

#### **DEPARTMENT OF BOTANY**



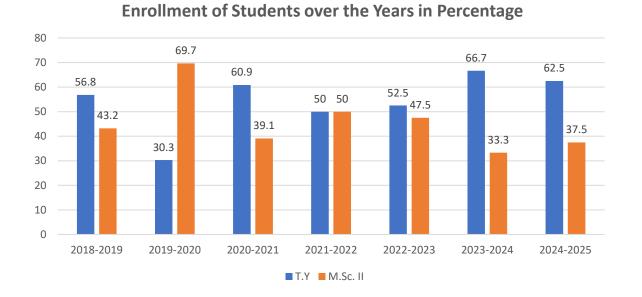


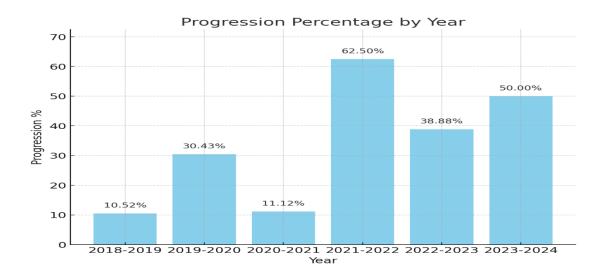
Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik-5 Maharashtra

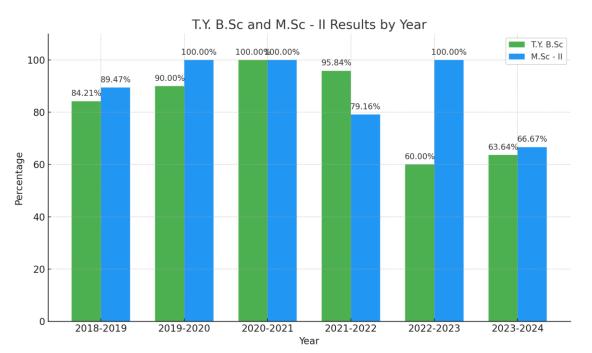
## **History and Faculty**

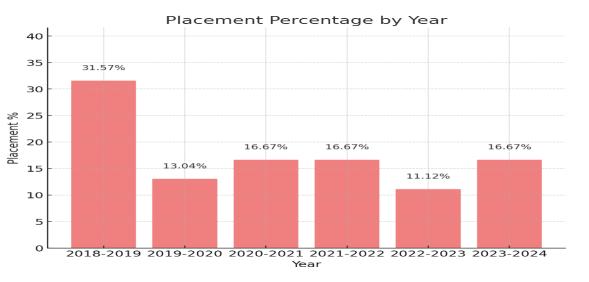
ESTABLISHMENT	FACULTY		Y	
Establishment – 1948	Sr. No	Name	Designation and Experience (years)	
<ul> <li>T. Y. B. Sc. Botany: June 1971</li> <li>1<sup>st</sup> in Nashik District who has started teaching of Botany at</li> </ul>	1	Prof. Dr. S. G. Auti	<b>Professor and HOD - 35</b>	
T. Y. B. Sc. level as a special subject.		Prof. Dr. H. A. Thakur	Professor-29	
<ul> <li>M.Sc. Botany: July 2007</li> <li>Recognized Research Center in Botany : June 2010 (SPPU)</li> </ul>	3	Dr. Mrs. U. G. Basarkar	Associate Professor -25	
	4	Dr. K.V.C. Gosavi	Assistant Professor -13	
	5	Mrs. Shilpa Jadhav	Assistant Professor -2	
		Non teaching Staff		
<b>Available Educational Program</b> Undergraduate Course (B.Sc.)		Shri. V.G. Sandhan	Lab Assistant	
<ul> <li>Post-graduate Course (M.Sc.)</li> <li>Ph.D. Program</li> <li>Implementation of NEP from the year 2024-2025</li> <li>Introduce courses for Arts and Science faculty</li> </ul>		Shri. R. V. Gulave	Lab Attendant	
		Shri. K.D. Bhosale	Lab Attendant	
Certificate course in Mushroom Cultivation		Smt. H.G. Gadhakh	Peon	

#### **Strength-Results-Placements**



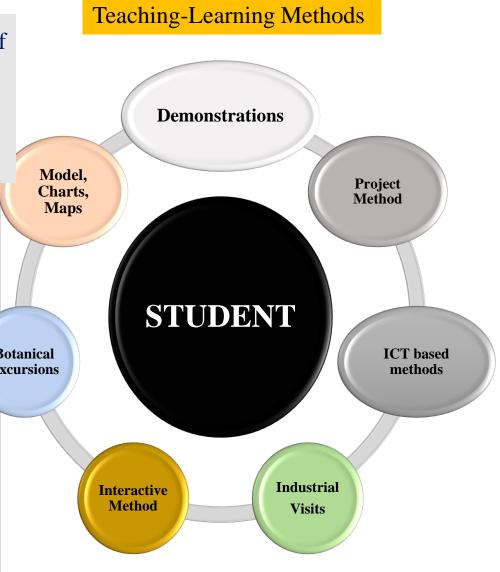


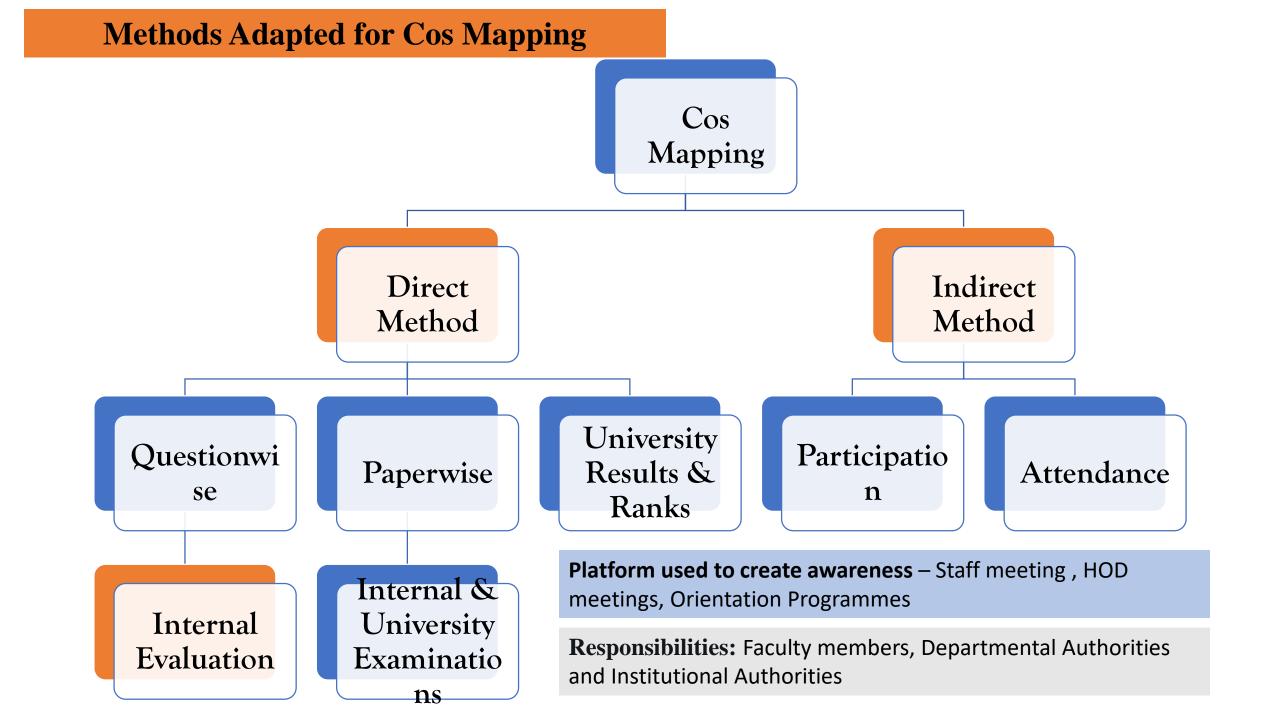




#### Infrastructure

□ laboratories 3, classrooms 2 ,Research laboratory, ICT facilities ,Staff				
Room – Total Area – 2044 sq.feet				
□Well develop and maintained Bota	anical Garden -120 Plant species –			
Area 14541 Sq.feet				
Department Working	Continuous Internal Assessment			
□ As per BOS, Savitribai Phule	□ Internal test,			
Pune University, Pune	□ Field visit,			
College Academic Calendar	Home Assignments,			
(IQAC)	Dissertations,			
Teaching plan	□ Journal writing ,			
Head of Department				
	□ Short presentations			
Students Support Facilities	University theory and Practical			
• Sectional Library –	examination			
<ul><li>Internet Facility</li><li>Drinking water facility</li></ul>	Assessment of on job training			
<ul> <li>Earn and learn Scheme</li> </ul>	courses and Dissertations			





## **1.3.1 Cross cutting issues transacted in the syllabus 22-23**

Programme Name	Level	Issues addressed
Bo-111 Plant life and Utilization	F.Y.B.Sc.	Biodiversity and sustainable ecosystem
BO-231Taxonomy of Angiosperms	S.Y.B.Sc.	Flowering plant diversity and maintenance of ecosystem
BO-242Plant Biotechnology	S.Y.B.Sc.	Pollution and measures to minimise it
BO-354 Plant Ecology	T.Y.B.SC.	Diversity of Ecosystems and its Managements
BO-3511 Plant diversity and Human Health	T.Y.B.SC.	Relation between Plants and Human and its sustainable development
BO-3510 Medicinal Plants	T.Y.B.SC.	Human heath
BOT-505 MJ Green Belt and Green Credit	M.SC.	Global warming, carbon footprints and conservation of plant species / forest
BOT-512 MJ Biodiversity Conservation and Utilization	M.SC.	Biodiversity and sustainable ecosystem
BOT-552 MJ Taxonomy of Angiosperms	M.SC.	Biodiversity and sustainable ecosystem

## **Experiential learning:** Students learn through hands-on experiences and reflection

Event	Experiential learning
Hands on Training in Angiosperm Taxonomy and Preparation of Herbarium	Help students to understand core concepts in easy way and to develop skill
Field visits in Botany	Helps to understand different ecosystems and vegetation type
Industrial visits	Provide exposure to functioning and working of Industries
<b>Demonstrations of Healthy recipes of Millets and Mushrooms</b>	Provide nutritional importance of millets for Health
Botanica (Green Festival)	Helps to develop logical potential and soft skills through poster making, scientific sketching , floral design

#### **Students Achivements**

• Post-Graduate Level –

#### **Students awarded University gold**

#### medal: 06

Pooja Daiya (2009), Tahsin Kazi (2011), Alka Rai (2012), Pratima Yadav (2013), Afra Akabani (2014) and Ashwini Shimpi (2017)

## • University Rank Holders: 07

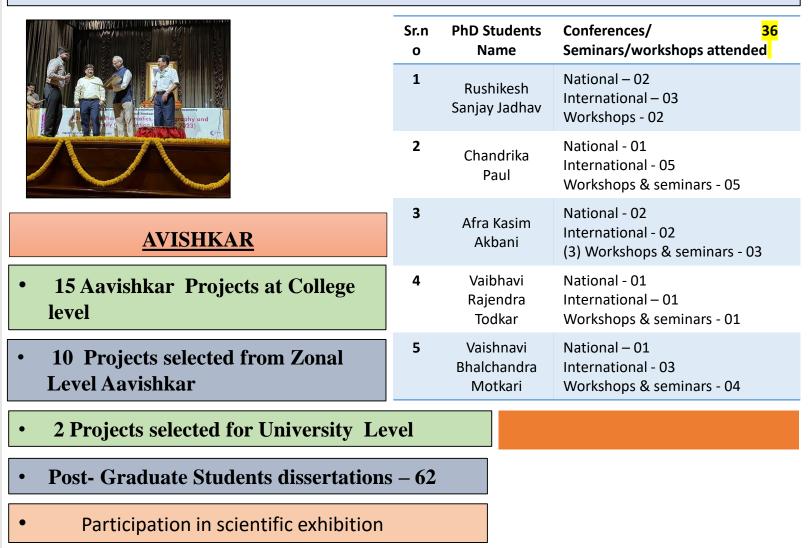
Jyoti Kamat (5<sup>th</sup>), Kirti Deshmukh (5<sup>th</sup>), Rahul Shejwal (6<sup>th</sup>), Pranjali Devda (5<sup>th</sup>), Sakshi Arora (2<sup>nd</sup>), Diksha Agarwal -3<sup>rd</sup>

• Graduate Level- 07

Drushtant Buch-5<sup>th</sup> (2012), Kalyani Gunjal –  $10^{th}$  (2012), Kajal Jaju 7<sup>th</sup> (2015), Riya Gulchait - 9<sup>th</sup> (2017), Nikita Kambale -5<sup>th</sup> (2019), Nikita Patil -5<sup>th</sup> (2022) and Joshi 5<sup>th</sup> (2022)

#### Award to Research Student by Indian Association for Angiosperm Taxonomy, Calicut, Kerala

## **Prof. R. S. Rao Award**



Participation in Botanica – Green Festival

Res	ear	ch .	Ac	tiv	ity
					•

- ▶ Recognized Research guide (SPPU) for M.Phil and Ph.D. : 03
- > Ph.D. Award students -07
- > Ph.D. Perusing students -06
- ≻Major Research Projects (SERB- CRG) Amount of Rs. 2898764/
- ≻Travel Grants (UGC) Amount Rs. 24741/
- >Paper presented at Seminar/conference -34
- > Patents 04
- ➢ Books 04
- ➢ Delivered Talk / Resource Person − 55
- $\succ$  Organized Workshops on Millets 13

<b>Publications – 56 +17 =73</b>				
Year	UGC care listed Journal	Peer reviewed journal	Total	
2018-19	10	0	10	
2019-20	9	0	9	
2020-21	9	1	10	
2021-22	15	1	16	
2022-23	10	1	11	
2023-24	07	-	7	
2024-25	10	-	10	

#### **Involvement of staff members at University work:**

Member on BOS of SPPU (2021-2024) and Academic Council of Autonomous College (2024-208)

- Participation in Syllabus framing
- > Co-ordinator: Avishkar, Innovation etc.
- CEO of College (2018- till date) and ARC (2018 to till date) Chairman of Assessment Program and Practical examination
- Selection committee member of SPPU



#### Awareness through Documentary film:

Anjaneri- the hidden treasure (29 Min.)

 YouTube Link https://youtu.be/ccS4jUA4y34?si=bPfC6v2ONgiz8jw



# Mobilise people to create awareness towards Biodiversity

Live



#### Outcome-

- Helps to conserve floral diversity of Plateaus
- Inculcate importance of diversity among students and people and involvement in Conservation

Five are going to in this season

## **Discovery of New Plant Species and Genus**

## **New Species**

- 1. Eriocaulon rayatianum Chandore, Borude & S.R. Yadav (2019)
- 2. Pinda shrirangii Gosavi & Chandore (2020)
- 3. Lepidagathis sabui Chandore, Borude, Madhav & S.R.Yadav (2020)
- 4. Vicoa gokhalei Gosavi, Madhav, Chandore & S.R. Yadav (2020)
- Dipcadi janae-shrirangii Chandore, Borude, Bhalekar, Madhav & Gosavi (2021)
- 6. Crotalaria gajureliana Gholave, Madhav & Gosavi (2021)
- 7. *Momordica janarthanamii* Gosavi, Gholave, Madhav & Kambale (2022)
- 8. Eriocaulon shrirangii Chandore, Borude, Bhalekar, Madhav & Gosavi (2023)
- 9. Tripogon salunkhei Gosavi, Madhav & Chandore (May 2024)
- 10. Shrirangia concanensis Gosavi, Madhav & Chandore (2022)

## New Genus:

1. *Shrirangia* Gosavi, Madhav & Chandore (Apiaceae)



Species Honours "Gokhale Education Society" Nashik, One of the oldest and well known education Institute of Maharashtra

#### **Research on Millets**

Morphological and nutritional characterization of Finger millet landraces from Maharashtra (120)

Morphological and nutritional characterization of Little millet landraces from Nashik and Palghar district

**Antioxidant and Phenolic studies** 

Screen nutrient rich landraces

**Develop and analyse nutritious recipes of Finger millet** 

Formulation of Finger millet products

**Extension activities** 

Awareness through Nashik Akashwani – 13 September 2023

Deliver Talk (55) and workshops (13) for the students

Publications on Millets -06

Workshops for the farmers (5)

#### Outcome

Established Startup by the name Dr. Ragi - CEO – Dr. Tahsin Kazi , Ph.D. Student

Promote farmers for the cultivation of Millets to enhance the area under cultivation of finger and little millets

Helps in the conservation of Millet landraces or local traditional varieties from North Maharashtra

Supported "Millet mission" of United Nation and Government of India



## **Millet conservation and promotion**



#### July 13, 2024 Savitribai Phule Pune University, Pune



Farmers WorkshopMay 21,2022 Finger millet conservation, Place: Aamlon

**Millet Exhibition** 

## Established Startup by the Name: Dr. Ragi CEO – Dr. Tahsin Kazi , Ph.D. Student



**Formulation of nutritional Product** 

## **Prestigious Awards**

#### Awards to Faculty:

Dest Teacher Award-2022 by Savitribai Phule Pune University, Pune, Maharashtra, India

□ Kirloskar's Vasundhara Mitra Puraskar – 2021, Pune, Maharashtra, India

Derof. M. Sabu Award-2022 by Indian Association for Angiosperm Taxonomy, University of Calicut, Kerala, India

- □ Prof. M.K. Mathur, Life Time Achievement Award -2023 by Global AgroBiotech and Pharma Research Foundation, Ahmedabad, Gujarat, India
- □ Vasundhara Mitra Nisargrakshak Purashkar 2024 . Mumbai Tarun Bharat (Maha MTB). (28.12.2024)
- □ Teacher Entrepreneur Award -2025 by Gokhale Education Society, Nashik, Maharashtra, India



## **MoU and Linkages**

Sr.no	moU and Linkages	Activities conducted under moU and Linkages
1.	Krishidoot Herbal Biotech Pvt. Ltd. Ozar,Nashik	Summer training to M.Sc. Students and laboratory facility for Ph.D. students 2019,2021,2022,2023
2.	Arts, Commerce and Science College, Karanjali , Nashik – College from Tribal region of Nashik.	workshops on Millet cultivation, Conservation and Promotion – year 2022, 2023
3.	Arts, Commerce and Science College, Mokhada Nashik – College from Tribal region of Palghar District.	lectures and workshops on Millet cultivation, Conservation and Promotion – Year 2022,2023

#### Outcome:

- Our students get opportunity to work with industry people and handling of few advance instruments
- Get opportunity to connect with triable students of Mokhada and Karanjali College to understand their traditions and traditional crops such as millets
- Collaboration in research 09 International Publications

## Books

 Bhartiy Dvipakalpatil Jasvandichi Olakh (Regional language: Marathi).
 Publisher: Blue Ink Publishing House ISBN: 978-81-956739-6-4 (July 2022)

**3. Sedges (Cyperaceae) of Maharashtra** (**An Annotated Checklist). Publisher:** Book Saga Publication. **ISBN:** 978-81-974128-8-2 (2024)

2. "Enumeration of Plant Diversity: At Abasaheb Marathe College campus, Rajapur

Publisher: Book Saga Publications ISBN: 978-93-95470-88-9 (March 2024)

4. Flora of India

and

Millet magazine



**Best Activities of the Department** 

1. Botanica – Platform for holistic development – Best practice – since 2010

2. Biodiversity , awareness movement and Tree plantation – Best Practice –Since 2016

3. Plant of the day activity – Since 2018

**Other Activities** 

Botanical excursions

Academic Workshop and Hands on Training

Aavishkar – Research project competition Career

Rotract – Activities in Collaboration with River Rotary Club, Nashik

Career Counselling

## **Botanica – Green Festival Since 2008 Platform for Holistic Development**



#### **Workshops and Training**



#### Protein Estimation Workshop (22-04-2022)



Field Training – Ratangad (Samrad)



**Plant of the Day** 



National workshop: Two days national workshop entitled "Fundamental tools in plant systematics" (March 3,2023)

## **Career Counselling**



Dr. Warkhede, February 26,2021



Dr. Umesh Kakade February 2, 2021





**Dr. Savita Borse, August 12, 2022** 21

Nilima Jorwar,, March 11.2022

## **Botanical Excursion**



Vegetation study of Old Jawhar Valley



Deorai visit, Kakatwadi,Palghar Dist March 18,2023



Deorai visit, Kakatwadi,Palghar Dist Date\_ November 11,2022



Ratanwadi, January 22, 2020



Sandhan Valley, December 22, 2021

## **Mushroom cultivation – Employment opportunities (2019,2023)**



**Mushroom Recipies** 

#### **Demonstration of Horticultural Practices**

#### Activities







#### Parent and Alumni Meet

#### Awareness campaign of campus flora



**Restoration of Endemic Plant species** 

**Tree plantation program – 2029 and 2022** 

#### **Goal Ahead**

### 1. Enrichment of Botanical Garden

2. Certificate courses on mushroom cultivation, nursery management, Plant tissue culture and Millets

- 3. Establishment of Herbarium
- 4. Upgradation/procurement of advanced instruments
- 5. Establishment of seed bank
- 6. Counseling cell
- 7. Linkages with industries and Institutes





Thank You

