRE Fellow, DST, Govt. of India         2.       The Earthwatch Fellow, UK (2010)         1.       Gophane, A., Sathe T. V., Khairmode, P         Triungulin occurrence and its load carryi<(Hymenoptera: Xylocopidae). Biolife, 30	M. Sc, Ph. D., PGD Bioinfo., SET, NET, GATE         Assistant Professor         9881427873         anna.gophane@gmail.com         Cell Biology, Ecology, molecular phylogeny, Toxicology         Total = 15       Last 5 year         National       International         03       12       02         Citations       h-Index       i10- Index       RG Score       Highest Im as per Thom         183       06       04       19.86       1.         1.       INSPIRE Fellow, DST, Govt. of India (2011)       2.       The Earthwatch Fellow, UK (2010)         1.       Gophane, A., Sathe T. V., Khairmode, P., Londhe, S. Triungulin occurrence and its load carrying capacity by (Hymenoptera: Xylocopidae). Biolife, 3(3), 688–693.       2.         2.       Sathe, T. V., Gophane, A., and Shendage, N. (2015)       occurrence of some cell sap sucking pests on crop p 546. ISSN 2320-4257.         3.       Kadam, A., Dhabbe, R., Gophane, A., Sathe, T., a Template free synthesis of ZnO/Ag2O nanocomposy visible active photocatalyst for detoxification of mett Photobiol. B, Biol., 154:24–33. ISSN 1011-1344. (II         4.       Gavade N. L., Babar S. B., Kadam A. N., Gophane A (2017). Fabrication of M@CuxO/ZnO (M= Ag Nanocomposite with Enhanced Photocatalytic Perform Eng. Chem. Res. 56 (49): 14489–14501. ISSN 1520-5         5.       Gophane A., T. V. Sathe and A. D. Jadhav (2017). I of wild Silkmoths (Lepidoptera: Saturniidae) in Sta Bul

7. Govind Vyavahare, Pooja Jadhav, Jyoti Jadhav, Ravishankar Patil, Chetan
Aware, Devashree Patil, Anna Gophane, Yung-Hun Yang and Ranjit Gurav
(2019). Strategies for crystal violet dye sorption on biochar derived from mango
leaves and evaluation of residual dye toxicity, Journal of Cleaner Production,
207: 296-305. ISSN 0959-6526. (IF. 6.395)
8. Anna Gophane, A. D. Jadhav, M. V. Santhakumar and T. V. Sathe (2019).
Influence of climatic regions on species richness, distribution and abundance of
wild Silk moths in Maharashtra, India, International Journal of Life Sciences
Research 7(2): 495-502. ISSN 2348-3148.
9. Khairmode P. V., Gophane A. D., Shewale V. S., Santha Kumar M. V. and
Sathe T. V. (2019). Diversity of Curculionidae from Kolhapur District.Indian
Journal of Entomology, 81(3):589-596. ISSN 0367-8288.
10. Naikwade, Altafhusen; Jagadale, Megha; Kale, Dolly; Gophane, Anna;
Garadkar, Kalyanrao; Rashinkar, Gajanan (2019). Photocatalytic degradation of
methyl orange by magnetically retrievable Supported ionic liquid phase
photocatalyst. ACS Omega, 5(1): 131-144. ISSN 2470-1343. (IF. 2.584)

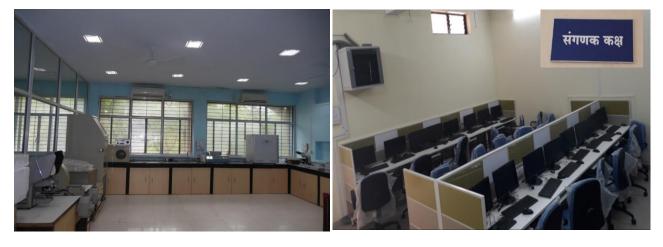
Sr. No.	Туре	Number
1	Classrooms	04
2	PG Practical Laboratories	05
3	Research Laboratories	09
4	Preparation Room	02
5	Instrumentation Room	02
6	Silkworm rearing house	02
7	Museum	01
8	Departmental Library	01
9	Computer Room	01
10	Auditorium	01
11	Staff cabins	10
12	Ladies Room	01
13	NAAC Room	01
14	Office	01
15	Store Rooms	04
16	Animal House Facility	01
17	Butterfly Park	01

8) Details of Research Laboratories & infrastructure with photographs:



Auditorium

**Class Room** 



**Instrumentation Room** 

**Computer Room** 



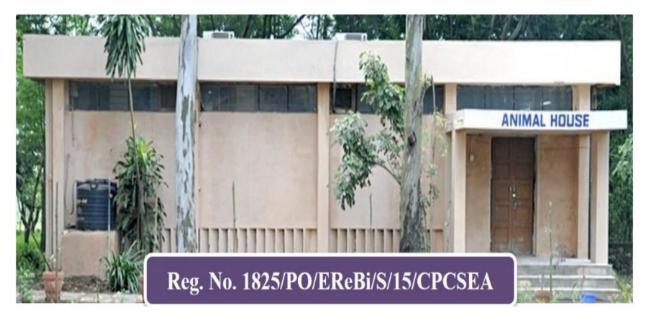
Museum

Animal Cell Culture laboratory



Physiology laboratory

Cell Biology laboratory



**Departmental Animal House Facility** 



Mulberry Silkworm Rearing House Funded by DBT, New Delhi



Spectrofluorometer

2 D Gel Electrophoresis System



CO<sub>2</sub> Incubator

**UV - Spectrophotometer** 





**Inverted Phase Contrast Microscope** 





ECG- Machine



Laminar Air Flow

**PCR-** Thermocycler



**Cooling Centrifuge** 

# 9) SET/NET Qualified Students:

Sr. No	Seat No	Name of Candidate	Qualifying Year
1.	330727	Atigre Rajaram Hindurao	2013
2.	330836	Gaikwad Yogesh Baban	2013
3.	371613	Shaikh Ayaj Ladlesaheb	2013
4.	532451	Ambi Ashutosh Appasaheb	2015
5.	570976	Patkar Namdev Babruvan	2015
6.	633174	Gaikwad Jayanti Sanjay	2016
7.	724171	Shinde Rekha Jalindar	2017
8.	735560	Behere Rhuta Purushottam	2017
9.	736314	Yadav Omkar Vishnupant	2017
10.	121184	Mulla Rubina Rafik	2018
11.	121368	Pharande Amruta Daulat	2018
12.	131745	Koli Kashinath Bhanudas	2018
13.	132107	Sutar Shital Shamrao	2018
14.	131714	Kamble Umesh Ramji	2018
15.	741395	Namrata Ajit Jadhav	2019
16.	741260	Chaugule Tanaji	2019
17.	741258	Sana Chaugule	2019
18.	741281	Jitesh Daunde	2019
19.	741659	Pratikshya Pardeshi	2019
20.	741283	Abhijit Desai	2019
21.	741664	Patel Najnin Aslam	2019
22.	741942	Shivsharan Dhiraj Yadav	2019
23.	727156	Pradip Gaikwad	2019

# SET Qualified Students (2014-2019)

# NET Qualified Students (2014-2019)

Sr. No.	Seat No	Name of Student	Exam Qualified	Year
1.	356732	Patkar NamdevBabruwan	NET-LS	2015
2.	355962	Jadhav Namrata Ajit	NET-JRF	2016
3.	355734	Chaphekar Kajal	NET-LS	2016
4.		Behere Rhuta Purushottam	NET-JRF	2016
5.	350122	Bhilugade Arati Kakaso	NET-LS	2017
6.	371059	Sutar Vishal Saudagar	NET-LS	2017
7.	350030	Shinde Rekha Jalindar	NET-JRF	2017
8.	352711	Kamble Vinit Vijay	NET-JRF	2017
9.	367533	Matwal Sirinbanu Rijwan	NET-JRF	2017
10.	366216	Sutar Shital Shamrao	NET-LS	2018
11.	358816	Shelake Sachin Kenchappa	NET-LS	2018
12.	358122	Mali Sumit Ravi	NET-LS	2018
13.	359373	Pharande Amruta Daulat	NET-LS	2018
14.	366008	Babar Rahul Ashok	NET-JRF	2018
15.	359272	Shivsharan Yadav Dhiraj	NET-JRF	2018

16.	355700	Sathe Jyoti Shivaji	NET-JRF	2018
17.	355040	Dhandale Archana	NET-LS	2018
18.	353957	Mulla Rubina Rafik	NET-JRF	2018
19.	355297	NadafSabehaKausar	NET-JRF	2018
20.	354003	SuhasAmrutsagar	NET-LS	2018
21.	357198	Yogesh Gaikwad	NET-LS	2018
22.	359969	Bhosale Amrut	NET-LS	2019
23.	29303	Chaugule Sana Inayatullah	ICMR-NET	2019

# **10) Details of Students Placements:**

# PLACEMENT RECORD (2014-2019)

# Average percentage of placement of outgoing student during the five years

Year	No. of Student placed	No. of Employers	Average Package received (Rs./pm)	Program Graduated
2014-15	15	14	11243	M. Sc., Ph. D.
2015-16	26	19	12750	M. Sc., Ph. D.
2016-17	16	12	21588	M. Sc., Ph. D.
2017-18	11	09	15455	M. Sc., Ph. D.
2018-19	19	15	17247	M. Sc., Ph. D.
2019-20	10	04	70,000	M. Sc., Ph. D.

# 11) Details of MoUs and Linkages.

# Memorandum of Understanding at National and International Level:

Organization	Date of MoU signed	Purpose and Activity	Number of students/ teachers participated
CSIR- National Institute of Oceanography	08-08-2017	<ul> <li>Purpose: To enhance activities and Awareness ab ecosystem study</li> <li>Activity: Guest lectures of NIO scientists were arr</li> <li>1. Dr. Samir Damare, Senior Scientist, NIO, Goa</li> <li>Topic – Deep Sea: Extreme Environment? Date: 21/09/2019</li> </ul>	
		<b>2. Dr. Baban Ingole,</b> Chief Scientist, NIO, Goa <b>Topic-</b> India's Deep-Sea mission- What are the opportunities for Zoologist's Date 23/09/2019	88 students 9 teachers <b>Total = 98</b> participants
National Research Institute of Agricultural Sciences, Mayabeque, Cuba	2013	<ul> <li>Purpose: To exchange knowledge and expertise in Faculty exchange. Technology transfer in sericulture.</li> <li>Activities: Consultancy and training to Sericulture Government in silkworm seed production, silkworm mulberry production and crop protection.</li> <li>1. Dr. A. D. Jadhav participated as sericulture expert in Training program of Cuban Sericulture Staff, November, 2015.</li> <li>2. Dr. A. D. Jadhav provided advisory on Sericulture Project, 21<sup>st</sup> November to 1<sup>st</sup> December 2016.</li> <li>3. Dr. A. D. Jadhav delivered lecture on "Diseases of Mulberry and Silkworm" to staff in The National Centre for Animal and Plant</li> </ul>	e staff of Cuban
		<ol> <li>In The National Centre for Animal and Plant health, Cuba, November 29<sup>th,</sup> 2016.</li> <li>Dr. A. D. Jadhav consulted to update Cuban sericulture Project during 19<sup>th</sup> November to 1<sup>st</sup> December 2018.</li> </ol>	

### 12) Extracurricular and Extension activities.

- Department is involved in various Extracurricular activities such as celebration of various days of national importance, Betibachao Betipadhaoabhiyan, National Science Day, Plantation, village development and Campus cleanliness activities under National Service Scheme, Sports day, creation of awareness about various health and environmental issues.
- Several Transfer of Technology Programmes have been taken up by the researchers of this Department in Apiculture, Aquaculture, Biodiversity and Sericulture through Trainers' Training Programmes, Workshops, Vichargoshtis, Awareness Programmes, Crisis Management programs, Exhibitions and KrishiMela etc.. The main beneficiaries of this Program are Agricultural Officers, Sericulture Officers, farmers, faculty members and students.
- We arrange regular interaction sessions with external faculty, scientists, Government Officers and technocrats from Industry to interact with our students through Guest Lectures.
- In collaboration with National Academy of Sciences India, Bangalore Chapter, we have organized Lecture series in Biology at this Department during 2017. During this Lecture series, several Fellows of National Academy of Sciences India, Bangalore shared their vast experience in the Modern biology.
- As Western Ghats are the Hot spot for faunal biodiversity, every year we conduct workshops on Awareness on Biodiversity and its conservation. These workshops are sponsored by Maharashtra State Biodiversity Board, Ministry of Forests, Govt. of Maharashtra, Nagpur. During these programs eminent personalities from Forest Department and wild life experts deliver lectures on the importance of Biodiversity and its conservation. During the deliberations, they narrate the students about the threatened species and their conservation techniques. Faculty members take active part in conducting such programs in affiliated colleges with active funding from Maharashtra State Biodiversity Board.
- Every year, we conduct workshops on Apiculture. With the financial assistance from Central Bee Research & Training Institute, Govt. of India, Pune, these events are conducted both in the University campus and at affiliated colleges. During these workshops both theoretical & practical aspects of Bee keeping, Honey extraction, wax preparation and Entrepreneurship opportunities and various incentive schemes from Government are well explained to stakeholders.
- With a view to increase the Entrepreneurship activities among our students and farmers, we are conducting two courses, viz., Post Graduate Diploma in Sericulture (PGDS) and Diploma in Sericulture (DS). Through these structured courses we are promoting the Entrepreneurship activities.
- To provide a platform for budding entrepreneurs "Centre of Excellence and Incubation in Sericulture" is established. Several enthusiasts are registering as Incubates under this Centre. The University is providing all kinds of technical and infrastructural help to these incubates. Several alumni have already achieved great success in the fields of Commercial rearing of Silkworms, Production of Silkworm Seed Cocoons, Kisan Nurseries, Chawki Rearing Centers (Young silkworm rearing).

- This Department is having International collaboration with Ministry of Agriculture, Havana, Cuba. Our faculty visits and trains several Agriculture Officers, Extension Officers and farmers in various aspects Sericulture.
- Our Faculty are holding advisory positions with Maharashtra State Biodiversity Board (Directorate of Forests, Govt. of Maharashtra), Nagpur and provides guidelines for conservation of Biodiversity, preparation of village level Biodiversity Registers etc.
- Further, our faculty are in the advisory panel of Directorate of Sericulture, Govt. of Maharashtra, Nagpur and plays a key role in formulation of developmental strategies for Sericulturists to increase the productivity per unit area.
- Our faculty are invited as resource persons by Directorate of Sericulture and Directorate of Agriculture, Govt. of Maharashtra for various skill enhancement training programmes of Sericulture Development Officers and Agriculture officers.
- Several Technology dissemination programmes for farmers (workshops, awareness programs, Krishi Melas etc.) conducted by Directorate of Sericulture and Directorate of Agriculture, Govt. of Maharashtra requisites the services of our faculty as resource persons.
- In our Department, Faculty members impart corporate training to Sericulture farmers on "Integrated Sericulture Farming". Under this programme 55 farmers from Osmanabad district were trained during October, 2018. This program was sponsored by Agriculture Technology Management Agency (ATMA) and District Sericulture Officer, Directorate of Sericulture, Govt. of Maharashtra, Osmanabad. The second batch of "Integrated Sericulture Farming" is conducted for 25 farmers from Radhanagari village of Kolhapur District during 11.02.2020 to 20.02.2020 in collaboration with D.Y.Patil Education Society. This program was sponsored by Agriculture Skill Council of India, Indian Council of Agriculture Research, Govt. of India, Guragaon, Haryana.
- As per the request of Collector & District Magistrate, Kolhapur (to comply with directions given by National Green Tribunal, New Delhi), our faculty members served as experts in framing the guidelines for preparation of illustrated field manual for identifying various fauna, to prepare Village level Biodiversity Registers (BDRs).

### **CELEBRATION OF VARIOUS DAYS:**



Plantation

Students during Campus Cleaning



Sports Day

**Celebration of National Science Day-2020** 



AIDS awareness program



Popular lecture by Dr. Krishnamegh Kunte



National Science day Exhibition.



Science day Debate competition at Tamgaon.



Dr. Ashok P. Giri delivered lecture



Dr. N. Shylesha felicitation during lecture.



Celebration of Luis Pasteur Day



Celebration of World Heart Day

#### **LECTURES FOR STUDENTS:**

1. Foundation Lectures in Biology



Foundation Lectures in Biology



Lecture delivered by Prof. Raghunath



2. Prof. A. T. Varute Memorial lectures

Prof. I. K. Pai delivering lecture

3. Guest Lectures:



Dr. Sachin Kulkarni delivering lecture



Lecture by Dr. Vishal Shinde



Lecture by Dr. Manoj Borkar

#### WORKSHOPS:

### National Workshop on "Dissemination of Apiculture Technologies"



Prof. B. B. Wyakar delivering lecture.

Dr. K. Lakshmi Rao delivering lecture.

One Day Seminar On "Understanding the Life Style Diseases and Their Management": *Felicitation of guest during seminars: -*



Dr. Pinky Thapar, Gastroendologist



Dr. Alpa Dalal, Pulmonologist



Corporate training to Sericulture farmers on "Integrated Sericulture Farming".



"Centre of Excellence and Incubation in Sericulture" is establ

Inauguration at hands of Hon'ble VC, Prof. D. B. Shinde and Hon'ble Pro-VC, Prof. D. T Shirke.



Dr. A. D. Jadhav training to Cuban Sericulture officers. Dr. A. D. Jadhav delivering lecture.

### 13) List of Distinguished Alumni.

Many students of the Department are successful as Researchers, Academicians,

Sr. No.	Name	Address	Designation	Photo	<b>Contact Details</b>
01.	Dr. Udayan Apte	School of Medicine, Kansas University Medical Centre, 4087 HLSIC; MS-1018 3901 Rainbow Blvd. Kansas City, Kansas 66160	Associate Professor		Phone: (913) 588-9247 E-mail: uapte@kumc.edu
02.	Dr. Mandar Nanajkar	Business Development Group, CSIR-NIO, Dona Paula Goa.	Senior Scientist		Mob.No.: 8886291444 E-mail: mandar@nio.org
03.	Dr. Meghanad Joshi	D. Y. Patil University, Kolhapur	Associate Professor		Mob. No. : 9767677772 E-mail: cmd@stemplusbiot ech.com
04.	Dr. Mahendra Jagtap	Office of Jt. Director, Health Services (malaria) Pune 06, Arogya Bhavan, Alandi Road Vishrantwadi, Yerawada, Pune 06	State Entomologist at Health Services Govt. of Maharashtra		Mob. No. : 9422606504 E-mail: drjmahendra@gma il.com
05.	Ketaki Nishikant Methe	Ketaki N. Methe, Råbyvägen 33, Lgh 1304, 754 22, Uppsala, Sweden (0046 761577329)	Researcher, Gothenburg University, Sweden		E-Mail: ketaki.methe@gu.s e, knmethe2020@gm ail.com
06.	Dr. Rahul Jamdade	Sharjah Research Academy, UAE	Post-doctoral Researcher		Mob. No. : 097668 16678 E-mail: rahul.aqualab@gm ail.com
07.	Shri. Sameer Bajaru	Bombay Natural History Society, Hornbill House, S. B. S. Road, Fort, Mumbai -400001, India	Assistant Curator, Natural History Collection Department		Mob. No. : 8369454638 E-mail: s.bajaru@bnhs.org

Administrators in Government and several are Entrepreneurs.

08.	Dr. D. L. Bharmal	Shri Pancham Khemraj Mahavidyalaya, Sawantwadi Near Moti Talav, Tal - Sawantwadi, Dist - Sindhudurg, 416510	Principal	Mob.No.: 9422964019 E-mail: bharamaldeelip@g mail.com
09.	Dr. S. B. Kengar	Yashwantrao Chavan College of Science, Karad, 415124	Principal	Contact No. :02164 271356 E-mail: prinyccsk@gmail.c om
10.	Dr. Vijaya R. Chavan	Shri. Vijaysinha Yadav Arts and Science College, Pethvadgaon, Tal. Hatkangangale, Dist. Kolhapur. Pin:416 112	Principal	Mob. No.: 9421181666 E-mail: mrs.vijaya.chavan @gmail.com
11.	Shri. Dilip J. Rayannavar	Sudhagad-Pali, Tal. Pali, Dist. Raigad	Tehsildar	Mob. No. : 9768400659 E-mail: dilipjkr@gmail.co m

## 14) Future roadmap of the department:

Based upon on our strengths and Opportunities available and challenges to address the departmental roadmap is planned as -

2022	<ul> <li>Establishment of Demonstration cum training centre for Sericulture.</li> <li>Facility for in-situ conservation of butterflies.</li> </ul>
2023	<ul> <li>Phytonanomedicine development to restore important signalling pathways for uptake of glucose in body cells.</li> <li>Establishment of training centre for freshwater aquaculture practices.</li> </ul>
2024	<ul> <li>Creation of awareness and propagation of host and nectar plants of butterflies.</li> <li>Development of phyto-chemicals for management of agricultural, medical and stored product insect pests.</li> </ul>
2025	<ul> <li>Development of digital inventory of various animal groups.</li> <li>To understand the effect of different stressors in intervention of neurodegeneration.</li> <li>Molecular characterization of lepidoptera from Western Ghats</li> </ul>

#### 15) Media coverage of the Department.

This Department regularly conducts various Guest lectures by inviting eminent personalities in various fields of Research and public life. Various Transfer of Technology programs sponsored by various agencies involving workshops, awareness programs, Training programs are being regularly conducted.



## शिवाजी विद्यापीठाचे रेशीम उद्योगासाठी कार्य कौतुकास्पद सुधीर कुरसंगे : उद्योगाला शासनाचे प्रोत्साहन

रेशीम कोल्हापुर. ता. 6 : उद्योगासाठी कुशल व प्रशिक्षित विद्यार्थी घडविण्यासाठी शिवाजी विद्यापीठात सुरू असलेले कार्य कौतुकास्पद आहे, असे मत वस्त्रोद्योग विभागाचे सचिव सुधीर कुरसंगे यांनी व्यक्त केले.

कुलगुरू डॉ. एन. जे. पवार व प्र-कुलगुरू डॉ. अशोक भोईटे यांची सकाळी कुरसंगे यांनी भेट घेतली. यशवंतराव रेशीमशास्त्र विभागाचे डॉ. ए. डी. जाधव उपस्थित होते.

श्री. कुरसंगे म्हणाले, ''पश्चिम महाराष्ट्रात उसाच्या लागवडीमूळे

अन्य शोतीकडे दुर्लक्ष झाले आहे राज्य शासनाने अल्प खर्चातला आणि दीर्घकालीन उत्पन्नाचा स्रोत म्हणून रेशीम उद्योगाला प्रोत्साहन दिले. रेशीम क्षेत्राशी संबंधित अभ्यासक्रम प्राणीशास्त्र विभागात शिकविण्याचा उपक्रम कौतुकास्पद असून विद्यार्थ्यांना चांगले भवितव्य आहे.''

चव्हाण ग्रामीण स्कूलच्या माध्यमातून एखादा प्रकल्प, पथदर्शी प्रकल्प राबविता येतो का, या दष्टीने विचार करता येईल, असे डॉ. पवार यांनी नमूद केले.



. राची प्रचंड क्षमता व करता येत असल्याने ण भागात विकासात मोठे तहे. हा अभ्यासक्रम रेशीम इच्छिणाऱ्या व करणाऱ्या

एक वर्ष पदविकास ो उत्तीर्ण, अभ्यासक्रम

जे शेतकरी रेशीम शेती करतात

सप्टेंबरपासून होत आहे. अधिक माहिताजन प्राणिशास्त्र अधिविभागतील डॉ. ए. डी. जाधव यांच्याशी संपर्क साधावा पत्ने आवाहन प्राणिशास्त्र अधिविभा व राकृत यां

## **TIMES** CITY Varsity students to get training in sericulture

ur: The department of ogy from Shivaji Universi-olhapur (SUK) will receive hds on training on the seri-ture technology from Sep-aber 11 at Mysuru in Karna-

experts from Central Rese and Training Institute in uru will guide the students ughout the whole process. A D Jannav, proressor at the tepartment of zoology, SUK, old TOI, "The training is im-portant for students. They get to know about the advanceits in sericulture. The stu-is' entrepreneurial skills also given a push. These ients can start their own sere farming or they can their friends and familintages of it.

ment always gives a push to stu dents' entrepreneur skills an sericulture is one ment which is still relatively

ment which is still relatively unexplored. Elaborating on the course he added that students will be trained for five days from Sep-tember II. It will focus mainly temper in it will focus mainly on the basics of sericulture such as mulberry varieties and their characteristics, silk-worm breeds and their incuba-tion as well as boxing and silk-

worm rearing. He added that as many as 24 students and two progressive farmers from Satara are being sent to the said training program. He further said that the tra-

ining program has been orga nised in the past two years. Stu

ied the s sed a rise of almost 40

tes and qua



बुधवारी आयोजन; वन विभागाचा सहभाग

कोल्हापूर : प्रतिनिधी शिवाजी विद्यापीठ प्राणीशास्त्र अधिविभाग व महाराष्ट्र राज्य जैवविविधता मंडळ आणि वन वन विभाग यांच्या वतीने बुधवारी (दि. ४ ऑक्टोबर) राजर्थी शाहू सभागृह येथे सकाळी साडेदहा वाजता राज्यस्तरीय संर्वधन आणि जैवविविधता जागरूकता' या विषयावर एक दिवसीय कार्यशाळेचे आयोजन केले आहे.

राज्य जैवविविधता मंडळाचे अध्यक्ष डॉ. विलास बडेकर यांच्या हस्ते होणार आहे. कार्यक्रमाचे प्रमुख प्र-कुलगुरू डॉ. डी. ती पाहणे शिर्के, तर कुलगुरू प्रा. डॉ. देवानंद शिर्दे अध्यक्षस्थानी असतील. या कार्यशाळेस राज्यात जैवविविधता संवंधन, जागृती या अनुपंगाने विविध तज्ज्ञांचे मार्गदर्शन पान ७ वर ••

#### शिवाजी विद्यापीठात जैवविविधता कार्यशाळा

(पान १ वरून) होणार आहे. रामध्ये प्रा. डॉ. पी. डी. राऊत, प्रा. यामध्ये प्रा. डॉ. पी. डी. राऊत, प्रा. डॉ. एस. पी. चल्हाण, डॉ. ए. डी. जाधव, विवेक डावरे, उपवन संरक्षक डॉ. प्रमुनाथ शुक्ल, हेमंत ओगले, प्रा. डॉ. एस. आर. यादव आदी मार्गदर्शन करतील.

कार्यक्रम संयोजन सचिव डॉ. ए डी. जाधव तर डॉ. एम. व्ही. शांताकुमार हे समन्वयक आहेत. या कार्यशाळेस राष्ट्रीय सेवा योजनेचे विद्यार्थी व निवडक जयात राग्रिशत महाविद्यालयात राहणार आहेत.

परागी भवनासाठी मधमाशांचे अस्तित्व महत्वाचे

प्रा. बी.बी. वायकर : आजरा महाविद्यालयात मधुमक्षिका पालन राष्ट्रीय कार्यशाळा

#### प्रतिनिधी आजरा

मधमाशा या मानवी जीवनाशी जोडल्या गेल्या आहेत. परागी भवनाशिवाय अन्नधान्य पिकविणे अशक्य असून परागीभवनासाठी मधमाशांचे अस्तित्व महत्वाचे असल्याचे प्रतिपादन औरंगाबाद येथील डॉ. बाबासाहेब आंबेडेकर मराठवाडा विद्यापीठाचे प्रा. बी. बी. वायकर यांनी केले. येथील आण्णाभाऊ सांस्कृतिक सभागृहात आयोजित करण्यात आलेल्या मधुमक्षिका पालन तंत्रज्ञान व प्रसार या राष्ट्रीय कार्यशाळेत ते बोलत होते.

केंद्रीय मधुमक्षिका पालन संशोधन व प्रशिक्षण संस्था, खादी ग्रामोद्योग आयोग व शिवाजी विद्यापीठाच्या संयुक्त विद्यमाने या कार्यशाळेचे आयोजन करण्यात आले होते. स्वागत आजरा महाविद्यालयातील डॉ. व्ही. व्ही. आजगेकर यांनी केले. प्रास्ताविकात प्राचार्य डॉ. एम. एल. होनगेकर यांनी मधुमक्षिका पालन व्यवसाय व फायदे याबाबत माहिती दिली. ही कार्यशाळा ग्रामीण भागात झाली तरच याचा लाभ शेतकऱ्यांना होणार असल्याने आजरा महाविद्यालयात या कार्यशाळेचे आयोजन करण्यात आल्याचे त्यांनी सांगितले.

यावेळी डॉ. वायकर म्हणाले, मराठवाड्यात डाळींबाचे पिक मोठ्या प्रमाणावर घेतले जाते.



आजरा : मधुमक्षिका पालन तंत्रज्ञान व प्रसार कार्यशाळेत मार्गदर्शन करताना डॉ. बी. बी. वायकर व्यासपीठावर उपस्थित डॉ. व्ही. व्ही. आजगेकर, डॉ. एम.एल. होनगेकर, दिनेश कुरूणकर, के. लक्ष्मीराव, डॉ. अे. डी. जाधव, डॉ. व्ही. एस. मन्ने, के. व्ही. येसणे.

मात्र गेल्या काही वर्षात डाळींबाच्या बागा ओस पडल्या होत्या. यावर संशोधन करून बागांमध्ये मधमाशांच्या पेट्या आणून ठेवल्या. यामुळे परागीभवन होऊन डाळींबाच्या बागा बहरल्या आणि उत्पादनही वाढल्याचे त्यांनी सांगितले. मधमाशांमुळे परागीभवन प्रक्रिया निरंतर सुरू आहे. मधमाशा नष्ट झाल्या तर परागीभवनाची प्रक्रिया बंद होऊन शेतात अन्नधान्य पिकविणे शक्य होणार नाही. यामुळे मध्यमाशांचे पालन व संवर्धन करणे ही काळाची गरज आहे.

पुणे येथील केंद्रीय मधुमक्षिका पालन, संशोधन व प्रशिक्षण संस्थेच्या सहाय्यक संचालिका डॉ. के:

समाजनिर्मितीत विज्ञानाचे योगदान

#### म. टा. प्रतिनिधी, कोल्हापूर

'विज्ञान हे संशोधनाचे मुख्य प्रवेशद्वार आहे. संशोधन म्हणजे ज्ञान शोधण्याची कला आहे,' असे प्रतिपादन शिवाजी विद्यापीठाचे कुलगुरू डॉ. देवानंद शिंदे यांनी केले. शिवाजी विद्यापीठाच्या प्राणिशास्त्र अधिविभागामार्फत राजधीं शाहू सभागृहात आयोजित करण्यात आलेल्या राष्ट्रीय विज्ञान सप्ताहाच्या सांगता समारंभामच्ये अध्यक्षस्थानावरून

### शिवाजी विद्यापीठात राष्ट्रीय विज्ञान सप्ताहाचा समारोप

कुलगुरू डॉ. शिंदे बोलत होते. यावेळी प्र-कुलगुरू डॉ. डी. टी. शिर्के उपस्थित होते.

कुलगुरू शिंदे म्हणाले, 'समाज घडविण्यामध्ये विज्ञानाचे फार मोठे योगदान आहे विज्ञानातील विवेकपूर्ण विचार हे समाजाला अंधश्रद्धेपासुन दूर ठेवण्याचे मुख्य काम करीत असते. प्रत्येक व्यक्तीमध्ये एक संशोधक लपलेला असतो. संशोधक वृत्तीचे कार्य पूर्ण होण्यासाठी त्याला पुरक वातावरण



राष्ट्रीय विज्ञान दिनानिमित्त आयोजित कार्यक्रमात बोलताना कुलगुरू डॉ. देवानंद शिंदे, सोबत डॉ. व्ही. एस. मन्ने, डॉ.डी. टी. शिर्के, आदी.

उपलब्ध होणे आवश्यक आहे. संशोधन ही निरंतर चालणारी प्रक्रिया आहे. संशोधनामुळे माणुस सक्षम बनतो.'

डॉ. डी. टी. शिर्के म्हणाले, 'भारतीय महिला शास्त्रज्ञांचे विज्ञानात फार मोठे योगदान आहे. विद्यार्थ्यांनी अभ्यासू, चिकित्सकवृत्ती जोपासून समाजाच्या प्रगतीसाठी विज्ञानाचा उपयोग करावा'

यावेळी अधिष्ठाता डॉ. पी. एस. पार्टील, कुलसचिव डॉ. विलास नांदवडेकर, विद्यार्थिनी स्वरूपा फडके यांनी मनोगत व्यक्त केले. सप्ताहाच्या माध्यमातून प्राणिशास्त्र विभागामाफंत निबंध स्मर्धा, वक्तृत्व स्पर्धा, विज्ञान प्रदर्शन स्पर्धांचे आयोजन केले होते. प्राविण्य मिळविलेल्या विद्यार्थ्यांना कुलगुरूंच्या हस्ते प्रमाणपत्र देऊन गौरविण्यात आले.

लक्ष्मीराव यांनी शासकीय योजनांची माहिती दिली.

जाधव, आजरा तालुका कृषी अधिकारी मोमीन

यांनी मनोगत व्यक्त केले. जनता शिक्षण संस्थेचे

संचालक के. व्ही. येसणे यांनी अशा कार्यशाळा

ग्रामीण भागात घेतल्या तरच आपण शेतकऱ्यांपर्यंत

पोहोचू आणि कार्यशाळांचा हेतू सफल होईल असे

मत व्यक्त केले. यावेळी संस्थेचे संचालक दिनेश

कुरूणकर, आजरा महाविद्यालयाचे अधिक्षक योगेश

पोटील यांच्यासह तालुक्यातील विविध गावातील

शेतकरी उपस्थित होते. डॉ. अशोक बाचूळकर

यांनी सूत्रसंचलन करून आभार मानले

यानंतर शिवाजी विद्यापीठातील डॉ. ओ. डी.

प्राणीशास्त्र अधिविभागप्रमुख डॉ. व्ही. एस. मन्ने यांनी स्वागत केले. समन्वयक डॉ. एम. व्ही. वाळवेकर यांनी आढावा सादर केला. आदित्य नागवेकर यांनी सूत्रसंचलन केले. डॉ. माधव भिलावे यांनी आभार मानले. यावेळी अधिष्ठाता डॉ. ए, एम. गुरव, वित्त व लेखाधिकारी व्ही. टी. पाटील, राष्ट्रीय सेवा योजनेचे संचालक डॉ. अभय जायभाय यांच्यासह शालेय विद्यार्थी, विद्यार्थिनी, शिक्षक, संशोधक उपस्थित होते.

## Study finds 123 species of vertebrates on Shivaji University's biodiversity-rich campus

kolhapur. A blodiversity sundy carried out for over a year has cited the presence of 123 species of vertebrates - including 90 species of 11 species of amphibians and nine species of mam mals - in the lush-green 850-acre campus of the Shical Diversity. Kolhapur

(SUR). The study, which was approved under the 'research strengthening scheme' for university researchers, has stamped the biodiversity present in the university campus and revealed the fypes of species for the first time. The dense vegetation

and minimal human interference has let the animals thrive on the campus. The research also cites some rare species of animals such as the common trinket enake. It is a non-venomous slender snake fo-

nd in dense vegetation. It eds on rodents and has nooth and glossy scales, aking it attractive. In adtion, the campus has 10 ferent sub-species of pesthat are rarely present



in a single habitat in large numbers. Among them is the rare Indian balloon frog, which forms a baggy shape when threatened. This species of frog remains in underground pits near water bodies most of the year. Lead researcher of the study and professor of zoology department SM Gaikwad said: "Various types of habitats are present on the SUK campus — from dense vegetation to water bodies. We are continuing with the study for a few more months

F

TRINKET

species will be found on the 850-acre campus." In the birds category, or the second second second eagle on the campus. Moreover, five species of migratory birds have been spotted, including northern shoveller, shelducks, para dise flycatcher etc. "The university has ta ken up the task of planting local species of plants. This will help conserve as well as increase the biodiversity of the campus," said Gaikwad

RUDDY SHELDUCK

## पारंपरिक मासेमारीचा आफ्रिका ते पन्हाळा प्रवास



कोल्हापूर : छोट्या झील जाळीसह संशोधन करणारे प्रज्ञा डवरी, दिग्विजय चौकीकर, दीप्ती मोहिते व आफरीन नदाफ.

#### सुयोग घाटगे : सकाळ वृत्तसेवा

कोल्हापूर ता २६ : पन्हाळा परिसरातील पारंपरिक पद्धतीच्या मासेमारीचे मूळ हे आफ्रिका खंडातील असल्याचे सांगितल्यास आएचचे वाटले नाही तर नवल्य. शेकडो वर्षांपासून पन्हाळा परिसरातील गोड्या पाण्यातील हंगामी मासेमारी करण्याची पद्धत आफ्रिका खंडातील मासेमारीशी जुळणारी असल्याचे संशोधन शिवाजी विद्यार्गठाच्च्या प्राणीशास्त्र विभागाच्या विद्यार्थठाच्च्यांनी केले आहे.

डॉ. एम. पी. भिलावे यांच्या मार्गदर्शनाखाली प्रज्ञा डवरी, दोप्ती मोहिते, आफरीन नदाफ, दिग्विजय चौकीकर यांनी गोड्या पाण्यातोल पारंपरिक पढतीने मासेमारी होणाऱ्या टिकाणाह्नी माहिती संकलित केली. 66 आशिया खंडातील मासेमारीच्या पारंपरिक पद्धतीपेक्षा आफ्रिक खंडातील पद्धत वेगळी आहे. मुळात एखादी पद्धत तेथील भौगोलिक परिस्थिती आणि मिळणारे मासे यावर अवलंबून असते. मात्र, आशिया खंडात आफ्रिका खंडातील पद्धतीचा वापर ही बाब महत्वाची असून, याबाबत विभागाच्या विद्यार्थ्यांनी केलेले संशोधन महत्त्वपूर्ण आहे. - डॉ. एम. पी. भिलावे

त्याचा अभ्यास करताना पन्हाळा तालुक्यातील गोड्या पाण्यातील हंगामी मासेमारी करण्याची पद्धत थेट आफ्रिका खंडातील पद्धतीशी तंतोतंत मिळती-जुळती असल्याचे लश्चात आले. मासेमारीसाठी वापरली जाणारी उपकरणे, जाळीचे नावही आफ्रिका खंडाप्रमाणेच उच्चारले जाते. ही पद्धत विशेषत: हंगामी मासेमारी करणारे मच्छीमार वापरतात. आफ्रिका खंडातही याच पद्धतीने हंगामी मासेमारी होते. ब्रिटिश राजवटीच्या आधे अथवा त्या दरम्यान खलाशी अथवा इतर स्रोतांद्वारे ही पद्धत येथे रुजु झाली असल्याची शवयता येथील स्थानिक वर्तवितात. काळाच्या ओघात जाळीसाठी झाडांच्या सालीऐवजी नायलॅनचा दोरा वापरला जात असल्याचा बदल घडला आहे. हे संशोधन इंटरनॅशनल जर्नल ऑफ फिशरीस अॅण्ड ॲक्वेटिक स्टडीजमध्ये प्रसिद्ध झाले असून, यामुळे दोन खंडांतील सांस्कृतिक देवाण-घेवाणीचा परस्पर संबंध समोर आला आहे.



घरमाशीवर आता जैविक नियंत्रण!

### कोल्हापूर : प्रवीण मस्के

शिवाजी विद्यापीठ प्राणीशास्त्र विभागातील प्रा. डॉ. ए. डी. जाधव यांनी घरमाशा कोषावस्थेत असताना त्यांना नष्ट करणाऱ्या 'नेसोलॅंक्स धायमस' या जैविक मित्र कीटकांचा शोध लावला आहे. सर्वत्र आढळ्णाऱ्या व आजारांचे कारण ठरणाऱ्या घरमाशीवर जैविक पद्धतीने आता नियंत्रण मिळविणे शक्य होणार आहे.

या संशोधनासाठी जिल्हा

## डॉ. ए. डी. जाधव यांचे यशस्वी संशोधन

नियोजन मंडळाकडून त्यांना निधी मिळाला

अाहे. घरमाशी 'डिप्टेरा' या कुळातील घटक आहे. अस्वच्छतेच्या ठिकाणी त्यांची पैदास मोठ्या प्रमाणात होते. अनेक रोगांचा प्रसार होण्यासाठी व साथरोग पसरण्यास घरमाशा कारणीभूत ठरतात. डॉ. जाधव गेल्या काही वर्षांपासून यासंदर्भात संशोधन करीत आहेत. विद्यापीठाच्या प्राणीशास्त्र विभागात 'नेसोलॉक्स धायमस' या मित्र किडीची निर्मिती केली आहे. शासनाच्या नावीन्यपूर्ण योजनेतंगंत मिळणाऱ्या निधीतून विद्यापीठात या अद्ययावत किडीची मोठ्या प्रमाणात उत्पत्ती करणारी प्रयोगशाळा निर्माण करण्यात थेणार आहे. मित्र किडींचे वाटप पोल्टीधारक, सार्वजनिक आरोग्य यंत्रणेकडे केले जाईल. त्यांना सार्वजनिक ठिकाणी सोडले जाणार आहे. मित्र कीटक रेशीम आळ्यांवर प्रादुर्भाव करणाऱ्या ऊजी माशीवर नियंत्रणासाठी राज्यातील रेशीम उत्पादन शेतकऱ्यांना वाटप केले जाणार आहे. त्यामुळे रेशीम उत्पादनात २० टक्के . . वाढ होईल, असे डॉ. 28TH FE जाधव यांनी सांगितले. NAT ON

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## पुण्यनगरी

जनसंपर्क कक्ष ष्मवाजी विद्यापीठ, कोल्हापूर

रेशीम शेती इन्क्युबेशन सेंटरमुळे शेतकऱ्यांचा प्रवास सुकर

## कुलगुरू डॉ. देवानंद शिंदे : रेशीम शेती इन्वयुबेशन सेंटर विद्यापीठात कार्यान्वित, लाइफ सायन्समधील देशातील पहिले केंद्र

#### कोल्हापूर / प्रतिनिधी :

शिवाजी विद्यापीठात कार्यान्वित करण्यात आलेल्या रेशीम शेती इन्क्युबेशन सेंटरमुळे विद्यार्थ्यांचा आणि शेतकऱ्यांचाही ज्ञानार्जनातन अर्थार्जनाकडील प्रवास सुकर होणार आहे, असे प्रतिपादन शिवाजी विद्यापीठाचे कुलगुरू डॉ. देवानंद शिंदे यांनी केले.

कुलगुरू डॉ. देवानंद शिंदे विद्यापीठाच्या प्राणिशास्त्र अधिविभागात सेंटर ऑफ एक्सलन्स अँड इन्क्युबेशन इन सेरीकल्चर या केंद्राचे उद्घाटन झाले, त्यावेळी ते बोलत होते.

या उद्घाटनाच्या निमित्ताने उस्मानाबाद जिल्ह्यातील ५५ शेतकऱ्यांसाठी दि. ८ ते १३ ऑक्टोबर या कालावधीत या



कोल्हापुरः प्राणिशास्त्र अधिविभागात इन्क्युबेशन सेंटरअंतर्गत शेतकऱ्यांसाठी रेशीम शैतीविषयक प्रशिक्षण शिबिराचे उद्घाटन करताना कुलगुरू डॉ. देवानंद शिंदे, प्र-कुलगुरू डॉ. डी. टी. शिर्के यांच्यासह मान्यवर.

'एकात्मिक रेशीम शेती' या आयोजित करण्यात आले आहे.

इन्क्यूबेशन कें द्राच्या अंतर्गतच विषयावरील प्रशिक्षण शिबिरही

कुलगुरू डॉ. शिंदे म्हणाले, लाईफ सायन्स या विषयामधील रेशीम शेतीशी निगडित भारतातील हे पहिले इन्क्युबेशन सेंटर आहे. इन्क्युबेशन सेंटरची योजना अशासाठी असते की. विद्यार्थी अगर नागरिकांना नोकरीऐवजी स्वतःचा रोजगार सुरू करता यावा आणि त्या माध्यमातून इतर गरजू लोकांनाही रोजगार देता यावा. त्यादष्टीने या रेशीम शेती इन्क्युबेशनमध्ये रोजगार निर्मितीची पुरेपूर क्षमता आहे.

दरम्यान, या एक आठवड्याच्या निवासी प्रशिक्षण कार्यक्रमात जमिनीची तयारी, निवड, खताचे, पाण्याचे महत्त्व, चॉकी व प्रौढ रेशीम कीटक संगोपन, निर्जतकीकरण, तुती व रेशीम कीटकांचे विविध रोग व कीड कोष बांधणी, विक्री,

कोल्हापुर : प्रतिनिधी

शिवाजी विद्यापीठात कार्यान्वित करण्यात आलेल्या रेशीम शेती

रेशीम शेतीतील मल्यवर्धित उत्पादने धागानिर्मिती, शासकीय योजना अशा विविध विषयांवर प्रात्यक्षिकांसह प्रशिक्षण देण्यात येणार आहे.

कार्यक्रमास प्रमुख पाहुणे म्हणून विद्यापीठाचे प्र-कुलगुरू डॉ. डी. टी शिर्के, इनोव्हेशन अँड इन्क्यबेशन केंद्राचे संचालक डॉ. आर. के कामत, विज्ञान व तंत्रज्ञान विद्याशाखेचे अधिष्ठाता डॉ. पी. एस. पाटील, कृषी महाविद्यालयाचे प्राचार्य डॉ. जी. जी. खोत, समृद्धी उद्योग सम्हाचे मनीष पाटील, उस्मानाबादचे प्रगतिशील रेशीम शेती उत्पादक बालाजी पवार आदी उपस्थित होते. प्राणिशास्त्र अधिविभागप्रमुख डॉ. व्ही. एस. मन यांनी प्रास्ताविक केले. कार्यक्रम समन्वयक डॉ. ए. डी. जाघव यांनी आभार मानले

जनसंपर्क कक्ष जीवाजी विद्यापीठ, कोल्हापूर 11 OCT 2018 **Times of India** 

## Varsity opens incubation centre for sericulture

#### Piyush.Bhusari

Kolhapur: A centre at Shivaji University Kolhapur (SUK) could well become the one-stop centre for all things related to sericulture. The incubation centre for seri-culture, inaugurated earlier this week will serve eth. this week, will serve students, farmers, as well as

dents, farmers, as well as industry. Integrated research, field visits, transfer of technolo-gy, and dissemination of technology will be the first priority in the incubation lab, said AD Jadhav, pro-gramme coordinator at the pepartment of Zoology, SUK. Jadhav said at the first

Jadhav said at the first programme after its inaugu-ration, 55 farmers from Osmanabad district enrolled

for the five-day training on the various aspects of seri-culture. The programme will conclude on October 13. All these farmers have arrived

55 farmers from Osmanabad district enrolled for the five-day training on the various aspects of sericulture. The programme will conclude on October 13. All these farmers have arrived under the sponsorship of the district adminis-

tration of Osmanabad.

under the sponsorship of the district administration of Osmanabad. They plan to send 500 more farmers inter-

estad in serioult The exposure to proper ctices in the field of sericulture is much needed to get proper yield. We have many success stories from the surrounding region, where far-mers have earned in the lakhs with their harvest," he said.

akans with their narvest, he said. Balaji Powar, one of the farmer participants, said that the training that they are receiving at the Depart-ment of Zoology of SUK will stand them in good stead. "The field visit tonearby far-mers, inspires one with con-fidence," he said. Devanand Shinde, VC, SUK on the day of inaugura-tion of the incubation centre said this is the first incuba-tion centre associated with

tion centre associated with the life sciences in the

केले



सेरिकल्चर केंद्रातफें आयोजित कार्यक्रमाच्या उद्घाटनप्रसंगी कुलगुरू डॉ. देवानंद शिंदे, प्र-कुलगुरू डॉ. डी. टी. शिकें यांच्यासह मान्यवर

#### रेशीम शेतीतून इतर उत्पादने घेण्यास 'इन्क्युबेशन'च्या माध्यमातून चालना

कोल्हापूर : प्रतिनिधी शेतकऱ्यांसाठी इन्क्युबेशन केंद्रांतर्गत रेशीम श्रेतीतून इतर मुल्यवर्धित एकात्मिक रेशीम श्रेती या विषयावर उत्पादने घेण्यास इन्क्युबेशन केंद्राच्या प्रशिक्षण कार्यक्रम झाला. यावेळी माध्यमातून चालना मिळेल. रेशीम प्र-कुलगुरू प्रा. डॉ. डी. टी. शिर्के, शेतीतून उत्पादकता व गुणवत्ता डॉ. आर. के. कामत, मनीष पाटील, वातविण्यास याचा फायदा होईल. असे डॉ. जी. जी. खोत यांनी मनोगत व्यक्त केले. यावेळी प्रा. डॉ. पी. एस. पाटील, प्रतिपादन कुलगुरू डॉ. देवानंद शिंदे यांनी डॉ. ए. डी. जाधव, डॉ. वी. एस.

प्राणीशास्त्र अधिविभागात सेंटर मन्ने, बालाजी पवार आदी उपस्थित ऑफ एक्सलन्स औड इन्क्युबेशन इन होते. सेरिकल्चर केंद्राच्या उद्घाटनप्रसंगी ते बोलत होते उग्मानाबाद जिल्ह्यातील

हन्युवेशन सॅटरमुळे विद्यार्थ्याचा 🔹 उस्मानाबाद येथील शेतकऱ्यांना प्रशिक्षण आणि शेतकऱ्यांचाही ज्ञानार्जनातून अर्थार्जनाकडील प्रवास सुकर होणार आहे, असे प्रतिपादन शिवाजी विद्यापीठाचे कुलगुरू डॉ. देवानंद शिंदे यांनी येथे व्यक्त शिवाजी विद्यापीठाचे प्राणीशास्त्र अधिविभागात सेंटर ऑफ एक्सलन्स औह इन्क्यूबेशन इन

दिले जाणाग आहे. प्र-कुलगुरू डॉ. डी. टी. शिर्के उपस्थित कुलगुरू डॉ. झिंदे म्हणाले,

उस्मानाबाद जिल्ह्यातून रेशीम शेतीचे निवासी प्रशिक्षण घेण्यास विद्यापीठात अकृषी <u>श्रोतकरी</u> येतात, ही अभिमानाची बाब आहे

याबेळी इनोव्हेशन औह इन्क्युबेशन केंद्राचे संचालक डॉ. आर, के, कामत, विज्ञान व तंत्रज्ञान प्राशाखेचे अधिष्वता डॉ. पी. एस पारील, कृषी महाविद्यालयाचे प्राचार्य



🔅 पुलसि

विद्यापीठात 'रेशीमशेती इन्क्युबेशन' कार्यान्वित

वही. एस. मन्ने यांनी प्रास्ताविक केले. कार्यक्रम समन्वयक डॉ. ए. डी. जाधव यांनी आधार मानले. भारतातील पहिले इन्क्युबेशन सेंटर लाईफ सायन्स या विषयामधील

रेशीम शेतीशी निगडित भारतातील पहिले इन्क्युबेशन सेंटर आहे. इन्क्यबेशन सेंटरची योजना अशासाठी असते की, विद्यार्थी अगर नागरिकांना नोकरीपेवजी स्वतःचा रोजगार सरू करता यावा आणि त्या माध्यमातून इतर गग्ज लोकांनाही रोजगार देता याचा. त्या दृष्टीने या रेशीम शेती इन्क्युबेशनमध्ये

रोजगार निर्मितीची पुरेषुर क्षमता असल्याचे कुलगुरू डॉ. शिंदे यांनी

शेवाजी विद्यापीठातन

लाईफ सायन्समधील देशातील पहिले केंद्र



सेरीकल्चर या केंद्राचे उद्पाटनावेळी डाँ, शिंदे बोलत होते. या उद्घाटनाच्या निमित्ताने उस्मानाबाद जिल्ह्यातील ५५ शेतकऱ्यांसाठी इन्क्युबेशन केंद्राच्या अंतर्गत एकात्मिक रेशीम यो अवगत एकालपक स्तान या विषयावरील प्रशिक्षण जण्णार आहे. यावेळी

## सेरिकल्चर मॉडेलचा विद्यापीठात प्रयोग

## केंद्र सरकारच्या 'वन डिस्ट्रिक्ट वन प्रॉडक्ट' योजनेंतर्गत निवड

#### संदीप खांडेकर : सकाळ वृत्तसेवा

कोल्हापूर, ता. १२ : शिवाजी विद्यापीठातील सेंटर ऑफ एक्सलन्स अँड इन्क्युबेशनच्या माध्यमातून पाच एकर जागेत तुतीची लागवड ते धागा निर्मितीचे . सेरिकल्चर मॉडेल' आकाराला येणार आहे

केंद्र शासनाच्या 'वन डिस्ट्रिक्ट वन प्रॉडक्ट' योजनेसाठी कोल्हापूर जिल्ह्याची रेशीमसाठी निवड झाली आहे. त्याअंतर्गत हे मॉडेल साकारले जाणार आहे. 'कमवा व शिका' योजनेतील विद्यार्थ्यांना मॉडेलमध्ये काम करण्याची संधी मिलेल

जिल्ह्यातील शेतकऱ्यांचा रेशीम शेतीकडे कल वाढत आहे. प्रत्येक तालुक्यातील शेतकरी कोष निर्मितीत गुंतल्याचे चित्र आहे. विशेषतः यळगुडमध्ये वर्षाला



'वन डिस्ट्रिक्ट वन प्रॉडक्ट' योजनेअंतर्गत देशात ५० जिल्ह्यांची निवड झाली आहे. मात्र, राज्यात निवड झालेला कोल्हापूर जिल्हा एकमेव आहे. खासदार धैर्यशील माने यांनी केंद्रिय वस्त्र मंत्रालयाशी संपर्क साधला होता. त्यामुळे जिल्ह्याची निवड झाली आहे.

कुलगुरू डॉ. डी. टी. शिकें यांनी दिलेले पाठबळ मोलाचे आहे. - डॉ. ए. डी. जाधव, सल्लागार, क्युबा राष्ट्रीय रेशीम प्रकल्प

#### प्राथमिक स्तरावर मॉडेलच्या हालचाली सुरू आहेत. मॉडेलसाठी आवश्यक जागा विद्यापीठात असल्याने शेतकऱ्यांना रेशीम शेतीचे ज्ञान मिळणार आहे. ते उत्पादकता व गुणवत्ता वाढीला तो पोषक ठरेल.

- डॉ. डी. टी. शिकें, कुलगुरू, शिवाजी विद्यापीठ

कोट्यवधीची उलाढाल करणारे शेतकरी आहेत. त्यांच्याप्रमाणे या व्यवसायात येऊ इच्छिणाऱ्यांना शास्त्रशुद्ध पद्धतीने रेशीम शेतीचे विद्यापीठाने देण्याकरिता जान पढाकार घेतला आहे. प्राणीशास्त्र अधिविभागातील डॉ. ए. डी. जाधव क्युबाच्या राष्ट्रीय रेशीम प्रकल्पाचे सल्लागार म्हणून कार्यरत आहेत. डॉ. जाधव व प्राणीशास्त्र विभागाचे प्रमुख डॉ. शांताकुमार मन्ने यांच्याकडे मॉडेलची जबाबदारी आहे.

त्तीची लागवड ते धागा निर्मिती, यांत्रिकीकरणाचे, वेगवेगळ्या मशिन्स, उत्पादकता व किटक संगोपन गहाचे निर्जंतकीकरण, धागा काढण्याची विविध यंत्रे, जिओ-थर्मल टेक्नॉलॉजीचा वापर, शेतकऱ्यांना प्रशिक्षण, असे उपक्रम राबविले जाणार आहेत.



#### दुष्टिक्षेपात प्रकल्प

- भारतात रेशीम अळ्यांच्या ४६६ जाती 😐 तुतीच्या १२९९ जाती 😑 वातारणात पोषक ठरणाऱ्या ततीची विद्यापीठात होणार लगवड 😐 जर्मप्लाझम बँकेची होणार निर्मिती केंद्रिय रेशीम मंडळ
- व शिवाजी विद्यापीठात होणार सामंजस्य करार



chichad

शिवाजी विद्यापीठाचे कलगरू डॉ. डी. टी. शिकें, कलसचिव डॉ. विलास नांदवडेकर यांची केंद्रीय रेशीम संशोधन प्रशिक्षण संरक्षेचे संचालक डॉ. पॅकज तिवारी, सहसंचालक एम. मुर्ती, शिवकमार हक्केरी यांनी भेट घेतली. यावेळी व्ही. एस. मन्ने, ए. डी. जाधव, आदी उपस्थित होते.

# तुती लागवड ते कापड निर्मितीचे एकात्मिक मॉडेल उभारण्यास सहकार्य केंद्रीय रेशीम'ची तयारी : विद्यापीठातील उपक्रमांचा आढावा

#### लोकमत न्यूज नेटवर्क

कोल्हापूर शिवाजी : विद्यापीठाच्या सेरिकल्चर इन्क्युबेशन सेंटरच्या माध्यमातून संशोधन, प्रशिक्षण, नावीन्यपूर्ण संकल्पना, आदींना भविष्यात सहकार्य केले जाईल. जिल्हा नियोजन समिती, केंद्रीय रेशीम मंडळ, वस्त्र मंत्रालय यांच्या सहकार्याने तुती लागवड ते कापड निर्मिती असे एकात्मिक मॉडेल विद्यापीठात ਤਾਮੇ करण्यासाठी सर्वतोपरी सहकार्य करण्याची तयारी

केंदीय रेशीम संशोधन प्रशिक्षण संस्थेच्या वरिष्ठ शास्त्रज्ञ, अधिकाऱ्यांनी दर्शविली

केंद्रीय रेशीम संशोधन प्रशिक्षण संस्था आणि म्हैसूर येथील केंद्रीय रेशीम मंडळाचे संचालक डॉ. पंकज तिवारी, सहसंचालक एम, मुर्ती, हुक्केरी शिवकुमार यांनी विद्यापीठाच्या सेंटर फॉर एक्सलन्स आणि इन्क्युबेशन इन सेरिकल्चरला गेल्या आठवड्यात भेट दिली. येथे सुरू असलेल्या विविध उपक्रमांचा आढावा

घेतला. विद्यापीठाच्या रेशीमशास्त्र विभागामार्फत मार्गदर्शन प्राप्त यळगुड (ता. हातकणंगले) येथील आप्पासो झुंजार, राजेंद्र बागल यांच्या रेशीम शेतीची पाहणी केली. 211 अधिकाऱ्यांनी कुलगुरू डॉ. डी. टी. शिर्के, कुलसचिव डॉ. विलास नांदवडेकर यांची भेट घेऊन चर्चा केली. यावेळी प्राणिशास्त्र अधिविभागप्रमुख डॉ. व्ही.एस. मन्ने, रेशीमशास्त्र सेंटरचे समन्वयक डॉ. ए. डी. जाधव उपस्थित होते.

## राज्यातील किंग कोब्राची पहिली नोंद तिलारीत शिवाजी विद्यापीठाच्या प्रा. एस. आर. यंकन्ची व ओमकार यादव यांचे संशोधन

#### कोल्हापूर : मोहसीन मुल्ला

तिलारीच्या जंगलात किंग क्रोबा या सापाची नोंद झाली आहे. किंग कोब्राच्या महाराष्ट्रातील जंगलातील आढळाची ही पहिली शास्त्रीय नोंद ठरली आहे. शिवाजी विद्यापीठाच्या प्राणीशास्त्र विभागातील सहायक प्राध्यापक एस. आर. यंकन्ची आणि संशोधक विद्यार्थी ओमकार यादव यांनी ही नोंद केली आहे. या संदर्भातील संशोधन पेपर 'हरपेटोलॉजी नोटस' या संशोधन पत्रिकेत ३ ऑक्टोबरला प्रसिद्ध झाला आहे.

सध्या तिलारीचे जंगल हे अभयारण्य म्हणून घोषित करावे यासाठी राज्याच्या वाईल्ड लाईफ बोर्डने मान्यता दिली आहे. या पार्श्वभमीवर किंग कोब्राची तिलारीतून झालेली नोंद ही या जंगलाची समृद्ध जैवविविधता अधोरेखित करणाती आहे. यादव म्हणाले, किंग कोब्रा हा जगातील सर्वाधिक लांबीचा विषारी साप आहे. अगदी ५.७३ मीटर इतक्या लांबीचे किंग कोब्रा आढळले आहेत. या सापाची ओळख, त्याचा आकार आणि डोक्यावत आढळणाऱ्या विशिष्ट प्रकारच्या खवल्यां करून होते. परिस्थितीनुरूप सापांचा रंग, खवल्या, लांबी आणि वजन यात वैविध्यही दिसून येते.

स्वसाधारणपणे रेन फारेस्ट प्रकारातील जंगल, खारफुटी आणि काहीवेळा शेतातही किंग कोब्रांचा अधिवास असतो. भारतात पश्चिम घाटात तामिळनाडू, केरळ, कर्नाटक, गोवा येथे



किंग कोब्राची अधिवास आहे. गोव्यात बोंडला अभयारण्यातून किंग कोब्राची नोंद झाली आहे; पण महाराष्ट्रातील जंगलातून किंग कोब्राची नोंद यापूर्वी झालेली नाही. मार्च २०१५ ला प्रा. यंकन्ची आणि यादव तिलारीच्या जंगलात उभयचर आणि सरपटणाऱ्य प्राण्यांचा अभ्यास करत असताना त्यांना एका परिसरात किंग कोब्रा दिसून आला. त्यांनी या किंग कोब्राची छायाचित्रे घेतली. तसेच इतर नोंदी घेतल्या. यादव म्हणाले, पश्चिम घाटातील जंगलात सरपटणारे प्राणी आणि उभयचर यांची फार मोठी विविधता आहे. किंग कोब्रा जातीचा साप अत्यंत विषारी समजला जातो. या सापाची नोंद तिलारीत होणे, ही नक्कीच अत्यंत समाधानाची बाब आहे. त्याच बरोबरीने तिलारीच्या जंगलाच्या संवर्धनाची गरज ही यातून अधोरेखित झालेली आहे. या संशोधनात संशोधक वरद गिरी आणि केदार भिडे यांचे मार्गदर्शन लाभल्याचे यादव यांनी सांगितले.





Save Animals Save Earth

Thank You!