Curriculum Vitae

Ashutosh Sawarkar, PhD.

Assistant Professor, Genetics and Plant Breeding School of Agriculture and Rural Development, Faculty Centre for IRDM. Ramkrishna Mission Vivekananda Educational and Research Institute, Narendrapur Campus

Research Interest

Heterosis Breeding, Stress Breeding, Maize Breeding and Mungbean Breeding

Edı	Education					
1.	2016	-	PhD. in Plant Breeding from Bidhan Chandra Krishi Viswavidyalaya, West Bengal. Theses title "Studies on Inheritance for Tolerance to Moisture Stress in Tossa Jute (<i>Corchorus olitorius</i> L)"			
2.	2012	-	M.Sc. (Ag.) in Plant Breeding from Bidhan Chandra Krishi Viswavidyalaya, West Bengal. Theses title "Morphological Characterization of Some Early Lines of Basmati Derivative"			
3.	2009	-	B.Sc. (Ag) from College of Agriculture, Nagpur, sub campus of Dr. P.D.K.V., Akola, Maharashtra.			
4.	2005	-	(10+2) – HSC			
5.	2003	-	10-SSC			

Professional Teaching Experience

1. 31 May, 2017 – 28 June, 2018 –	Assistant Professor, Department of Agricultural Botany, College of Agriculture, Udgir, affiliated with VNMKV, Parbhani, Maharashtra.
2. 10 October,2015- 4 November,2016	 Assistant Professor, Department of Agricultural Botany, SSWP College of Agriculture, Kesalwada/Wagh, affiliated with VNMKV, Parbhani, Maharashtra.

Research (Field) Experience

1.7 October,2016 – 31 March, 2017- Senior Research Fellow at Agricultural Research Station, Badnapur, affiliated with VNMKV, Parbhani, Maharashtra.

Awards and Achievements

- 1. 2011 Recipient of University Research Scholarship (URS) for PhD programme, BCKV, Mohanpur, West Bengal.
- **2. 2013 -** Qualified National Eligibility Test in Genetics and Plant Breeding, conducted by Agricultural Scientist Recruitment Board (ASRB), ICAR.
- **3. 2018 'Best Young Researcher National Award'** Innovative Research Developers and Publishers (IRDP) group of journals, Chennai, India.

Professional Training Received

1. 18 December - 22 December,2015	 Participated and successfully completed Workshop on "Molecular Biotechnology and Bioinformatics" organized by International Centre for Stem Cells, Cancer and Biotechnology (ICSCCB), Pune, India.
2. 4 October – 13 October, 2017	- Participated and successfully completed short training course on "'Advance Techniques and Tools for Functional Genomics in Crops" organized by Sher-e-Kashmir University of Agricultural Sciences and Technology, (SKUAST), Jammu, India.
3. 7 July -20 July, 2021 -	Participated and successfully completed workshop on "Application of Molecular and Bioinformatics Tools in Agriculture and Allied Sciences" organized by Sardar Vallabhbhai Patel, University of Agriculture & Technology, Meerut-250 110
4. 5 January – 9 February, 2022	 Participated and successfully completed "7th Faculty Induction Programme" organized by North Bengal University, Darjeeling, WB
5. 18 September – 25 September	, 2023 – Participated and successfully completed short training course on MOOCS, e-Content Development & ICT enabled System organized by North Bengal University, Darjeeling, WB.

Professional Memberships

1. 2012 -	Association of Plant Breeding Improvement, Kolkata, WB.
2. 2016-	Euro Asia Research and Development Association.
3. 2020 -	Indian Society of Plant Breeders, Coimbtore, TN.
4. 2020 -	Indian society of Genetics and Plant Breeding, New Delhi.

Act as **Paper Setter** for the UG Courses like Fundamental of Plant Breeding and Fundamentals of Genetics for Palli Siksha Bhavana, , Institute of Agriculture, Viswa Bharati University, Shantiniketan, WB and Odisha University of Agriculture And Technology, Bhubaneshwar, Odisha.

Subject Taught									
3.Sc. (Ag.) - Environmental Science, Principles of Genetics, Fundamental of Crop Physiology.									
M.Sc. (Ag.) in Genetics and Plant	Breeding - Principles of Genetics, Principles of Plant Breeding, Principles of Cytogenetics, Breeding for Stress resistance and climate change, Crop Breeding (Kharif)-I and Rabi-I, Mutagenesis and Mutation Breeding, Plant Tissue Culture, Hybrid Breeding.								
PhD. Genetics and	Plant Breeding - Advances in Plant Breeding System, IPR and Regulatory Mechanism, Synthetic and System Biology in Plant Science								
Invited Talk									
1. 13.01.2023 -	Invited speaker in the IDP-NAHEP Sponsored Skill Development Training on Conservation Agriculture Organized by College of Agriculture, Chiplima, Odisha University of Agriculture & Technology, Odisha-768026.								

Research Guidance

Degree	Completed	In-progress
Ph.D.	-	3
M.Sc.(Ag.) in Genetics and Plant breeding	13	-
M.Sc. in Agricultural Biotechnology	1	-

Special Activities/Extra- Curricular Activities

- 1. Served as the Course Coordinator for the M.Sc. (Ag.) program in Genetics and Plant Breeding.
- 2. Contributed as a member of the Board of Studies (BoS) for the Genetics and Plant Breeding Department at RKMVERI, actively participating in curriculum development and enhancement.
- **3.** Played a pivotal role as a member of the Examination Committee responsible for overseeing examination processes for both M.Sc. and Ph.D. courses in Genetics and Plant Breeding at RKMVERI.
- 4. Actively participated as an organizing member in the administration of M.Sc. and Ph.D. entrance examinations at the university level, facilitating the admission process.
- **5.** Contributed significantly to the formulation of M.Sc. and Ph.D. syllabi for the Genetics and Plant Breeding Department, ensuring alignment with UGC guidelines and National Education Policy (NEP) directives.
- 6. Coordinated and led educational field trips to various state and central agricultural research institutes

1. Act as co-incharge of voluntary centre of 'All India Coordinated Research Project on Maize' of ICAR-IIMR

Software Proficiency

SPSS, Past 3, Minitab, XLSTAT, GenRes, MSTAT, R, NTSYSpc

Participation in Seminar/Symposium/Conference

- 1. Participation and Oral Presentation in the National Symposium of entitled "Polygenic Variations and Cause Effect Relationship in Some Recombinant Inbred Lines of Photo-Insensitive Basmati Derivative" on "Safe Food For All" organised by Department of ASEPAN, Pali Siksha Bhavan, Viswa-Bharti, Sriniketan, West Bengal during 21-23 February, 2012.
- 2. Participation and Poster presentation of entitled "Studies On Yield and Yield Attributing Characters in Some Recombinant Inbred Lines of Photo-insensitive Basmati Derivative" in the International Symposium on "Food Security Dilemma: Plant Health and Climate Change Issues" organised by Association For Advancement in Plant Protection at BCKV. West Bengal during 7-9 December, 2012.
- **3.** Participation and Oral Presentation of entitled "Genetic Divergence Within Some Genotypes of Tossa Jute" at the 5th Indian Youth Science Congress organised by Viswa-Bharti, West Bengal during 6-9 December 2013.
- Participation and Oral presentation of entitled "Stability Performance of Tossa Jute Under Waterlogged Condition" in the National Conference On Biodiversity and Ecological Sustainability Organised by S.C.S.(J) College, Puri, Odisha and Academy of Plant Sciences India, Muzzaffarnagar(U.P.) during 15th-16th February, 2014.
- 5. Participation and Oral presentation of entitled "Stability Study For Fibre Yield And Its Attributing Traits Of Tossa Jute Under Water Logged Condition" in the National Seminar on Breeding for Abiotic Stresses: Problems and Prospects organised by Ranchi Chapter of the Indian Society of Genetics and Plant Breeding, New Delhi at Birsa Agricultural University, Ranchi (Jharkhand) during 23rd -24th February, 2014.
- 6. Participation and Oral presentation of entitled "Identification of diverse genotypes in white jute (*Corchorus Capsularis* L.) on the basis of some important morphological characters" in the International Conference on Natural Fibres held at the Oberoi Grand, Kolkata (India), West Bengal, during 1^s-3rd August, 2014.

Publications

Research Articles

2023

1. Sawarkar, A., Pradhan, A., Raman, R.B., Yumnam, S., Dutta, S. and Mukherjee, S. Identification of best combiners and heterotic crosses for seedling characters in jute (*Corchorus olitorius* L.) under normal and drought conditions. (2023). *Electronic Journal of Plant Breeding*, 14(2).

2. Sawarkar, A., Yumnam, S., and Mukherjee, S. (2023). Combining ability and heterosis for fibre yield, fibre quality and yield attributing traits in tossa jute (*Corchorus olitorius* L.) under normal and drought conditions. *Journal of Crop and Weed*, 19(1), 173–185. <u>https://doi.org/10.22271/09746315.2023.v19.i1.1676</u>

2022

3. Sawarkar, A., Pradhan, A., Yumnam, S., Raman, R.B., Ghosh, S.C., and Mukherjee, S.(2022). Principal component analysis, euclidean clustering of tossa jute (*Corchorus olitorius* L.) Genotypes for the drought stress tolerance, *International Journal of Agricultural sciences*, 14(12). 12126-12133

2021

 Pradhan, A., Choudhury, M. R., Sawarkar, A., & Das, S. (2021). Genetic Analysis of Some Genotypes of Indian Mustard (Brassica juncea L.) for Yield and Yield Attributing Traits. *Current Journal of Applied Science and Technology*, 51–60. <u>https://doi.org/10.9734/cjast/2021/v40i3531573</u>

2017

5. Yumnam, S., Sawarkar, A., and Mukherjee, S. (2017). Response to water stress on some seedling characters of tossa jute (*Corchorus olitorius* L.), *Journal of Crop and Weed*, 13(3):135-143.

2016

- Yumnam, S., Sawarkar, A., Mukherjee, S., & Sarkar, K. K. (2016). Assessment of genetic diversity in Jute (Corchorus olitorius L.) under rain fed condition. *Electronic Journal of Plant Breeding*, 7(2), 454. <u>https://doi.org/10.5958/0975-928x.2016.00058.2</u>
- 7. Sawarkar, A., Yumnam, S., Mukherjee, S. and Sarkar, K.K. (2016). Effect soil moisture stress against irrigated condition on tossa jute, *Vegetos*, 29(4).
- 8. Sawarkar, A., Yumnam, S., Mukherjee, S., & Sarkar, K. (2016). Screening for moisture stress tolerant genotypes in *C. olitorius* L. on the basis of seedling characters. *Indian Journal of Plant Genetic Resources*, 29(2), 170. <u>https://doi.org/10.5958/0976-1926.2016.00024.3</u>

2015

- 9. Yumnam, S., Sawarkar, A., Mukherjee, S., & Sarkar, K. K. (2015). Stability performance of tossa jute (*Corchorus olitorius* L.) under waterlogged condition. *The Bioscan*, 10(3): 977-980.
- **10.** Yumnam, S., **Sawarkar, A.**, Mukherjee, S., and Sarkar, K.K. (2015). Assessment of genetic variability, interrelationship and direct and indirect effect of seedling characters on fibre yield of jute under rainfed and irrigated condition. *Journal of Crop and Weed*, 11(2): 78-85.
- **11. Sawarkar, A.,** Yumnam, S., Patil, S.G., and Mukherjee, S. (2015). Genetic divergence of tossa jute (*Corchorus olitorius* L.) for fibre yield and its related component characters under moisture stress condition. Indian Journal Plant Genetic Resources, 8(2): 263-266.
- **12.** Sawarkar, A., Yumnam, S., Patil, S.G., and Mukherjee, S.(2015). Evaluation of quantitative traits of tossa jute (*Corchorus olitorius* L.) based on principal component analysis. *Electron Journal of Plant Breeding*, 6(1): 307-311.

 Sawarkar, A., & Senapati, B. K. (2014). Polygenic variations and cause effect relationship in some photoinsensitive recombinant inbred lines (RILs) of Basmati derivative. African Journal of Biotechnology, 13(1), 112–118. <u>https://doi.org/10.5897/ajb2013.13050</u>

2014

- 14. Yumnam, S., Sawarkar, A., Patil, S.G., and Senapati, B.K. (2014). Multivariate analysis of recombinant inbred lines (F6) of Basmati derivative. *The Ecoscan*, 8(1&2):1-5.
- **15.** Yumnam, S., **Sawarkar, A.**, Patil, S.G., and Senapati, B.K. (2014). Genetic divergence studies on white jute under rainfed condition. *Environment and Ecology*, 33(3A):1327-1329.
- **16.** Sawarkar, A., Yumnam, S., Mukherjee, S. and Patil, S.G. (2014). Genetic divergence within some genotypes of Tossa jute (*Corchorus olitorius* L,). *Environment and Ecology*, 33(2): 749-752.
- **17. Sawarkar, A.,** Yumnam, Patil, S.G. and Mukherjee, S. (2014). Correlation and path coefficient analysis of yield and its attributing traits in tossa jute (*Corchorus olitorius* L.). *The Bioscan*, 9(2): 883-887.
- **18. Sawarkar, A.** and Senapati, B.K. (2014). Agro-Morphological characterization of some short duration basmati derivative. *Environment and Ecology*, 33(IA): 214-218.

Review Articles

2023

- Dutta, H., Bhattacharya, S., Sawarkar, A., Pradhan, A., Raman, R. B., Panigrahi, K. K., Banerjee, K., & Dutta, S. (2023, March 1). High yielding mulberry production through controlled pollination for enhanced vegetative growth and early sprouting suitable for tropical agroclimatic regions. *The Pharma Innovation*, 12(3), 4485–4492. https://doi.org/10.22271/tpi.2023.v12.i3aw.19445
- 20. Dutta, H., Sawarkar, A., Dutta, S., Pradhan, A., Yumnam, S., Paul, D., Mondal, B. P., & Panigrahi, K. K. (2023). Genomic approaches to ensure a more sustainable and productive future of mulberry for sericulture industry. *Pharma Innovation*, 12(9), 2001–2011. <u>https://doi.org/10.22271/tpi.2023.v12.i9v.22980</u>

Book Chapters

- Guru, R. K. S., Ganpatrao, A. S., Madhao, A. P., Pradhan, R., Mohanty, A., Panigrahi, K. K., Tarai, R. K., & Khatoon, B. (2023). Biosafety and biosecurity concerns associated with plant genome editing. In Routledge eBooks (pp. 236–274). <u>https://doi.org/10.4324/9781003382102-10</u>
- **2.** Dutta, S., Mukherjee, B., and Sawarkar, A. (2023). Enhanced agricultural productivity using hydroponics: A Smart farming tool. In Irrigation New Perspectives. (Accepted)

Popular Articles

1. Sawarkar, A. and Yumnam, S. (2015). Black rice - the 'Forbidden Rice', Popular Kheti, 3(3): 5-7.

- 2. Sawarkar, A. and Yumnam, S. (2015). Breeding for earliness in rice, Popular Kheti, 3(4): 142-146.
- 3. Sawarkar, A. and Yumnam, S. (2016). Protection of Plant Varieties (PPV) and Farmers Right Act (FRA), 2001., *Agrobios*, 15(1): 77-79.
- 4. Sawarkar, A. and Yumnam, S. (2016). Nanotechnology for Indian agriculture., Agrobios, 15(3): 26-28.
- 5. Sawarkar, A. and Yumnam, S. (2017). In vitro production of haploid through pollen culture, *Agrobios*, 15(94-96): 26-28.
- 6. **Sawarkar, A.** Pradhan, A. and Bhosle, S. (2017). Shetkatyanch Mitra: Gandhul ani Gandul Khatavishayi, *Krushkonnatti*, Dt.21-27 Nov,2017.
- 7. Bhosle, S. Pradhan, A. and **Sawarkar, A.** (2017). Rabi Hangamatil Bahupupyogi Peek : Kardai *Krushkonnatti*, Dt.28-04 Dec,2017.
- 8. Sawarkar, A. (2018). Naisargik Sheti : Kalachi Garaj, KrishiPanan, January, 2018.
- 9. Sawarkar, A. and Pradhan A. (2023). Tulsi: A Mother of Medicine, Agrobios, 21(12): 30-33.
- 10. Sawarkar, A. and Pradhan A. (2023). Internet of Things (IoT) in Agriculture and smart farming, *Agrobios*, 22(02): 31-33.
- 11. Sawarkar, A. (2023). Speed breeding: new approach to crop breeding, Agrobios, 21(07): 26-27.
- 12. Sawarkar, A., Dutta, S. and Raman, R. B.(2023). Role of women in Indian Agriculture, *GRAIN*, 2(03):(43-49).
- 13. Sawarkar, A., Panchabhai S. and Pusdekar, V.(2023). Challenges of smallholder farmers in India and possible solutions, *Agrobios*, 22(04): 10-12.
- 14. Pusdekar, V., Panchabhai S., and **Sawarkar, A**., (2023). Green manuring: an organic farming approach, *Agrobios*, 22(04): 07-09.
- 15. Panchabhai, S., Pusdekar, V., and **Sawarkar, A.**, (2023). Impact of climate change on Indian agriculture: an in-depth exploration, *Agrobios*, 22(04): 15-17.

Web Identities

- 1. Google scholar link https://scholar.google.com/citations?user=40W4OR0AAAAJ&hl=en
- 2. ORCiD: 0000-0002-1016-8822

Personal Information

- Name: Ashutosh Sawarkar
- Sex: Male
- Date and Place of Birth: 16/08/1987, Nawegaonbandh. Nagpur, Maharashtra
- Marital Status: Married
- Nationality: Indian
- Religion: Hindu
- Permanent Address: At Post Murmadi/Sa., Ta. Lakhani, Dt. Bhandara, Maharashtra-441804
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- Dr.. Paresh Chandra Kole
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- Dr. Subhra Mukherjee Professor and Associate Dean, College of Agriculture (Extended Campus of BCKV), Burdwan, Sadar Email: <u>subhrabckv@rediffmail.com</u> Mob. No. +919434168936
- Dr. Tapash Dasgupta Professor and Dean, Faculty Centre of IRDM, RKMVERI Email: <u>tapashdg@rediffmail.com</u> Mob. No. +919748699912

Declaration

I hereby declare that all the information above is complete and true to the best of my knowledge and belief.

-Asmitcel

Ashutosh Sawarkar

Date:

Place:

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