# NAVSARI AGRICULTURAL UNIVERSITY

# **ACHIVEMENTS**

# Department of Plant Pathology N. M. College of Agriculture Navsari Agricultural University, Navsari (Gujarat)



## A. Awards

Sr. No.	Name of award	Year
	K. B. Rakholiya	
1	First Rank Oral Presentation award: ISMPP 3 <sup>rd</sup> Asian Congress on Plant Pathology: Plant and Soil Health Management for Better tomorrow: oral presentation on First report of <i>Fusarium falciforme</i> causing wilt of chilli at SDAU, SK nagar 7-10, February, 2024	2024
2	Best Teacher Award for the Academic year:2021-22 In recognition of outstanding contributions to Academic and Personal growth in the field of Agricultural and Allied Sciences from Navsari Agricultural University, Navsari, Gujarat	2023
3	Plant Protection Association of Gujarat (PPAG): Outstanding Research Work Done in the Field of Bio-Pesticides by SAU'S Scientist: Ghelani Agricon Private Limited Award-2021 on April 05, 2022 at AAU, Anand. During state level seminar on Prakrutik Krushima pak Sanrakshan' organized by PPAG and AAU, Anand.	2022
4	ASPEE Agro Equipment Pvt Ltd Award 2021: Best Research work Done by M. Sc. (Agri.) Student in the Field of Plant Pathology. Award-2021 on April 05, 2022 at AAU, Anand. During state level seminar on Prakrutik Krushima pak Sanrakshan" organized by PPAG and AAU, Anand.	2022
5	First Oral Presentation Award IPS (WZ) Symposium: Epidemiology of damping-off of tomato.Indian Phytopathological Society West Zone Symposium on "Current Trends in Plant Disease Detection, Diagnosis and Management duringg 16-17,112022 at NAU, Navsari	2022
6	Third Oral Presentation Award IPS (WZ) Symposium: Epidemiology study of Chilli Anthracnose caused by <i>Colletotrichum capsici</i> (Sydow) Butler and Bisby. Indian Phytopathological Society West Zone Symposium on "Current Trends in Plant Disease Detection, Diagnosis and Management" during November 16-17, 2022 at NAU, Navsari.	2022
7	Third Oral Presentation Award IPS (WZ) Symposium: Black fruit rot of Mango: A New Disease ReportIndian Phytopathological Society West Zone Symposium on "Current Trends in Plant Disease Detection, Diagnosis & Management "during 16-17, November 2022 at NAU, Navsari	2022
8	3 <sup>rd</sup> Rank Oral Presentation award: ISMPP 42 <sup>nd</sup> Annual Conference & National Symposium: Plant Health management: A way forward for food safety, security and sustainability, Golden Jubilee celebration of ISMPP, May 10-11, 2022 at AAU, Anand	2022
9	Life Time Achievement Award in Plant Pathology in National Symposium on Sustainable Management of Pests and Diseases in Augmenting Food and Notional Security organized by NAU, Navsari	2019

10	Best Poster Award: Role of Microorganisms for Biodegradiation of Pesticides. National Workshop on "Pesticide Residue: Management and Techniques for Food	2019
	Safety and Security during February 25-26, 2019 at NAU, Navsari.  Best Poster Award: V. D. Babaria, P. J. Davaria and K. B. Rakholiya (2019): Role of	
11	Microorganisms for Biodegradiation of Pesticides. National Workshop on "Pesticide Residue: Management and Techniques for Food Safety and Security during February 25-26, 2019 at NAU, Navsari.	2019
12	Management of damping-off disease The Second Best Oral presentation in National Seminar on Technologies and Sustainability of Protected Cultivation for Hi-Valued Vegetable Crops at NAU, Navsari	2018
13	Bio priming of tomato seed for the management of damping-off disease The Second Best Oral presentation in National Seminar on Technologies and Sustainability of Protected Cultivation for Hi-Valued Vegetable Crops at NAU, Navsari	2018
14	PR VERMA STUDENT AWARD-2016 - Epidemiology and management of turmeric leaf blotch caused by <i>Taphrina</i> sp. XXXVIII Annual Conference and national Symposium organized by ISMPP and BCKVV, Mohanpur, West Bengal.	2016
15	The Best Thesis Award by GASS, Ahmedabad Gujarat Association for Agricultural Sciences, Integrated management of stem and pod rot of groundnut caused by <i>Sclerotium rolfsii</i> Sacc.	2011
16	Assessment of yield losses in castor due to root rot. Indian Phytopathological society best poster presentation awards at GAU, Anand National Symposium on "Perspective in the Plant Health management" Dec. 14-16, 2010. pp. 197. AAU, Anand.	2010
Dr. P	riya John	
1	Women Scientist Award in International Conference ICCGFLLES-2023 at NAU during 28 to 30 th December 2023	2023
3	Dr.B.B. Mundkar Award By GRIDSA	2022
4	Scroll of Honour By Indian Phytopathological Society, IARI, New Delhi for West Zone Councillor	2022
5	M.J. Narasimhan Award to two Ph.D. students under mentorship from Central Zone and West Zone of Indian Phytopathological society	2022
6	Young Women Scientist Award by Agro Environment Development Society (AEDS)	2020
7	Third prize in poster presentation the National Symposium on sustainable management of pests and disease in augmenting food and nutritional security, NAU, Navsari held during January, 22-24.	2019
8	ICAR Best teacher of the year by NAU	2015
9	Best poster presentation award in the national seminar on Role of Organic Farming in climate resilient and sustainable Agriculture held at NAU during January 9-10, 2014	2014
10	Excellent performer in the winter school sponsored by ICAR on "Diagnostics, Genomics, Implications and Integrated Management of Plant Pathogens" from November 2 to 22, 2011, at BACA, AAU, Anand	2011
11	Studies on biodiversity of fleshy fungi in Navsari (South Gujarat). Got the first prize in oral presentation in National Symposium on Perspective in the plant Health Management conducted by IPS at BACA, AAU, Anand on December 14-16.	2010
12	Countries visited: Italy, France, Switzerland, Malaysia, Singapore, Egypt and Israel	

Dr. I	alit Mahatma	
1	Best Oral Presentation Award For the presentation on the topic entitled "Antagonism on the development of seedling rot by <i>Sclerotia rolfsii</i> Sacc in chilli" at National Seminar, Navsari	2019
2	Zonal President of ISMPP for Contribution in the society, ISMPP, Udaipur	2018
3	Prof. H.C. Dube Outstanding Young Scientist Award-2015 for Overall Research activities specially on the first record of seed borne nature of Begomoviruses and Commercialization of Biofertilizers, ISMPP, Udaipur	2016
4	PP Singhal Memorial Pesticide Industries Award-2014 for presentation of Research Paper on "Role of Seed in Epidemiology of Yellow Mosaic Virus Disease in Mungbean ( <i>Vigna radiata</i> L.), ISMPP, Udaipur	2015
5	Best Teacher Award-2014 for the contribution in UG & PG Teaching in the NAU, Navsari (As per the Guidelines of ICAR award was presented), NAU, Navsari	2015
6	Executive Body Member as Immediate Vice President of ISMPP for the society and journal related activities, ISMPP, Udaipur	2014
7	Vice President of ISMPP As per the Bylaws of ISMPP, ISMPP, Udaipur	2013
8	Fellow of Indian Society of Mycology and Plant Pathology (F.I.S.M.P.P.), For the contribution in the science, ISMPP, Udaipur	2013
9	Organizing Secretary of 34 <sup>th</sup> Annual Conference and National Symposium of ISMPP, Responsibility shouldered for the Society, ISMPP, Udaipur	2013
10	Commercialization of Biofertilizers, For the production of bio fertilizers and Development of new formulation has been appreciated by our Hon PM (Sh. Narendra Modi) then Hon CM during his message ( <i>Pravachan</i> ) to the Farmers of the Gujarat General Remarks by the Hon CM	2012
11	West Zone Councilor of ISMPP Bylaws of ISMPP, ISMPP, Udaipur	2010
12	"Excellent Performer" in the Mahyco Research Centre, Jalna, For the Research & Development, Mahyco Seeds Ltd. Jalna	2007
13	"Excellent Performer" in the Mahyco Research Centre, Jalna, For the Research & Development, Mahyco Seeds Ltd. Jalna	2007
Dr. I	Danny Tandel	
1	Received 1 <sup>st</sup> Best Oral Paper presentation Award during International conference on "Impact of climate changes on global food, livestock, livelihood and environment security-Advanced mitigation strategies organized by NAU, Navsari & NADCL Baramulla, UT of J&K, India during December ,2023	2023
2	Received 2 <sup>nd</sup> Best Oral Paper presentation Award during National West Zone Sympopsium on "Current trends in Plant Disease detection, diagnosis and management organized by Indian Phytopathological Society and NAU, Navsari & during November 16-17,2022	2022
3	Received Prof. K.C. Mehta Memorial Award during 7 <sup>th</sup> International conference on "Opportunities and Challenges in Agriculture, Environmental and Biosciences for Global Development (OCAEBGD-2022) organized by AEDS India during October 29-31, 2022.	2022
4	Received Overall 3 <sup>rd</sup> Best Poster Presentation Award during 7 <sup>th</sup> International conference on "Opportunities and Challenges in Agriculture, Environmental and Biosciences for Global Development (OCAEBGD-2022) organized by AEDS	2022

	India during October 29-31, 2022.	
_	"Eminent Scientist" Award by Agro-Environmental Development Society	2020
5	(AEDS), U.P.	2020
6	Best Zonal KVK Award 2015-16	2017
7	"Samaj Ratna" Award by Tandel Samaj, Gujarat Machhi Mahamandal, Gujarat	2017
8	"Man of the Match" Award in All Gujarat Staff Cricket Tournament at NAU, Navsari	2017
9	"Best Batsman" Award in All Gujarat Staff Cricket Tournament at M.K. University, Bhavnagar	2015
10	"Best Captain" Award in Cricket at Navsari Agricultural University, Navsari	2014
11	"Man of the Match" Award in All Gujarat Staff Cricket Tournament at M.S.	2014
11	University, Vadodara	
Dr. G	opal B. Chopada	
1	Young Scientist award (Major area of study – Plant Pathology) at National	
	Symposium on sustainable pest management of pest and disease in augmenting	2019
	food and nutritional security organized by NAU, Navsari	
	P R Verma Student Award for Ph.D. Research at 38 <sup>th</sup> annual conference and	
2	national symposium organized by Indian Society of Mycology and Plant	2016
	Pathology and BCKVV, Mohanpur, Nadia, West Bengal	
	P R Verma Student Award for M.Sc. (Agri.) Research at Global Conference on	
	Technological Challenges and Human Resource for Climate Smart	2014
3	Horticultural-Issue and Strategies organized by NAU Navsari and ASM	2014
	Foundation, New Delhi in Collaboration with Confederation of Horticulture Association of India and Indian Society of Mycology and Plant Pathology	
	Late Dr. H. U. Joshi Gold Plated Bronze Medal in the ninth annual convocation	
4	for securing highest overall grade point average in the subject of Plant Pathology	2014
•	in the faculty post-graduation studies in agriculture.	2014
	Award of INSPIRE Fellowship sponsored by Department of Science and	
5	Technology, Ministry of India New Delhi.	2013
	ASPEE Distributors' Association Gold Plated Bronze Medal in the sixth annual	
6	convocation for overall grade point average in the subject of Plant Protection	2011
	(Agricultural Entomology and Plant Pathology) in the faculty graduate studies in	2011
	agriculture agriculture	
	Vice-Chancellor's Gold Medal in the sixth annual convocation for overall grade	
7	point average and performance in extracurricular activity in the faculty graduate	2011
	studies in agriculture	
	Late Shri Pramodbhai Desai, The Surat District Co-operative Bank Ltd., Gold	
8	Plated Silver medal in the sixth annual convocation for overall grade point	2011
0	average in the subject of Plant Protection (Agricultural Entomology and Plant	2011
	Pathology) in the faculty graduate studies in agriculture	
_	ASPEE Agricultural Research and Development Foundation Award for Junior	
9	Fellowship sponsored by ASPEE Agricultural Research and Development	2010
<b>D</b> ~	Foundation, Mumbai	
	hivangi S. Kansara	2024
1	Academic Excellence Award in recognition of outstanding professional and	2024

	research achievement in the field of agricultural sciences by Institute of researchers, Kerala, India.	
2	Yound Scientis Awardfor outstanding contribution in the field of Plant Pathology on Occasion of 2 <sup>nd</sup> International Agriculture Conference on "Natural Farming Innvations: Enhancing soil health and seed quality with AI and Drone fr Greener agricultural future held at New Delhi on November 3-5, 2024	2024
3	Best Poster presentation – "Isolation and Identification of seed mycoflora associated with groundnut seeds in IPS West zone symposiumon current trends in plant disease detection, diagnosis and management Organized by NAU, Navsari, Guajarat, November 16-17,2022	2022
4	First prize in poster presentation at National symposium on probing beneficial microorganisms for next generation revolution organized by Indian Phytopathological Society (Western Zone)	2021
5	First prize in poster presentation at National Symposium on sustainable pest management of pest and disease in augmenting food and nutritional security	2019
6	Young Scientist award (Major area of study – Plant Pathology) at National Symposium on sustainable pest management of pest and disease in augmenting food and nutritional security organized by NAU, Navsari	2019
7	Chancellor's gold medal for securing highest grade point during Ph. D. and outstanding research for farming community	2016
8	P R Verma Best Student Award for M.Sc. (Agri.) Research at Global Conference on Technological Challenges and Human Resource for Climate Smart Horticultural-Issue and Strategies organized by NAU Navsari and ASM Foundation, New Delhi in Collaboration with Confederation of Horticulture Association of India and Indian Society of Mycology and Plant Pathology	2014
9	Award of INSPIRE Fellowship sponsored by Department of Science and Technology, Ministry of India New Delhi.	2013
10	Late Dr. H. U. Joshi Gold Plated Bronze Medal in the ninth annual convocation for securing highest overall grade point average in the subject of Plant Pathology in the faculty post-graduation studies in agriculture.	2013
	Kotramma Addangadi	2024
1	Certificate of Excellence in Reviewing awarded by Journal of Advances in Microbiology for contribution to the quality of the journal	2024
2	Young Profession Award in International Conference Organized by NAU, Navsari and NADCL, Baramulla	2023
3	Women Scientist Award by the society for Scientific Development in	2023
4	Agriculture and Technology, Meerutat Himchal Pradesh university, Shimla	2022
4	Second Prize in National level Hackathon on Smart and Remunerative Farming, at Navsari Agricultural University, Navsari.	<i>2022</i>
5	Second Best Oral Presentation Award in Indian Phytopathological Society West Zone Symposium at Navsari Agricultural University, Navsari, Gujarat.	2022
6	Second Best Poster Presentation Award in Indian Phytopathological Society West Zone Symposium at Navsari Agricultural University, Navsari, Gujarat.	2022
7	Best Poster Presentation Award in national conference held at Navsari Agricultural University, Navsari	2020

8	Young Scientist Award-2018 from Bioved Research Society, Allahabad, Uttar	2018
	Pradesh	
9	Third Prize in Poster Presentation during the National Conference held at Bihar	2017
	Agricultural University, Sabour, Bihar	

## B. Seminar/training organized:

- 1) 34<sup>th</sup> Annual conference and National symposium on "Crop disease management and challenges" was organized by Department of Plant Pathology, N. M.College of Agriculture, NAU, Navsari and Indian Society of mycology and Plant Pathology, Udaipur during January 21-23, 2013 at NAU, Navsari.
- 2) Online National training on" Advanced in mushroom cultivation: A sustainable key to food –nutritional and employment security" jointly organized by Department of Plant Pathology, N. M. College of Agriculture, NAU, Navsari and Centre of Advanced agricultural science and technology, (CAAST), NAHEP, NAU, Navsari during September, 21-22, 2021.
- 3) One day webinar on "Invasive pests and disease problem in Indian Agriculture" Jointly organized by Department of Plant Pathology and Department of Entomology, N. M. College of Agriculture, NAU, Navsari during August, 5, 2021.
- 4) State level seminar on "Maintenance of quality and safety of horticultural and food crops through biological control of pests and diseases" jointly organized by Plant Protection association of Gujarat and Centre of Advanced agricultural science and technology, (CAAST), NAHEP, NAU, Navsari during December, 30, 2021.
- 5) State level workshop on "Spawn production and farming techniques of mushroom" during August 3-4, 2022.
- 6) West Zone Symposium of Indian Phytopathological Society on "CURRENT TRENDS IN PLANT DISEASE DETECTION, DIAGNOSIS AND MANAGEMENT" during November 16-17, 2022.

#### C. Patent filed:

Sr. No.	Title of patent	Year
1.	Method of preparation of hybrid silver nanoparticles with banana pseudostem extract and chitosan	27/02/2024

#### D. Post graduate/Ph.D. thesis

Sr. No.	Year	No. of M.Sc. (Agri.)	No. of Ph.D.	Total
1	2004	05	00	05
2	2005	00	00	00
3	2006	10	00	10
4	2007	03	00	03

Sr. No.	Year	No. of M.Sc. (Agri.)	No. of Ph.D.	Total
5	2008	08	03	11
6	2009	06	00	06
7	2010	05	01	06
8	2011	06	02	08
9	2012	05	04	09
10	2013	08	05	13
11	2014	05	01	06
12	2015	05	02	07
13	2016	08	02	10
14	2017	15	03	18
15	2018	07	00	07
16	2019	13	02	15
17	2020	13	04	17
18	2021	01	01	02
19	2022	12	04	16
20	2023	11	05	16
21	2024	06	07	13
	Total	146	39	185

# D. Research recommendations (2016-17 to 2024-25)

Sr. No				Title and	Recomi	nendation					Appro val Year
1.	Compatibility of fungicides and insecticides with <i>Trichoderma viride</i> Farmers Recommendation: The farmers are advised to refer the following table for mixing <i>Trichoderma viride</i> with different fungicides, insecticides and antibiotic.										2024
	Sr. No	Fungicides, Insecticides and Antibiotic	Conce (g or r	entration (ppi nl/l)	n)						
			PPM	(g or ml/l)	PPM	(g or ml/l)	PPM	(g or ml/l)	PPM	(g or ml/l)	
	1	Azoxystrobin 23SC	250	(1.08ml/l)	500	(2.17 ml/l)	750	(3.26ml/l)	1000	(4.34ml/l)	
	2	Fosetyl-AL 80WP	250	(0.31g/l)	500	(0.63g/l)	750	(0.94g/l)			
	3	Sulphur 80WP	500	(0.63g/l)	1000	(1.25g/l)	2000	(2.5g/l)			
	4	Streptomycin Sulphate 90 + Tetracylin Hydrocloride 10) SP	100	(0.1g/l)	150	(0.15g/l)	200	(0.2g/l)	250	0.25g/l)	
	5	Flubendiamide 7.50 + Kresoxim Methyl 37.5 w/w	500	(1.1g/l)			•	•	•		

6	Chlorantraniliprole 18.50SC	500	(2.7ml/l)	1000	(5.4ml/l)	2000	(10.8ml/l)	3000	(16.21ml/l)
7	Chlorpyrifos 20EC	500	(2.5ml/l)		· ·	· ·		•	
8	Emamectin benzoate 5SG	500	(10g/l)						
9	Flubendiamide 20WG	500	(2.5g/l)	1000	(5g/l)	2000	(10g/l)	3000	(15g/l)
10	Lambda-cyhalothrin 5 EC	500	(10ml/l			•			
11	Novaluron 10EC	500	(5ml/l)						
12	Spinetoram 11.70 SC	500	(4.27ml/l)	1000	(8.54ml/l)	2000	(17.08ml/l)	3000	(25.64ml/l)
13	Chlorpyrifos 50 + Cypermethrin 5EC	500	(0.9ml/l)	1000	(1.81ml/l)			•	
14	Flubendiamide 7.50 + Kresoxim Methyl 37.5 w/w SC	500	(1.1ml/l)			•			
15	Novaluron 05.25 + Indoxacarb 04.50 SC	500	(5.12ml/l)	1000	(10.25ml/l)	2000	(20.5ml/l)	3000	(30.75ml/l)
16	Profenofos 40 + Cypermethrin 4 EAC	500	(1.1ml/l)	1000	(2.27ml/l)				
17	Chlorantraniliprole 9.30 + Lambda-cyhalothrin 4.6 ZC	500	(3.59ml/l)	1000	(7.19ml/l)	2000	(14.38ml/l)		
18	Dimethoate 30EC	250	(0.83ml/l)	500	(1.6ml/l)	750	(2.49ml/l)	1000	(3.32ml/l)
19	Spinosad 45SC	250	(0.55ml/l)	500	(1.11ml/l)	750	(1.65ml/l)	1000	(2.22ml/l)
	Thiamethoxam 30FS	250	(0.83ml/l)	500	(1.66ml/l)	750	(2.49ml/l)	1000	(3.32ml/l)
20									

# ખેડૂત ઉપયોગી ભલામણ:

ખેડૂતોને નીચે જણાવેલ જુદી જુદી કૂગનાશકો, કીટનાશકો અને જીવાણુંનાશકો સાથે ટ્રાયકોડર્માં વિરીડી ભેળવવા માટે નીચે દર્શાવેલ કોષ્ટકને અનુસરવાની ભલામણ કરવામાં આવે છે.

ટેબલ-૧ ટ્રાયકોડર્માં વિરીડીને જુદી જુદી ફૂગનાશકૉ, કીટનાશકૉ અને જીવાણુંનાશક સાથે સુસંગતા

	સાંદ્રતાપીપીએમ./ ગ્રામઅથવામીલી/૧૦લીટર										
		પીપીએમ	ગ્રામ	પીપી	ગ્રામ	પીપીએમ	ગ્રામ	પીપીએમ	ગ્રામઅથવા		
ક્રમ	કુગનાશક/કીટનાશક		અથવા	એમ	અથવા		અથવા		મીલી/		
	/જીવાણુંનાશક		મીલી/		મીલી/		મીલી/		૧૦લીટર		
			90		90		૧૦લીટર				
			લીટર		લીટર						
٩	એમોક્સીસ્ટ્રોબીન ૧૩ એસસી	૧૫૦	90.0८	ч00	૨૦.૧૭	૭૫૦	32.90	9000	83.80		
ર	ફોસેટાઈલ એલ.૮૦ વે.પા	રપ૦	3.90	૫૦૦	9.30	૭૫૦	6.80				
3	સલ્ફર ૮૦ વે.પા.	ч00	9.30	1000	૧૨.૫૦	5000	રપ.00				

8	સ્ટ્રોપ્ટોસાયક્લીન સલ્ફેટ ૯૦ + ટ્રેટાસાયક્લીન ફાયડ્રોક્લોરાઈડ ૧૦ એસપી	100	9.00	૧૫૦	૧.૫૦	500	00.5	રપ(	0	ર.૫૦
ų	ફ્લ્યુબેન્કીયામાઈડ ૭.૫૦ + ક્રેસોક્સીમ મિથાઈલ ૩૭.૫ વે.પા	чоо	99.0							
S	ક્લોરાન્ટ્રાનીલીપ્રોલ ૧૮.૫ એસસી	ч00	ર૭.૦૦	9000	૫૪.૦૦	5000	906.00	300	0	૧૬૨.૧૦
9	કલોરપાઈરીફ્રોસ ૨૦ ઈસી	૫૦૦	<b>૧૫.</b> ૦૦					•		
۷	એમાબેક્ટીન બેન્ઝોએટ પ એસસી	ч00	90.00							
9	કલોરપાઈરીફ્રોસ ૨૦ ઈસી	ч00	<b>૨૫.</b> ૦૦							
۷	એમાબેક્ટીન બેન્ઝોએટ પ એસસી	чоо	900.00							
e	ફ્લ્યુબેન્ડીયામાઈડર૦વેજી	чоо	રપ.00	9000	чо.00	5000	900.0	3000	91	чо.00
90	લેમ્બડાસાયફેલોથ્રીનપઈસી	ч00	900.00				<u> </u>			
99	નોવાલ્યુરોન ૧૦ઈસી	чоо	чо.00							
૧૨	સ્પીનેટોરમ ૧૧.૭૦એસસી	૫૦૦	85.9	1000	૮૫.૪૦	5000	૧૭૦.૮૦	300	00 7	૧૫૦.૬૪
93	ક્લોપાયરીફ્રોસ૫૦+સાયપરમે થ્રીન પઈસી	ч00	6.00	9000	9८.90		I			
૧૪	ફ્લ્યુબેન્કીયામાઈડ૭.૫૦ + ક્રેસોક્સીમમીથાઈલ ૩૭.૫વે/વે. એસસી	чоо	11.00							
૧૫	નોવાલ્યુરોન ૦૫.૨૫ + ઇન્ડોક્સાકાર્બ ૪.૫૦ એસસી	ч00	૫૧.૨૮	9000	૧૦૨.૫	800	૦	ાર 3	8000	309.90
૧૬	પ્રોફેનોફોસ ૪૦+ સાયપરમેથ્રીન ૪ઈસી	чоо	11.39	9000	98.99		•	1		•
૧૭	ક્લોરાન્ટ્રાનીલીપ્રોલ૯.30 + લેમ્બડાસાયફેલોથ્રીન ૪ઈસી	ч00	39.90	9000	૭૫.૧૮	200	0 чо	.39		
٩८	ડાઈમેથોએટ ૩૦ઈસી	રપ૦	۷.33	ч00	૧૬.૬૬	૭૫૦	૧૫.૦	00	1000	33.33
૧૯	સ્પીનોસાડ૪૫એસસી	રપ૦	૫.૫૫	чоо	11.10	૭૫૦	૧૬.૫	. '	9000	25.55
50	થાયમેથોકઝામ30એફએસ	રપ૦	۷.33	ч00	૧૬.૬૬	૭૫૦	રપ.૦	00	1000	33.33
ર૧	એસીટામીપ્રીડર૦એસપી	રપ૦	૧૨.૫૦	ч00	૨૫.૦	૭૫૦	39.1	100	1000	чо.ос

#### 2024

## **Recommendation for the farming community**

Farmers practicing chemical and organic mixed agriculture can use Azotobacter, Acetobacter, Azospirillum, Rhizobium, PSB, KMB and Pseudomonas as a bio fertilizer or PGPR as per the recommended doses at any time before or after the application of insecticides, fungicides, weedicides and chemical fertilizers.

## ખેડૂતો ઉપયોગી ભલામણ

રાસાયણિક અને જૈવીક મિશ્ર ખેતી કરતા ખેડૂતો જંતુનાશકો, કૂગનાશકો, નીંદણનાશકો અને રાસાયણિક ખાતરો નાખતા પહેલાં અથવા પછી કોઈપણ સમયે એઝોટોબેક્ટર, એસિટોબેક્ટર, એઝોસ્પિરિલમ, રાઈઝોબિયમ, પીએસબી, કેએમબી અને સ્યુડોમોનાસનો જૈવિક ખાતર અથવા પીજીપીઆર ભલામણ કરેલ માત્રા મુજબ ઉપયોગ કરી શકે છે.

### 3. Chemical control of fenugreek powdery mildew

Fenugreek growers of South Gujarat are advised to apply, three sprays of hexaconazole 5 EC (0.005%) @ 10 ml/ 10 lit. or propiconazole 25 EC (0.025%) @ 10 ml/10 lit or sulphur 80 WP (0.2%) @ 25g/10 lit of water for effective management of powdery mildew and to get higher yield. The first spray should be given with anyone fungicides after initiation of disease and subsequent two sprays at 15 days of interval.

1	1 2	- 5					
Crop	Disease	Fungicides	Concent	Quantit	Dilution	Waiting	Residue
			rations	уg	in water	period	in the
			(a.i%)	or	(liter)		seed
				ml/ 1			sample
Fenugreek	Powdery	Hexaconazole	0.005	10.0 ml	10	30	BQL
( Not		5% EC				( Another	
included in						crops)	
CIB-RC)		Propiconazole	0.025	10.0 ml	10	30	BQL
		25 % EC				( Another	
						crops)	
		Sulphur	0.2	25 g	10		
		80 % WP					

દક્ષિણ ગુજરાતમાં મેથીની ખેતી કરતા ખેડૂતોને ભૂકીછારા રોગના અસરકારક નિયંત્રણ તેમજ વધુ ઉત્પાદન મેળવવા માટે ફેકઝાકોનાઝોલ ૫ ઇસી (૦.૦૦૫%), ૧૦ મિલી પ્રતિ ૧૦ લિટર અથવા પ્રોપીકોનાઝોલ ૨૫ ઇસી (૦.૦૨૫%) ૧૦ મિલી પ્રતિ ૧૦ લિટર અથવા સલ્ફર ૮૦ ડબલ્યુ પી (૦.૨%), ૨૫ ગ્રામ/૧૦ લિટર પાણીમાં મિશ્ર કરી તે પૈકી કોઈ એક કૂગનાશકનો પ્રથમ છંટકાવ ભૂકીછારા રોગની શરૂઆતમાં અને બીજા બે છંટકાવ ૧૫ દિવસના આંતરે કરવાની ભલામણ કરવામાં આવે છે.

પાક	રોગ	કૂગનાશક	સાાંદ્રતા	કૂગનાશક ની	પાણી માં	પ્રતિક્ષા	સીડ માં
			(185)	માત્રા	મિશ્રણ	સમય	જંતુનાશક
				ગ્રામ અથવા	(લીટર)	( દિવસ )	નાં અવશેષ
				મિલી/લીટર			

2023

		1				T	1	1	1	
	મેથી	ભૂકીછારા	ફેકઝાકોનાઝોલ	૦.૦૦૫	૧૦ મિલી	90	30	BQL		
	(CIB-RC માં આ		૫ ઇસી			લિટર	(અન્ય			
	પાક નો						પાક માં)			
	સમાવેશ		પ્રોપીકોનાઝોલ	૦.૦૨૫	૧૦ મિલી	90	30	BQL		
	કરવામાં		૨૫ ઇસી			લિટર	(અન્ય			
	આવ્યો		e e o ca			10101	પાક માં)			
	નથી )		સલ્ફર ૮૦	9.0	૧૫ ગ્રામ	90				
			ડબલ્યુ પી			લિટર				
4.	Diversity	of fun	gal endophyt	ic comm	unities fr	om pado	ly (Oryza	sativa I	L.) and their	2023
	antagoni	stic activ	vities in <i>in vitr</i>	0						
	The total	thirteen	endophytes we	ere isolate	d from the	paddy G	NR-3 var	iety. All tl	he endophytes	
									Sarocladium	
	oryzae b	y dual	culture technic	que. Resi	ılts clearly	indicate	ed that en	ndophytes	significantly	
	inhibited	the myce	elial growth of	all the thi	ee pathoge	ens and th	neir efficac	cy ranged	from 31 to 85	
	per cent.	Their ef	ficacy was max	kimum ag	ainst the P	yriculari	a oryzae a	and Saroc	ladium oryzae	
	because of	of slow §	growth of thes	e pathoge	ns as com	pared to	Sclerotiun	n oryzae.	Hence all the	
	endophyt	es were	subjected for t	he morph	ological ar	nd moleci	ular identi	fication.	Among all the	
	edophyte	s differer	nt species of As	spergillus,	Penicilliu	m citrinu	m, Trichod	derma har	zianum and T.	
	erinaceur	m showed	d maximum m	ycelial inl	nibition un	der <i>in vit</i>	ro condition	on. Hence	the results of	
	this research can be considered as information for scientific community.									
5.			erent spore harv	_					spore harvest	2022
	of Tricho			ie saime s	olution (11	vi) can be	used for i	maxmuum	spore narvest	
6.			ilms format	ion in	Trichode	rma-Azo	tobacter	interact	tion against	2022
			phaseolina						mmunity that	
	-	_		chrooco					viride (1x10 <sup>6</sup>	
			oduction of Ex						· ·	
	help to e	extract El	PS after 20 da	ys incuba	tion by etl	nanol pre	cipitation.	. The exti	racted EPS @	
	2g/Kg see	eds of bla	ackgram provid	le better c	olonization	n, increas	e plant gro	owth and i	reduce root rot	
			phomina phase							
7.	Suscepti	bility of	medicinal pla	nts to G	armar ( <i>Pl</i>	ectranthi	us barbatı	us Andew	vs.) root knot	2021
		•	dogyne sp.)							
		-	viz., Garo, Ka	•			_	•		
	•		nematode ( <i>Mel</i>	0.	,		und that B	hoyaringa	ani, Senna and	
			ly susceptible							• • • •
8.			hate solubiliz	ing micr	obes in w	heat (T	riticum a	estivum)	under saline	2020
	condition	us								
		It	is informed to	scientifi	c commun	ity to use	e native is	solates Ba	acillus subtilis	
	PSB-S (		(u/ml) + Clade							
	recomme								um phosphate	

	solubilization in the soil with EC up to 3.79 (dS/m).					
9.	Isolation and characterization of plant growth promoting Actinomycetes from rhizospheric soil	2020				
	It is informed to the scientific community that <i>Streptomyces enissocaesilis</i> IB 7.2 fou promotion characters like nutrient solubilization, antagonistic potential, extracellular hydroly hormone production under <i>in vitro</i> conditions					
10.	Evaluation of different substrates for cultivation of oyster mushroom	2019				
	The mushroom growers of South Gujarat are advised to use wheat or paddy straw for the higher production of oyster mushroom, <i>Pleurotus sajor caju</i> cultivation. દક્ષિણ ગુજરાતનાં મશરુમ ઉત્પાદકોને ઢીંગરી મશરુમના (પ્લુરોટસ સજોર કાજુ) વધુ ઉત્પાદન માટે ઘઉં અથવા ડાંગરના પરાળનો ઉપયોગ કરવા ભવામણ કરવામાં આવે છે.					
11.	Investigation of Phylloplane microflora of tomato and banana  Phylloplane microfloras were found maximum in diseased leaves of tomato and banana as compared to healthy leaves. This investigation confirmed that among all the leaf surface mycobiota, <i>Trichoderma viride</i> was found effective against <i>Alternaria solani</i> and <i>Fusarium proliferatum</i> of tomato and <i>Colletotrichum musae</i> of banana.					
12.	Evaluation of different products for the supplementation of phosphorous and potash in sugarcane with graded chemical fertilizers  Sugarcane growers of South Gujarat Heavy Rainfall Zone are recommended to treat the setts of sugarcane before planting with the liquid Acetobacter, PSB and KMB (1x10 <sup>8</sup> cfu/ml) for setts treatment @300ml mixed in 300lit. water/ha for 30 minutes before sowing. Soil applications of each biofertilizers @1000 ml/ha mixed in pulverized soil, first at the time of planting and second at the time of earthing up along with 125:62.5:62.5 NPK kg/ha to get higher cane yield and simultaneously save 50 per cent chemical fertilizers.  Eક્ષિણ ગજુરાતના વધુવરસાદ ખેત આબોફવાકીય વિસ્તારના શેરડીની ખેતી કરતાં ખેડ્ડતોને શેરડીનીનુ વધુઉત્પાદન મેળવવા તથા ૫૦ ટકા રસાયણિક ખાતરની બચત કરવા માટે, દરેક પ્રવાફી જૈવીક ખાતરો; એસીટોબેક્ટર, પી. એસ. બી. અને કે.એમ. બી.(૧x૧૦' સીએફચુ પૃતિ મીલી) ને 300 લિટર પાણીમા મિશ્ર કરી પૃતિ ફેક્ટરે 30 મિનિટ માટે વાવણી પફેલા કટકાની માવજત આપવી .તેમજ રસાયણિક ખાતર ૧૨૫.૧૬.૫ પ્રમાણે ના. ફો. પો. કિલો/ ફે આપવું તેમજ દરેક જૈવિક ખાતર ૧૦૦૦ મીલીને ભરભરી માટી સાથે મિશ્ર કરી પૃતિ ફેક્ટર પુમાણે, પુથમ વાવણી સમયે ચાસમાં અને બીજી	2019				
	જીવક ખાતર ૧૦૦૦  મીલીને ભરભરી માટી સાથે મિશ્ર કરી પ્રાંત  ફેક્ટર પ્રમાણ, પ્રથમ વાવણી સમયે ચાસમાં અને બીજી વખત પાળા ચડાવવાના સમયે જમીનમાં આપવાની ભલમણ કરવામાં આવેછે.					
13.	Evaluation of different products for the supplementation of phosphorous and potash in sugarcane with graded chemical fertilizers  Five times higher concentrations (200ml prepared from 1000ml normal bio fertilizers) of phosphate solubilizing bacteria ( <i>Bacillus megatarium</i> ) and lyophilized Phosphate solubilizing	2019				

	bacteria (5gm prepared from 1000ml of bio fertilizer) can be used as a new formulation of bio	
	fertilizer.	
14.	Evaluation of different products for the supplementation of phosphorous and potash in sugarcane with graded chemical fertilizers	2019
	Conninghemella sp. NAUB-5 fungal isolate can be used for the preparation of bio fertilizers to convert unavailable and fixed phosphorus into available for the plant in the soil for the crop growth.	
15.	Isolation of important microorganisms in biodegrading crop residues	2018
	It is recommended to use <i>Bacillus alkalophilus</i> RR isolate for cellulose decomposition in rice	
	straws as it possess highest cellulose decomposition activity and considerably lowers C:N ratio.	
16.	Mapping the mycogeography of the macromycetes from Dangs	2017
	Biodiversity in fleshy fungi exists in Dangs district. A total no. of 192 fleshy fungi were identified. Out of them, 171 belong to Basidiomycotina, 15 belong to Ascomycotina and 6 from Mycetozoa. The numbers of edible fleshy fungi were 70 out of 186. The major genus of edible fungi were <i>Pleurotus, Ganoderma, Agaricus, Lepiota, Auricularia, Termitomyces, Volvariella, Clitocybe, Cantharellus, Fistulina</i> and <i>Calocybe</i> . From the study of various morphological	

## **E. Publications**

Sr. No.	Publications	Total
1	Practical manuals	10
2	Research papers	140
3	Books/booklets	25
4	Folders	44
5	DVD films on IPDM	12

# F. Students Achievements:

## SRF qualified students -Plant Pathology

Sr. No.	Name of students	Reg. Number	Degree	SRF Qualifying subject	Category & Rank		
SRF qualified during 2019							
1	Lokesh R.	2010117050	M. Sc. Agri.	Plant Pathology	G- 71/ OBC-42		
2	Anjali Suansia	2010117003	M. Sc. Agri.	Plant Pathology	G-62		
3	Sruthy M.	2010111711	M. Sc. Agri.	Plant Pathology	G - 85		
SRF	qualified during 202	3					
1	Divyashree	1010122038	Ph.D.	Plant Pathology	OBC & 2		
2	Shree Laxmi	2010121093	M.Sc. Agri.	Plant Pathology	General &15		
3	Neha Singh	2010121053	M.Sc. Agri.	Plant Pathology	EWS & 4		
4	M Ramya Krishna	2010121043	M.Sc. Agri.	Plant Pathology	ST & 2		
5	Sandhya G	2010121087	M.Sc. Agri.	Plant Pathology	OBC &10		

# **NET** qualified students

Sr.	Name of students	Reg.	Degree	Duration	Subject/s
No.	11 X7 2015	Number			
	g the Year 2017	2010114024	N.C. A .	2014.16	DI (D.4.1
1	Ghevariya T. V.	2010114034	M.Sc. Agri.	2014-16	Plant Pathology
2	Dore R	2010115038	M.Sc. Agri.	2015-17	Plant Pathology
3	Kishan Kumar Sharma	2010115058	M.Sc. Agri.	2015-17	Plant Pathology
4	Bipinchandra Vahunia	2010115015	M.Sc. Agri.	2015-17	Plant Pathology
5	Arjunsinh Rathva	2010115006	M.Sc. Agri.	2015-17	Plant Pathology
6	Chaudhary Dinesh H.	2010115026	M.Sc. Agri.	2015-17	Plant Pathology
7	Chaudhary Mahesh M.	2010115027	M.Sc. Agri.	2015-17	Plant Pathology
8	Kapadiya Rasikbhai Kanubhai	N1- 0123-06	B. Sc. Agri.	2006-10	Plant Pathology
During	g the Year 2018				
1.	Chauhan Rinkikumari C.	1010116008	Ph. D. Agri.	2016-19	Entomology
2	Shinde Manisha	1010113023	Ph. D. Agri.	2013-16	Pl. Pathology
3	Ghevariya Tushar	1010116014	Ph. D. Agri.	2016-19	Pl. Pathology
4	Sangani Mehul J	1010117038	Ph. D. Agri.	2017-20	Pl. Pathology
5	Vaja Sonal J	1010117044	Ph. D. Agri.	2017-20	Pl. Pathology
6	Vasava Kamal I	1010117045	Ph. D. Agri.	2017-20	Pl. Pathology
7	Patel Reena	2010114071	M. Sc. Agri.	2014-16	Pl. Pathology
8	Patel Uma	2010116080	M. Sc. Agri.	2016-18	Pl. Pathology
9	Ramya	2010116089	M. Sc. Agri.	2016-18	Pl. Pathology
10	Savaliya Anil	2010116097	M. Sc. Agri.	2016-18	Pl. Pathology
11	Shekada Maulik	2010116099	M. Sc. Agri.	2016-18	Pl. Pathology
12	Sohaliya Nikunj	2010116101	M. Sc. Agri.	2016-18	Pl. Pathology
During	g the Year 2019				
2	Ghevariya Tushar	1010116014	Ph. D. Agri.	2016-19	Pl. Pathology
3	Gojiya Amit	2010116032	M. Sc. Agri.	2016-18	Pl. Pathology
4	Lokesh R.	2010117050	M. Sc. Agri.	2017-19	Pl. Pathology
5	Thesiya Mayur R.	2010117116	M. Sc. Agri.	2017-19	Pl. Pathology
6	Prajapati Dhara R.	2010117092	M. Sc. Agri.	2017-19	Pl. Pathology
During	g the Year Feb. 2020				
1	Thesiya Mayur Rajeshbhai	2010117116	M. Sc. Agri.	2017-19	Pl. Pathology
2	Reddy Lokesh	2010117050	M. Sc. Agri.	2017-19	Pl. Pathology
During	g the Year Feb. 2023			•	
1	Parmar Mittal C.	1010121021	Ph.D.	2021-24	Pl. Pathology
2	Patel Payal R.	1010121029	Ph.D.	2021-24	Pl. Pathology
3	Parmar Krishna Atulbhai	1010121020	Ph.D.	2021-24	Pl. Pathology
4	Saranya S.	1010120028	Ph.D.	2020-22	Pl. Pathology
5	Vaniya Ravikumar Ganpatbhai	1010120038	Ph.D.	2020-22	Pl. Pathology
6	Rahul Joshi	1010122014	Ph.D.	2023	Pl. Pathology
7	Divyashree	1010122038	Ph.D.	2023	Pl. Pathology
	1 -	L	I		

8	Narsing Laxmi Prasanna	1010122042	Ph.D.	2023	Pl. Pathology
9	Shree Laxmi	2010121093	Ph.D.	2023	Pl. Pathology
10	Neha Singh	2010121053	M.Sc. (Agri.)	2021-23	Pl. Pathology
11	Rathod Sanjana Amrutlal	2010121081	M.Sc. (Agri.)	2021-23	Pl. Pathology
12	M Ramya Krishna	2010121043	M.Sc. (Agri.)	2021-23	Pl. Pathology
13	Sandhya G	2010121087	M.Sc. (Agri.)	2021-23	Pl. Pathology