RESUME

NAME: Dr. Md. Nasim Ali

DESIGNATION: Associate Professor

CONTACTS:

1. OFFICIAL ADDRESS FOR CORRESPONDENCE:

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3.EMAIL : **Institutional:** <u>ali.md.nasim@bckv.edu.in</u>

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4.ORCID ID: orcid.org/0000-0003-4899-3892

5.GOOGLE SCHOLAR

PROFILE: https://scholar.google.com/citations?user=bIX79a8AAAJ&hl=en

6.RESEARCHGATE PROFILE: <u>https://www.researchgate.net/profile/Md_Nasim_Ali</u>
7.DATE OF BIRTH: 03rd August 1978
8.DATE OF JOINING TO THE UNIVERSITY: 03rd November 2015

9. ACADEMIC PROFILE:

LEVEL	NAME OF THE DEGREE WITH DISCIPLINE/ DEPARTMENT	INSTITUTE	YEAR OF PASSING
DOCTORAL	Ph. D. (Ag.) in Genetics	BCKV	2007
MASTER'S	M. Sc. (Ag.) in Genetics	BCKV	2003
BACHELOR'S	B. Sc. (Ag.) Hons.	BCKV	2001

10. EMPLOYMENT HISTORY:

POSITION	ORGANIZATION	PERIOD		
		From (Date) To (Date)		
Associate Professor	BCKV, Nadia	03 rd November 2015	Till date	
Assistant Professor	RKMVERI, Belur (erstwhile RKMVU)	12 th May 2007	2 nd November 2015	
Junior Scientist	WBSCST (DST, WB)	26 th December 2006	11 th May 2007	

11. ADMINISTRATIVE POST(S)/ RESPONSIBILIY(IES)

SL.	NAME OF THE POST(S)/	PERIOD		
NO.	RESPONSIBILITY(IES)	From (Date)	To (Date)	
1.	Course Coordinator, DBT sponsored M.	14 th February 2017	31 st March 2020	
	Sc. teaching Programme in Agricultural			
	Biotechnology at BCKV.			
2.	Head of the Department, Department of	17 th February 2021	Continuing	
	Agricultural Biotechnology			
3.	Member, BCKV Accreditation	30 th November 2021	-	
	Committee			
4.	Member, Annual Report Committee	30 th November 2021	Continuing	



5.	Member, ICAR-Nodal Cell, BCKV	9 th December 2022	Continuing
6.		21 st December 2022	Continuing
	of The Module Plant Biotechnology		
7.	Member of Website Committee, BCKV	31 st May 2023	Continuing
8.	Secretary, Faculty Council, Faculty of	1 st June 2023	30 th November 2023
	Agriculture, BCKV	1 st December 2023	Continuing

12. AREA OF RESEARCH :

- Utilization of molecular markers in Crop Improvement
- Enhancing Plant Secondary Metabolites through tissue culture
- Crop Improvement against biotic and abiotic stress
- Mutagenesis for Crop Improvement
- DNA Barcoding for Species identification
- Metagenomics and stress tolerance in Bacterial

13. COURSES ASSOCIATED WITH:

LEVEL	COURSE NO.	COURSE TITLE	CREDIT
UNDERGRADUATE	ABT-304	Principles and Practices of Agricultural Biotechnology	1+1
	EC-366	Micropropagation Technologies	1+2
POST GRADUATE	MBB-501	Principles of Biotechnology	3+0
	MBB-504	Techniques in Molecular	0+3
		Biology	
	MBB-508	Introduction o Bioinformatics	2+1
	MBB-591	M. Sc. Seminar	0+1
Ph.D.	MBB-601	Plant Molecular Biology	3+0
	MBB-608	Computational and Statistical	2+1
		tools in Biotechnology	
	MBB-691	Ph. D. Seminar I	0+1

14. NUMBER OF STUDENTS SUPERVISED:

Master's. 10 **Doctoral:** 07

15. RESOURCE PERSON FOR OTHER INSTITUTES

- Expert-Member of SATNET, UNESCAP under United Nations.
- Expert-member of ASRB-ICAR, New Delhi
- o Expert-member of University of Science & Technology, Meghalaya.
- Member of Board of Studies, Dept of Agricultural Biotechnology, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur
- Expert-member of B. R. Ahmedkar Institute for Panchayats and Rural Development, GoWB, Kalyani, Nadia
- Expert-member of ATC & SAMETI, Narendrapur.
- Expert-member of Nadia KVK, Gayeshpur, Nadia, BCKV.

16. LIFE MEMBERSHIP OF ACADEMIC SOCIETIES

- The Indian Science Congress Association (ISCA)
- Association for Plant Breeding and Improvement (APBI)
- The Indian Natural Fibre Society (TINFS)
- The Crop and Weed Science Society (CWSS)
- Society for Application of Statistics in Agriculture and Allied Sciences (SASAA)
- Indian Society of Genetics and Plant Breeding (ISGPB)

17. PROJECT ACTIVITIES

SL. NO.	TITLE OF THE PROJECT	FUNDING AGENCY	ONGOING/ COMPLETED	PI/ Co-PI
1	Sustainable Agriculture with Low cost Technology (Phase- I-III)	AGENCIRural TechnologyActionGroup-EasternIndia(RuTAG-EI), IIT,Kharagpur	Completed	PI
2	Efficacy of microbial pesticides and natural enemy to control pest in the farmers' field	Department of Science & Technology, Govt. of West Bengal	Completed	PI
3	Study on Bamboo <i>in vivo</i> and <i>In vitro</i> growing in South Bengal through Morphological and Molecular Approaches	withWest Bengal State Council of Science and Technology (WBSCST), under DST, WB	Completed	PI
4	Improved Quality of Rural Life through Scientific Management of Natural Resources	DepartmentofScienceandTechnology,GovernmentIndiaof	Completed	Co-PI
5	Anti tumor efficacy of Black Tea Polyphenols"	National Tea Research Foundation	Completed	Co-PI
6	In search of potential tumor marker	Department of Science and Technology, Govt. of West Bengal	Completed	Co-PI
7	Applied mutagenesis to develop mutants possessing spine-less and YVMV resistant characters in Okra	DepartmentofAtomicEnergy,BoardofResearchinNuclearScience(BRNS), Govt. ofIndia	Completed	Co-PI
	Induced Mutation for resistance to spot blotch of wheat caused by Bipolarissoriokiniana	Department of Atomic Energy, Board of Research in Nuclear Science (BRNS), Govt. of India	Completed	Co-PI

18. CAPACITY BUILDING/FACULTY DEVELOPMENTPROGRAMME(ATTENDED)

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1.	Training on "Conservation and evaluation of germplasm for higher yield and quality with special reference to jute and allied fibre"	13-17 th September, 2004	CRIJAF, Barrackpore	Participant
2.	Training on "Analysis of Biopesticides for quality control"	16-24 th October 2008	NPPTI, Hyderabad.	Participant
3.	Training on "Mass production of biocontrol agents"	17- 25 th November 2008	PDBC, Bangalore	Participant
4.	36 th Orientation Programme' organized by Academic Staff College, Jadavpur University	11 th July – 6 th August , 2011	Salt Lake Campus, Kolkata	Participant
5.	ICAR sponsored Winter School on 'Bioinformatics and its Emerging Dimensions in Agriculture'	12 th Janaury to 1 st February, 2015.	Kerala Agriculture University, Kerala	Participant
6.	ICAR sponsored Winter school training programme on "Development and Utilization of Genetic and Genomic resources through biotechnology for biotic, abiotic stress management and quality improvement in field crops"	01-21 st December 2016	UAS, Dharwad, Karnataka,	Participant
7.	Gene cloning and its expression to produce genetically modified organism	26 th June to 02 nd July 2021	Cytogene, Lucknow	Participant
8.	Two weeks capacity building programme organized by Department of Rural Development	31 st October 2022	University of Science & Technology Meghalaya	Resource person

19. SEMINAR/ SYMPOSIUM/ WORKSHOP etc

A. ORGANIZED

SL. NO.	NAME OF THE PROGRAMME			ROLE
1.	One day seminar on 'Food security	30 th October	RKMVU,	Organizing
	and G.M. Crops'	2013	Narendrapur	Secretary
2.	One day workshop to disseminate	22 nd February	Paruldah,	Organizing
	the knowledge and Experience of	2014	South 24	Secretary
	the DST (Govt. WB) -Funded		Parganas	
	project entitled as "Efficacy of			
	microbial pesticides and natural			
	enemy to control pest in the			
	farmers' field"			

3.	One day seminar on 'Food security	on 2 nd March	RKMVU,	Member of
5.	and Sustainable Agriculture'	2014	Narendrapur	Organizing
		-011	- (committee
4.	Two days Annual Conference of	21-22 nd March	RKMVU.	Treasurer of
	Bengal Economic Association	2015	Narendrapur	Organizing
	6		1	committee
5.	Two days Workshop on BARC	26-27 th March	RKMVU,	Programme
	Initiative programme on "Rural	2015	Narendrapur	Coordinator
	Technologies for Entrepreneurship		1	
	Development			
6.	National Seminar on "Resource	15-16 th	RKMVU,	Member of
	based inclusive Agriculture and	January 2016	Narendrapur	organizing
	Rural Development: Opportunities			committee
	and challenges"			
7.	International Symposium on "Eco –	20-23 rd	FACC,	Member of
	Efficiency in Agriculture & Allied	January, 2017	BCKV,	organizing
	Research (EEAAR 17)"		Kalyani	committee
8.	State level capacity building	3 rd April,	FACC,	Organizing
	workshop on GM Crops and	2018	BCKV,	secretary
	Biosafety		Kalyani	
9.	International Seminar on	28 th November	FACC,	Member of
	"Agriskills for convergence in	to 1 st	BCKV,	organizing
	research industry & livelihood	December,	Kalyani,	committee
	(ACRIL)"	2019	Nadia.	
10.	National Level workshop on Jute	25 th February,	FACC,	Member of
	Production, Marketing and	2021	Kalyani,	organizing
	Utilization strategies		Nadia	committee

B. ATTENDED

SL.	NAME OF THE	DURATION	PLACE	ROLE
NO.	PROGRAMME			
1.	International Conference on	4-8 th February,	Science City,	Participant
	"Environment And Development"	2004	Kolkata	
2.	National Conference on "Plant,	20-21 st March,	University of	Participant
	Microbes and Environment: Issues and Challenges"	2004	Burdwan	
3.	National Seminar on "Recent	30-31 st March,	Vidyasagar	Participant
	Advances in Plant Sciences"	2004	University	
4.	14 th West Bengal State Science &	28 th February- 1 st	Jadavpur	Participant
	Technology Congress	March, 2007	University	
5.	National seminar on 'Legumes for	03-5 th November,	Kanpur,	Participant
	Ecological Sustainability:	2007	Uttar Pradesh	
	Emergeging Challenges and opportunities'			
6.	National Conference on "Plant	11-12 th October,	Marwari	Participant
	Sciences: Diversity, Products and	2009	College,	_
	Environmental Planning"		Ranchi	
7.	National Seminar on 'Earthworm	21-23 rd	IAS, Visva-	Participant
	Ecology and Environment & IX	November. 2009	Bharati	
	National Symposium on Soil			
	Biology and Ecology'			
8.	6 th International Plant Tissue	3- 5 th December,	University of	Participant
	Culture & Biotechnology	2010	Dhaka,	
	Conference		Bangladesh.	

9.	National Seminar on 'Integrated	17-18 th	IRDM,	Participant
	Rural Development and	December. 2010	RKMVU	
	Management: Issues, Strategies and			
	Policy option'			
10.	International Symposium on	24-27 th February,	FACC,	Participant
	"System Intensification towards	2011	BCKV	···· I ···
	Food and Environmental Security"	_011	2011	
11.	18 th West Bengal State Science &	28 th February- 1 st	RKM	Participant
11.	Technology Congress held on	March, 2011	College	1 uniterpunt
	Kolkata, W. B.	101ur011, 2011	Narendrapur,	
12.	National Seminar on 'Approaches	12-14 th January.	IAS, Calcutta	Participant
12.	to maximizing crop productivity'	2012	University	1 articipant
13.	National Seminar on 'Safe Food for	21-23 rd February,	IAS, Visva-	Participant
15.	all'	2012 reordary,	bharati	1 articipant
14.	State level seminar on 'Production	$1-2^{nd}$ March,	FACC,	Participant
14.		2012 March,	BCKV	Farticipant
15.	& Management of Spices in WB' International Conference on	15-17 th March,	Kannur	Douticinent
15.				Participant
	'Advances in Biological Sciences'	2012	University,	
1.4		0 10 th T	Kerala,	Deur
16.	Sate level conference on	9-10 th January,	Saha Institute	Participant
	"Celebration of Hundred years of	2013	of Nuclear	
	Science in India"		Physics, Salt	
			Lake,	
		th	Kolkata	
17.	International conference on "Bio-	6-9 th February,	Science City	Participant
	resources and stress management"	2013	, Kolkata	
18.	International Symposium on	2-5 th March, 2013	CRRI,	Participant
	"Sustainable Rice Production and		Cuttack	
	Livelihood Security : Challenges			
	and Opportunities"	th		
19.	National Conference on	7-8 th March, 2013	ISI, Kolkata,	Participant
	"Reprographic rights and Copyright			
	act: Challenges and management"			
20.	SATNET Asia National Training	25-27 th November	Thimphu,	Resource
	Programme on "Cost benefit	2013	Bhutan	person
	analysis of Agricultural			
	technologies" under UNESCAP			
21.	National Symposium on	1 st March, 2014	University of	Participant
	Sustainable Agriculture for Food		Calcutta	
	and Nutritional Security in East and			
	North East India: Prospect and			
	Future"			
22.	Training programme on "Use of	27 th March 2014	ATC, RKM,	Resource
	Plant Growth regulators in		Narendrapur	person
	Agriculture"			
23.	Training programme on	16 th April 2014.	RKMVU,	Resource
	"Microbial fertilizers and		Belur	person
	pesticides and organic Liquid			
	manure"			
24.	SATNET National Training	23-25 th April	Kathmandu,	Resource
<i>Δ</i> -- .		-		
2т.	Programme on "Best Practices in	2014	Nepal	person
27.	•	2014	Nepal	person
27.	Programme on "Best Practices in	2014	Nepal	person

25.	One day training programme on "Preparation and uses of Organic	8 th July 2014	Teurhat, South 24	Resource person
	Liquid Manure in Agriculture under the Bio-village Development Programme"		Parganas	I to the
26.	International Conference on "Natural Fibres"	1-3 rd August, 2014	Oberoi Grand, Kolkata	Participant
27.	Farmers' Training on "Preparation and uses of Organic Liquid Manure in Agriculture"	22 nd October 2014	ATC, RKM, Narendrapur	Resource person
28.	"Importance of Organic Liquid Manure in Organic Agriculture"	23 rd October 2014	IAS, Calcutta University	Resource person
29.	International Seminar on "Integrating Agriculture & Allied Research: Prioritizing Future Potential for Secure Livelihoods (ASIAAR)"	6- 9 th November, 2014	FACC, BCKV	Participant
30.	National Symposium on "Evolving Plant Biology: From Chromosome to Genomics"	27- 29 th November, 2014	Institute of Culture, Golpark, Kolkata.	Participant
31.	Lectured on "Food Security and GM crops"	22 nd February 2015	RKM, Narendrapur	Resource person
32.	National Seminar on "Sustainable Agriculture for Food Security and Better Environment"	17-18 th December, 2015	FACC, BCKV	Participant
33.	National Seminar on "Resource based inclusive Agriculture and Rural Development: Opportunities and challenges"	15-16 th January 2016	RKMVU,Nar endrapur	Participant &Rapporte ur
34.	Lectured on Role of microbes in Agriculture and preparation and use of microbes	8 th February 2016	Ranaghat-II Block	Resource person
35.	National Seminar on Recent advances in Statistical tools for agriculture and allied sciences	3-5 th March, 2016	FACC, BCKV	Participant
36.	"Use of new varieties to improve crop production" in a farmers'	16 th March 2016	ICAR- CRIJAF, Barrackpore	Resource person
37.	International Seminar on "Recent Trends in Microbiology"	14 th January, 2017	Ramakrishna Mission Vidyamandi, Belur Math	Participant
38.	International Symposium on "Eco – Efficiency in Agriculture & Allied Research (EEAAR 17)"	20-23 rd January, 2017	FACC, BCKV,	Participant & Rapporteur
39.	National symposium on "Agriculture and food production today and tomorrow"	22-24 th , February, 2017	IAS, University of Calcutta	Participant
40.	National seminar on "Maximizing Fertilizer Use Efficiency and Environmental Health for Posterity"	08 th March, 2017	RKMVU, Narendrapur	Participant

41.	Banana Plant Tissue Culture	26 th May 2017	Kolkata.	Resource person
42.	Refresher training Course on "Improved technologies for Sustainable Agriculture: Prospect, Opportunities and challenges"	15 th February 2018	RKMVERI, Narendrapur, Kolkata	Resource person
43.	National seminar on "Agri- chemicals for a benign environment"	29 th March, 2018	FACC, BCKV	Participant
44.	International Conference on "Advancement in Science & Technology (ICAST-2018)"	3-4th September, 2018	Visva- Bharati, Santiniketan,	Participant
45.	National seminar on "Vegetables for livelihood and nutritional security under changing climate"	6-7 th December 2018	FACC, BCKV	Rapporteur
46.	Two day congress on "Science & technology induced innovation for sustainable development	17 th February 2019	Kolkata	Member of presidium
47.	International Conference on Recent Trend and Practices in Science, Technology, Management and Humanities for Sustainable Rural Development (STMH - 2019)	6 – 7 th September, 2019	University of Science and Technology Meghalaya.	Key note Speaker
48.	National Seminar on "Agro chemical inputs and its extension approaches towards food and Biosecurity: Prospects and challenges"	15-16 th November, 2019	SAMETI, Narendrapur, Kolkata	Co-chaired a session
49.	International Seminar on "Agriskills for convergence in research industry & livelihood (ACRIL)"	28 th November to 1 st December, 2019	FACC, BCKV	Participant
50.	National webinar on "Plant Biological Interventions for climate smart agriculture"	30 th July 2020	BAU, Sabour,	Participant
51.	Kosambi International Webinar series on Plant Genomics	31 st July to 2 nd August 2020	Pune.	Participant
52.	Webinar on "Molecular Breeding: Wheat Breeding as a model System"	27 th August, 2020	Jaipur	Participant
53.	National Webinar on "Crop Diversification: A way towards Nutritional Security"	26 th October, 2021.	Patna, Bihar	Participant
54.	International symposium on "Advances in Plant Biotechnology and Genome Editing"	8-10 th April, 2021	ICAR-IIAB, Ranchi	Participant

20. PATENTS/ HONOURS/ AWARDS/ RECOGNITION:

- Awarded National Scholarship in 1994.
- Qualified National Eligibility Test (NET), 2004 in Genetics.
- Qualified National Eligibility Test (NET), 2006 in Plant Breeding.
- Recognized by International Accreditation Organization (USA) and awarded"Certified Faculty Member" in 2013.

- Received CWSS Young Scientist Award 2016
- Received CWSS Fellow Award 2019
- Executive Editor, Journal of Crop and Weed (ISSN: 09746315) during 2019-2023

21. PUBLICATIONS

A. BOOKS

- Dasgupta, D., Mallick, A. K., Das, P. K., Goswami, R., Dutta, A. and Ali, N. (Eds.) (2012). Integrated Rural Development and Management: Issue, Strategies and Policy Options. Agrobios (India).
- ii. Yeasmin, L. and Ali Md. N. (2014). Evaluation of Salt Tolerance in Paddy. LAMBERT Academic Publishing (Germany).
- iii. Ali, Md. N. and Mandal N. 2018. Practical Manual on Principles and Practices of Agricultural Biotechnology (ABT 304). Faculty of Agriculture, BCKV.
- iv. Ali, Md. N. and Mandal N. 2018. Practical Manual on Micropropagation Technologies (EC-366). Faculty of Agriculture, BCKV.
- v. Ali, Md. N. and Mandal N. 2018. Practical Manual on Bioinformatics (ABT553). Faculty of Agriculture, BCKV.
- vi. Mandal, N. and Ali, Md. N. 2019. Practical Manual on Plant Tissue Culture and Genetic Transformation (ABT 551). Faculty of Agriculture, BCKV.
- vii. Sharangi, A. B.; Ali, Md. N., and Sinharay, S. (2022). Botany and Breeding of spice crops. New India Publishing Agency, New Delhi.

B. BOOK CHAPTERS (Best 10)

- i. Ali *et al.* (2011).Transgenic Plants: Prospects and Controversies. In: Environmental Concerns, **Agrobios** (India).
- ii. Ali *et al.* (2012). Nutritional diversity of some blackgram [*Vigna mungo* (L.) Hepper] genotypes of Indian origin. *In*: Role of Biotechnology in Food Security and Climate Change. Islam *et al.* (Eds). Bangladesh Assoc. Plant Tissue Cult. & Biotech., Bangladesh. pp. 79-86.
- iii. Ali *et al.* (2013). Improvement of vermicompost: Influence of feeding materials and inoculation of nitrogen fixing and phosphate solubilising bacteria. In: S., Abdulhameed, & A. Augustine (Eds.). Prospects in Bioscience: Addressing the issues. Springer Verlag, Berlin: pp. 221-228.
- iv. Md. Nasim Ali. (2013). "Jute Biology". In D. Dasgupta (ed.) "Jute Development-Technological Interface between Tradition and Modernity. Agrobios (India). pp: 13-16.
- v. Ali *et al.* (2013). Putting Vedic wisdom in practice: validation of *Panchagavya* as biostimulant in agriculture. In D. Dasgupta(ed.) "Food & Environmental Security-Imperatives of IKS". **Agrobios (India).**pp: 123-128.
- vi. Ali et al. (2014). "Role of Biodiversity in Development". In D. Dasgupta (ed.) "Frontiers of Rural Development for Developing Societies". **Agrobios (India).** pp 177-182.
- vii. Ali et al. (2018). Morpho-biochemical and molecular markers for screening and assessing plant response to salinity. In. Gupta *et. al.* (eds) Engineering practices for management of soil salinity: agricultural, physiological, and adaptive approaches. Waretown, NJ: Apple Academic Press, Taylor & Francis. Pp. 257-28.
- viii. Ali Md. N. and Ray S.S. (2018) Plant Tissue Culture as Potential Option in Developing Climate Resilient Spices. In: Sharangi A. (eds) Indian Spices.
 Springer, Cham, pp 405-419.

- ix. Yeasmin, L. and Ali Md. N.(2021). Molecular Markers in Bamboo Genotyping: Prospects for conservation and breeding. In: Z. Ahmed *et. al.*, (eds) Biotechnological advances in Bamboo. Springer, Cham, pp 379-399.
- x. Ali Md. N. and Ray S.S. (2022). Synthetic seeds vis-à-vis cryopreservation: An efficient technique for long term storage of endangered medicinal plants. In: Sharangi A. and Peter, K. V. (eds) Medicinal Plants: Bioprospecting and Pharmacognosy. Apple Academic Press, Taylor & Francis.,pp 337-360.

C. RESEARCH PAPERS (Best 10)

- i. Chakraborty *et al.* (2014). Rapid Estimation of Compost Enzymatic Activity by Spectral Analysis Method Combined with Machine Learning. *Waste Management*, 34: 623-631.(Elsevier, NASS:14.10)
- ii. Ali *et al.* (**2014**). Screening of rice landraces for salinity tolerance at seedling stage through morphological and molecular markers. *Physiology and Molecular Biology of Plants*, DOI 10.1007/s12298-014-0250-6. (**Springer, NAAS: 9.50**)
- iii. Ali *et al.* (2014). Selection of Rice Genotypes for Salinity Tolerance through Morpho-biochemical Assessment. Rice Science, 21(5): 288-298 (DOI: 10.1016/S1672-6308(13)60189-4). (Elsevier, NASS :10.80)
- iv. Ray *et al.* (2017). Elimination and molecular identification of endophytic bacterial contaminants during in vitro propagation of *Bambusabalcooa*, *World Journal of Microbiology and Biotechnology*, 33: 31, Doi 10.1007/s11274-016-2196-z. (Springer, NAAS 10.10)
- v. Gantait et al. (2017). Impact of differential levels of sodium alginate, calcium chloride and basal media on germination frequency of genetically true artificial seeds of Rauvolfiaserpentina (L.) Benth. ex Kurz., *Journal of Applied Research on Medicinal and Aromatic Plants*, 4: 75-81. (http://dx.doi.org/10.1016/j.jarmap.2017.01.005. (Elsevier, NAAS: 9.90)
- vi. Salma *et al.* (2018). Elicitor mediated enhancement of wedelolactone in cell suspension culture of *Eclipta alba* (L.) Hassk. *Plant Cell, Tissue and Organ Culture*, DOI 10.1007/s11240-018-1431-8. (Springer, NAAS: 9.00).
- vii. Kundu et al. (2018). Development of transgenic hairy roots and augmentation of secondary metabolites by precursor feeding in *Sphagneticola calendulacea* (L.) Pruski, *Industrial Crops and Products*, 121: 206-215.) (Elsevier, NAAS: 11.90).
- viii. Mukherjee *et al.* (2022). Microbiological properties of Beejamrit, an ancient Indian traditional knowledge, uncover a dynamic plant beneficial microbial network. *World Journal of Microbiology and Biotechnology*, 38(7):111. (doi: 10.1007/s11274-022-03296-3). (Springer, NAAS 10.10)
- ix. Mukherjee *et al.* (2023). Revisiting the oldest manure of India, *Kunapajala*: Assessment of its animal waste recycling potential as a source of plant biostimulant. *Frontiers in Sustainable Food System*, 6: 1073010. doi: 10.3389/fsufs.2022.1073010. (NAAS 10.70)
- x. Sarkar *et al.* (2023). Molecular characterization of vermicompost-derived IAA-releasing bacterial isolates and assessment of their impact on the root improvement of banana during primary hardening. *World Journal of Microbiology and Biotechnology*, 39:351(<u>https://doi.org/10.1007/s11274-023-03809-8</u>). (Springer, NAAS 10.10)

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Signature with Date

Date: 06.05.2024