

## Department of Plant Breeding and Genetics

Sr. No.	Name	Designation
1	<b>Dr. Rehana Niyaria</b>	<b>Associate Professor &amp; Head</b>
2.	<b>Prof. Yogesh V.Naghera</b>	<b>Assistant Professor</b>
3.	<b>Prof. Paresh A. Vavdiya</b>	<b>Assistant Professor</b>



### **Dr. Rehana Niyaria**

Associate Professor (Genetics & Plant Breeding)

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9898940253

#### **Educational Qualification**

Degree	Discipline	Year of Passing	University
Ph. D (GPB) Ag.	Genetics & Plant Breeding	2006	MPUAT, Udaipur
M. Sc (GPB) Ag.	Genetics & Plant Breeding	2000	GAU, S.K. Nagar (BACA, Anand )
B. Sc (Hons) Ag.	Agriculture	1997	RAU, Bikaner (RCA, Udaipur)

#### **Service Experience till date**

Sr. No.	Institute/Office	Designation	No. of years served	Job profile
1.	JAU, Junagadh	Assistant Professor	4 yrs. 2 months	UG/PG Teaching, Research (Plant Tissue Culture & Plant Breeding), Breeder Seed Production.
2.	N.V. Patel College of Pure and Applied Sciences	Assistant Professor	5 yrs. 1 month	UG Teaching, Administrative duties, Student counseling
3.	Shaili Biotech Pvt. Ltd.	Asst. Manager	1 yrs. 2 months	1. Planning and execution of the process for tissue cultured plantlets 2. Planning and monitoring of Research & Development Activities.

4.	N.V. Patel College of Pure and Applied Sciences	Lecturer (Ad-hoc)	4 months	UG Teaching
5.	St. Matthew's Mission School	P.G.T.	3yrs. 5 months	PGT Teaching and administrative responsibilities.

### Seminar/Symposia/Workshop/Training attended

Event	Number attended	Venue	Date	Topic
Conference	06	As per the list attached		
Symposia	05			
Workshop	04			
Training	03			
Seminar	08			
Orientation/Winter/Summer School	02			
<ol style="list-style-type: none"> <li>1. Participated in Silver jubilee symposium on "Plant Genetic Resources Management : Advances and challenges (August 1-4, 2001)"</li> <li>2. Participated in National Conference. Plant Protection - New horizons in the millennium (February, 23-25, 2001).</li> <li>3. Poster presentation at "International conference on vegetables" held at Bangalore (November 11-14, 2002)</li> <li>4. Participated in UGC sponsored national seminar on – "Bioinformatics -emerging Trends"( January 1, 2006)</li> <li>5. Participated in the XX Gujarat Science Congress, (2006)</li> <li>6. Poster presentation at National seminar on "New Horizons Biological sciences" (September 23, 2007)</li> <li>7. Participated in "National Symposium on plant Biotechnology for conservation, characterization and crop improvement". (February 8-10, 2008).</li> <li>8. Poster presentation at XXII Gujarat science congress, held at Bhavnagar. (March 9, 2008)</li> <li>9. Participated in national seminar – "Communications in biomedical and Agricultural sciences" held at Virani science college , Rajkot (September 6, 2008 )</li> <li>10. Poster presentation at State level seminar " Current trends in Environmental Sciences" (September 20, 2008)</li> <li>11. Participated in National level seminar "Passion to Mission in Molecular Biology" (November 28 2008)</li> <li>12. Participated in "International conference on Biomedical and Genomic Research" held at human genetics centre(HGC) Ahmadabad (January 29-31, 2009)</li> <li>13. Participated in 3 days workshop on "Tools and techniques in Bioinformatics and Molecular Biology" Organized by Dept. of biotechnology, Genetics and Bioinformatics , NV Patel College of Pure and applied sciences, VV Nagar. (December 4-6, 2009.)</li> <li>14. Participated in National symposium on Perspective in plant health management, held at BACA ,AAU (December 14-16, 2010)</li> <li>15. Participated in National symposium on "Exploring new horizons in microbial biotechnology- colloquium-2011" at NV P College of Pure &amp; applied scs. ( January 5 2011.)</li> <li>16. Poster Presented in 7<sup>th</sup> ADNAT Convention, International Symposium on Genomics &amp; Biodiversity, CCMB, Hyderabad held (February 23 to 25, 2011.)</li> </ol>				

17. Participated in "Women in Science" held by S.P.University (August 6, 2011.)
18. Best poster award for poster presented at National Conference on Emerging Trends in Chemistry – Biology Interface at Kumaun University, Nainital ( November 03-05, 2011.)
19. Participated in "National Conference for Plant Physiology" (December 13-16,2013)
20. Participated in Workshop on "Medicinal plants for farmers : buyers -seller meet"( 2013)
21. Participated in National conference on " GRISAAS,2015" (December 12-13, 2015)
22. Participated in Workshop on "Advanced Mango farming and Pruning techniques" at Junagadh Agricultural University ( June, 19 2016 )
23. Participated in "National workshop on Pomegranate crop" at Junagadh Agricultural University held on (September 26, 2016 )

#### **TRAININGS :**

1. Short Training "Molecular biology techniques" at Genome Research Centre , MSU. Vadodara in 2008.
2. Teachers Training on "Genomics, Proteomics and Bioinformatics tools for Plant Improvement" at Dept. of Biotechnology, JAU, Junagadh (March 12-19, 2012.)
3. Short course on "Advances in Seed Spices" at SKNAU, Jobner (January 05-14, 2014.)

#### **ORIENTATION /SUMMER /WINTER SCHOOL :**

- 1.Orientation course at UGC Academic Staff College, Vallabh Vidyanagar, Anand (May 2-28, 2011)
2. Winter School "Advances in breeding techniques for vegetable crops" at IIHR, Hessarghetta (October 8 28, 2015)

#### **Publications**

S.No.	Publications	No. of Publications
1.	Research Paper National Journal	03
2.	Research Paper Inter National Journal	04
3.	Workshop / Seminar / Symposia Proceedings	02
4.	Training Manual/Question bank	01
5.	Others (Radio talk, TV talk etc.)	01

#### **No of Professional Societies Membership:**

1. Gujarat Association of Agricultural Scientists (GAAS) Ahemdabad : Life Member.
2. Association for DNA Fingerprinting and associated Technologies (ADNAT), Hyderabad: Life Member.

#### **Research projects handled**

Sr. No.	Project title	PI/ Co-PI	Level (Departmental/ planned)	Status
1.	Induction of somaclonal variation in <i>Allium sativum</i> by callus culture	PI	Departmental	Concluded
2.	Low cost Micropropagation in Banana	PI	Departmental	On going
3.	<i>In vitro</i> screening for salinity tolerance in	PI	Departmental	On going

	onion ( <i>Allium cepa</i> L.)			
4.	Micropropagation in coconut	PI	Departmental	Concluded
5.	Micropropagation of Kankoda (Spine Gourd)	PI	Departmental	On going
6.	Long term effect of continuous application of various levels of N and P on yield of groundnut crop and its effect on the fertility status of soil.	Co-PI	Departmental	On going
7.	Response of groundnut to phosphorus under rainfed condition	Co-PI	Departmental	On going
8.	Development of heat tolerant variety through MAS in chickpea	Co-PI	Departmental	On going

### Number of PG students guided/guiding as chairman/Co-Chairman

1. M.Sc. : 03
2. PhD : -

### Details of Publications

#### [A] Research papers published in National Journal:

1. **Rehana Niyaria** and Bhalala MK (2001). Heterosis and combining ability in ridge gourd. *Indian H. Genet. Resour.* 14: 101-102.
2. **N. Rehana**, S.P.Sharma and Vimal Sharma (2009) "Exploitation of hybrid vigour in bottle gourd" In *Indian J. of Hort*" 526-529
3. .Girish K. Mittal, M.K.Mahatma, R.Bhatnagar and **N. Rehana** (2012) Optimization of the Transesterification Process for Production of Biodiesel from *Jatropha curcas* L. oil. *Indian J Agric Biochem* 25 (2), 134-136

#### [B] Research papers published in International Journal:

4. **N. Rehana** and S.P.Sharma (2007) Combining ability studies in bottle gourd. *In Crop Research* Vol. 33 (1,2,3)
5. Indu, **R. Niyaria** ,V.J.Bhatiya and Akanksha Saxena (2015) Genetic variability for yield contributing traits in mung bean during summer season (*Vigna radiata*(L.) R. Wilczek) *Progressive Research – An International Journal* Volume 10 (special-1): 548-550.
6. Sheena Lukose, **R. Niyaria**, S.L.Godawat and K.B.Shukla (2015) Heterosis for morpho physiological traits associated with drought tolerance in maize. *Progressive Research – An International Journal* Volume 10 (special-1V): 3513-3515.
7. S. Meena, G.K.Mittal, A.C.Shivran, D.Singh, **R. Niyaria**, N.K.Gupta, B.Singh and S.N.Saxena (2016) Water stress induced biochemical changes in fenugreek (*Trigonella foenumgraecum* L.) genotypes *International J. Seed Spices* 6(2):54-63.

**[C] Proceedings :**

8. **Rehana Niyaria**(2015) Functional Genomics in “Proceedings : National Workshop on Genomics, Proteomics and Bio-informatics : Fundamentals to Advanced.St.ThomasCollege ,Kozencherry, Pathanamthitta :1-23.
9. **Rehana Niyaria**(2015) RNA Interference as a tool for gene silencing :Proceedings : National Workshop on Genomics, Proteomics and Bio-informatics : Fundamentals to Advanced. St.ThomasCollege ,Kozencherry, Pathanamthitta 24-35.

**[D] Question bank :**

- **Rehana Niyaria** (2015) Question bank- "Crop Physiology -I" in "Key to success in Agriculture " Dept. Of Agricultural Extension ,COA, JAU, Junagadh

**[E] Abstracts presented in international level seminar/symposium/conference:**

1. **Rehana N** and M.K.Bhalala (2003) Combining ability studies in ridge gourd" In Souvenir - Seminar on advances in genetics and plant breeding - Impact of DNA revolution. Oct 30-31, at UAS, Dharwad.
2. K.B.Katheria., **Rehana N.**, M.K.Bhalala., A.D.Patel and R.R.Acharya (2002)“Heterosis in ridge gourd” in Souvenir - International Conference on Veg, Nov 11-14, at Bangalore.
3. Mittal G. K.;Rajamani, G.; **Rehana N.** and Joshi, A. (2007). Osmoregulatory markers in groundnut genotypes under water deficit conditions. Poster presented in one day National seminar on new horizons in biological sciences, at N. V. Patel College of pure and applied science, VallabhVidyanagar, Anand, Gujarat, 23<sup>rd</sup> Sept., 2007.
4. **Rehana, N.**; Mittal, G. K. and Bhatnager, R. (2008). Toxicity in *Jatropha curcus* L., XXII-Gujarat science congress on Role of communication and information technology in the development of science and technology held at Bhavnagar University, Bhavnagar, Gujarat, 9<sup>th</sup> March, 2008
5. Sushmita Sahoo, Nikita Patel, **Rehana N** and S.K.Sinha (2008) “Focus on plant groups useful in diabetes” In Souvenir) XXII Gujarat Science Congress.
6. Mittal G. K.,**Rehana N.**, Mahatma M. K. and Bhatnagar R. (2011) “Genetic relationship among tolerant and susceptible maize (*Zea mays* l.) genotypes to water stress revealed by SSR markers.”In Abstract Book (P-45): International Symposium on Genomics & Biodiversity; 7<sup>th</sup> ADNAT Convention at CCMB, Hyderabad held from 23 to 25 feb. 2011.
7. Mittal G. K., **Rehana N.**, Sheena Lukose (2011) “Reactive oxygen species(ROS) and antioxidant metabolism among tolerant and susceptible maize genotypes under water stress” page54: In Abstracts & Souvenir; National Conference on Emerging Trends in Chemistry – Biology Interface at Kumaun University, Nainital held from Nov 03-05,2011.

**Other information -**

- Member of the steering committee to organize National level seminar, Intercollegiate competitions and Crash Workshops for Preparation of Entrance of examination. (scientific events.)

- Member of the **IQAC** (Internal Quality Assessment Cell ) for NAAC Accreditation.
- Served as Counsellor and Sectional Co-ordinator and **Counselling Co ordinator** of the counseling cell for students of the college.
- Process owner (Library Services) for ISO Certification and assessment.
- Initiated a Social activity group "Hungry Genes" at NVPAS.
- Served as NSS Programme Officer for June 2012-13.
- As Incharge of the Plant Tissue Culture Laboratory, Prepared and maintained plant tissue culture section of Educational museum (central museum)
- Assistant Rector for Girls Hostel
- Member of Gender committee and student counselor.



## Mr. Yogeshkumar V. Naghera

Assistant Professor (Genetics and Plant Breeding)

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### Educational Qualification

Degree	Discipline	Year of Passing	University
<b>B.Sc. Agri</b>	Agriculture	2008	JAU, Junagadh, Gujarat
<b>M.Sc. Agri</b>	Genetics and Plant Breeding	2010	JAU, Junagadh, Gujarat
<b>ICAR NET</b>	Genetics and Plant Breeding	2013	ASRB-ICAR

### Service Experience till date

Sr. No.	Institute/Office	Designation	No. of years served	Job profile
1	Bank of Baroda	JMG-S-I	3	Agricultural Banking
2	NAU, Navsari	Assi. Professor	3	Teaching, Research and Administration

**Seminar/Symposia/Workshop/Training attended (Year 2013 onwards)**

Event	No. attended	Venue	Date	Topic
Conference	2	Ahmedabad JAU, Junagadh	11-13, March,2010 14-15, March,2009	Global Warming. Agribusiness.
Symposia	1	JAU, Junagadh	22, Feb, 2006	Greenhouse Technology.
Workshop	2	JAU, Junagadh NAU, Waghai	1, March, 2008 30, Nov, 2016	Personality Development. Mashroom Cultivation.
Training	4	SPIPA Ahmedabad NAU, Waghai SDAU, S.K.Nagar  PC Unit, Bengaluru	13-14, Aug, 2015 14-15, March,2016 18 July to 7 Aug- 2016 (21 days) 24 Oct, 2016	DDO-Role and Functions Leadership Allele Mining  Hybridization techniques in small millets
Seminar	1	JAU, Junagadh	20, Feb, 2010	Precision Farming

**Publications**

S.No.	Publications	No. of Publications
6.	Research Paper National Journal	4
7.	Research Paper Inter National Journal	1
8.	Workshop / Seminar / Symposia Proceedings	1
9.	Extension Bulletin	5

**No of Professional Societies Membership :****01 (GAAS)****Research projects handled**

Sr. No.	Project title	PI/Co-PI	Level (Departmental/planned)	Year of approval	Status
1	Isolation of fully male sterile line in Finger millet	Co-PI	Planned	2014	Ongoing
2	Mutation breeding in Finger Millet	Co-PI	Planned	2016	ongoing

## Details of Publications

1. Katariya, H. M., Parmar, V. L., **Naghera, Y. V.** and Ahir, S. D. (2016). Combining ability analysis in cowpea [*Vigna unguiculata* (L.) Walp.]. *Green Farming*, **7** (2) : 486-488
2. **Naghera, Y. V.**, Vaddoria, M. A., Mehta, D. R. and Chakraborty, B. (2015). Genetic diversity analysis in lablab bean [*Lablab purpureus* (L.) Sweet]. *Research in Environment and Life Sciences*, **8(2)** 313-316.
3. **Naghera, Y. V.**, Vaddoria, M. A., Mehta, D. R., Bhatia, V. J. and Vegad, P. M. (2012). Correlation and path coefficient analysis in Indian bean (*Dolichos lablab* L). *GAU Research Journal*, **37(2)**: 82-85.
4. Vegad, P. M., Vaddoria, M. A., Mehta, D. R. and **Naghera, Y. V.** (2012). Genetic analysis in bottle gourd [*Lagenaria siceraria* (Mol.) Standl.]. *GAU Research Journal*, **37(2)**: 89-92
5. Vegad, P. M., Vaddoria, M. A., Mehta, D. R. and **Naghera, Y. V.** (2011). Combining ability analysis in Bottle gourd. *Crop Improvement*, **38(1)**: 13-17.



## Mr. Paresh Amarshibhai Vavdiya

Assistant Professor (Genetics and Plant Breeding)

[pareshvavdiya@nau.in](mailto:pareshvavdiya@nau.in)

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## Educational Qualification

Degree	Discipline	Year of Passing	University
B.Sc. (Agri.)	Agriculture	2011	Junagadh Agri. Uni.
M.Sc. (Agri.)	Genetics and Plant Breeding	2013	Junagadh Agri. Uni.
NET (ASRB)	Genetics and Plant Breeding	2014	ICAR

## Service Experience till date

Sr. No.	Institute/Office	Designation	No. of years served	Job profile
1	Navsari Agri. Uni.	Assist. Professor	> 1 year continue	Teaching, Research



**Seminar/Symposia/Workshop/Training attended**

Event	Number attended	Venue	Date	Topic
Workshop	1	NAU, Waghai	30/11/16	Mushroom bioprospecting & its role in women empowerment & social upliftment in trial area
Training	1	NAU, Waghai	14,15/03/15	Leadership and entrepreneurship development
Seminar	3	JAU, Junagadh	02/10/13	Biosafety and the era of changing needs of the nation
		NAU, Navsari	9,10/01/14	Role of organic farming in climate resilient and sustainable agriculture
		JAU, Junagadh	20/03/12	Agricultural biotechnology

**Academic Achievements**

- Awarded with INSPIRE Fellowship by Department of Science & Technology (DST), GOI

**Publications**

S.No.	Publications	No. of Publications
10.	Research Paper National Journal	8
11.	Research Paper Inter National Journal	5
12.	Workshop / Seminar / Symposia Proceedings	5

**Research projects handled**

Sr. No.	Project title	PI/Co-PI	Level (Departmental/ planned)	Year of approval	Status
1	Evaluation of promising genotypes of finger millet ( <i>Eleusine coracana</i> L.) through gamma rays induced mutation	Dr. H. E. Patil Prof. Y. V. Naghera Prof. J. V. Patel Prof. P. A. Vavdiya	Departmental	2016	Ongoing

## Details of Publications

1. **P. A. Vavdiya**, K. L. Dobariya, C. A. Babariya and M. H. Sapovadiya (2013). Heterosis for seed yield and its components in sesame (*Sesamum indicum* L.). *Electronic J. Plant Breed.*, **4**(3):1246-1250.
2. **P. A. Vavdiya**, C. A. Babariya and K. L. Dobariya (2013). Heterosis studies for quantitative traits in sesame (*Sesamum indicum* L.). *AGRES- An Inter. e-Journal*, **2**(3):392-397.
3. C. A. Babariya, K. L. Dobariya, M. H. Sapovadiya and **P. A. Vavdiya** (2013). Analysis of genetic divergence in spanish bunch groundnut (*Arachis hypogaea* L.). *Progressive Res.*, **8**(Special):339-343.
4. S. V. Sakhiya, L. K. Sharma, G. U. Kulkarni, **P. A. Vavdiya** and C. K. Mandviya (2013). Heterosis for seed yield and yield attributing characters in sesasme (*Sesamum indicum* L.) *Progressive Res.*, **8**(Special):363-366.
5. **P. A. Vavdiya**, K. L. Dobariya and C. A. Babariya (2014). Combining ability and gene action studies for seed yield and its components in sesame (*Sesamum indicum* L.) *Electronic J. Plant Breed.*, **5**(4):688-694.
6. M. H. Darvhankar, G. U. Kulkarni, **P. A. Vavdiya** and H. V. Solanki (2014). Correlation coefficients of component characters with seed yield and their direct effects in path analysis in coriander grown under three environments. *AGRES – An International e-Journal*, **3**(4): 362-367.
7. C. A. Babariya, K. L. Dobariya, M. H. Sapovadiya and **P. A. Vavdiya** (2014). Discriminant function method of selection in groundnut (*Arachis hypogaea* L.). *Electronic J. Plant Breed.*, **5**(1):112-116.
8. H. V. Solanki, D. R. Mehta, V. B. Rathod and **P. A. Vavdiya**.(2015). Heterosis and combining ability for earliness and its related traits in cotton (*Gossypium hirsuitum* L.). *The bioscan*, **10**(4): 2075-2079.
9. M. H. Darvhankar, G. U. Kulkarni, V. V. Baraskar, H. V. Solanki and **P. A. Vavdiya**. (2015). Stability analysis for seed yield and its components in coriander (*Coriandrum sativum* L.) *The bioscan*, **10**(4): 1621-1626.
10. K. S. Mungra, K. L. Dobariya, M. H. Sapovadiya and **P. A. Vavdiya** (2015). Combining ability and gene action for grain yield and its component traits in pearl millet (*Pennisetum glaucum* (L.) R. Br.). *Electronic J. Plant Breed.*,**6**(1): 66-73.

11. M. H. Sapovadiya, K. L. Dobariya, C. A. Babariya, K. S. Mungra, and **P. A. Vavdiya** (2015). Heterosis for seed yield and its components over environments in castor (*Ricinus communis L.*). *Electronic J. Plant Breed.*, **6**(4): 1118-1123.
  12. K. S. Mungra, C. A. Babariya, M. H. Sapovadiya and **P. A. Vavdiya** (2015). Genetic correlation among grain yield and its component traits in pearl millet (*Pennisetum glaucum (L.) R. Br.*). *AGRES- An Inter. e-Journal*, **4**(1):25-28.
  13. C. A. Babariya, L. K. Dhaduk, M. H. Sapovadiya, **P. A. Vavdiya** and K. S. Mungra. (2016). Combining ability studies for seed yield and contributing characters of F<sub>1</sub> and F<sub>2</sub> generations in cowpea [*Vigna unguiculata (L.) Walp.*]. *Electronic J. Plant Breed.*, **7**(3): 649-656.
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