

Dr. Rita Shival Chudasama
Assistant Professor (Botany)
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I would like to work as an academician and researcher in the field of Botany. Botany is broad and multidisciplinary subject. I am interested to learn and apply advance techniques developed in this field for the study of plants and its diversity.

Education

Ph.D. (Plant Science) from Bioscience Department, Saurashtra University, Rajkot, March 2008

Title: "Influence of light on endogenous hormonal changes and associated metabolism during growth and development of leguminous seed"

M.Sc. (Plant Science) from Bioscience Department, Saurashtra University, Rajkot, March 2003 with 67.5 % (University 3rd rank)

B.Sc. (Microbiology) from M V M Science and Home Science College, Saurashtra University, Rajkot, March 2001 with 62%

*** RECOGNIZED AS UG AND PG TEACHER IN BOTANY FROM SAURASHTRA UNIVERSITY**

UG (Jodan/3/Purn Samay/Purv. M./356/2006), DATE – 9/3/2006

PG (PG/A/Manyata/1892/2012), DATE – 5/7/2012

*** RECOGNIZED AS UG TEACHER IN BOTANY FROM GUJARAT UNIVERSITY
No.academic/adhyapak/03/55037/2023, DATE – 29/03/2023**

Professional Position

- Assistant Professor in Botany, Government Science College, Gandhinagar from 11th March 2019 till date

- Assistant Professor in Botany, H. and H. B. Kotak Institute of Science, Rajkot from 10th September 2018 to 9th March 2019

- Assistant Professor in Botany, Bahauddin Science College, Junagadh from 19th September 2013 to 8th September 2018
- Assistant Professor in Botany, Gyanyagn College of Science and Management, Rajkot from 5th July 2005 to 18th September 2013

PG teaching experience

Worked as a visiting faculty for

- M.Sc. Plant Biochemistry (Biochemistry department, Saurashtra University, from 2005 - 2008)
 - M. Sc. Microbiology (M. & N. Virani Science College, Rajkot from 2007 - 2013)
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Profile

Core competencies

Communication Skill, Problem Solving, Team Work, Hard Work and Work Planning

Technical skills

Plant Tissue Culture, Immunology, Plant Biochemistry, Plant Physiology, Plant Anatomy and Morphology, Plant Taxonomy, Plant Biotechnology

Paper Publications

14 research papers published

Three Research papers have been published in National Journals of repute

Eleven Research papers have been published in International Journals of repute

Refer Annexure 1 for details

Book publication

Applied Botany (2014), B.Sc. (Sem IV) as per Saurashtra University Syllabus, Ekta Publication and Co. ISBN - 978-93-84683-25-2

Book Chapter

'Common wild edible foods in weekly tribal market' (2022) B L Majula, Asim Panda, Rita Shivilal Chudasam, Sanath Kumar N, Sugimani Marndi and Sanjeet Kumar, in: Indigenous Traditional Knowledge, ISBN: 978-81-955847-0-, page 16-21

Presentation in Conferences/Seminars/Workshops

Refer Annexure 2 for oral and poster presentation in National and International conferences/Seminars and Symposia

Workshop:

Worked as a training assistant in workshop of

- **“Basic techniques in plant tissue culture”** 2nd to 11th June, 2005, organized by VIRSACO, Rajkot
 - **“Basic techniques in plant tissue culture”** 2nd to 8th June, 2006, organized by VIRSACO, Rajkot
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Training and FDP:

1. Participated in: **“Multi-institutional teachers training program in Molecular biology and Bioinformatics”** 21st Feb – 1st March, 2006, organized by GSBTM, Gandhinagar.
2. Participated in: **DBT sponsored short term training course on ‘Molecular Markers and their Applications in Plant Sciences’** 2-22 February, 2010, organized by Botany department, Pune University.
3. Participated in: **DBT sponsored faculty development program on ‘Workshop in Bioinformatics’**, 24 – 29 September, 2011, organized by Biotechnology department, Shree M & N Virani Science College, Rajkot.
4. Participated in refresher course **‘CELL AND MOLECULAR BIOLOGY TECHNIQUES’** organized by Indian Academy of Science, National Academy of Sciences, Indian National Science Academy and TIFAC, Manipal Life Sciences Centre, **Manipal University from 23rd January to 4th February, 2012.**
5. Participated in One week **Faculty Development Program in Botany** organized by KCG, Ahmedabad from 14 – 18 March, 2016
6. Participated in Training of Teachers on **‘Fundamental and Applications of Remote Sensing and GIS’**, Botany Department, M G Science College, Ahmedabad
7. Participated in Online **Certificate Course on IPR**, organized by i-Hub, SSIP, Education Department of Gujarat from 6th July – 14th September, 2020

8. Participated in Online Training on '**Udayam E-content Development**', organized by KCG ahemf=dabad and Education Department of Gujarat from 28th July – 18th August, 2020
 9. Participated in one week online training on '**Medicinal Plants**' organized by Ambika Prasad Research Foundation, Odisha from 15th March – 22nd March, 2022
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Award:

- Received '**Young Scientist Award**' from Indian Society for Plant Physiology - 25th November, 2005
 - Received '**Outstanding Reader- Faculty**' award, 8th February 2011 (from Library and Learning Centre, Gyanyagna College of Science and Management)
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Invited for guest lecture

- Invited as subject expert in workshop on **Plant tissue culture and Molecular Biology** at department of Biotechnology, M. & N. Virani Science College, Rajkot (8/6/11 to 14/6/11)
 - Delivered a lecture on '**Somatic Embryogenesis and Meristematic Culture**' Invited by Biochemistry department, Shree M. & N. Virani Science College in a UGC Sponsored lecture workshop on Plant tissue culture (2/12/11)
 - Delivered a lecture on '**General Classification of Plant kingdom**' in crash workshop for undergraduate students organized by GSBTM, Gandhinagar and Shree M & N Virani Science College, Rajkot (3/5/12)
 - Delivered a lecture on '**Morphology and Anatomy of Plants**' in crash workshop for undergraduate students organized by GSBTM, Gandhinagar and Shree M. & N. Virani Science College, Rajkot (7/5/13)
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References

Prof. V.S. Thaker (Ph.D. Guide), Bioscience Department, Saurashtra University, Rajkot
Prof. S.P. Singh, Head, Bioscience Department, Saurashtra University, Rajkot

Annexure 1

1. Nisha Pujara, Rinku Makawana, **Rita Chudasama** and Vrinda Thaker (2004) Free radical scavenging activities of callus cell induced from embryonic tissue of *Azadirachta indica* and other parts of the plant. **Bulletin of Biological Sciences** 1: 61- 65.

2. **R.S. Chudasama**, S.H. Pansuriya, S.B. Bagatharia and V.S. Thaker (2005) Callus induction and cytokinin specific organogenesis in *Morus alba* leaf discs. **Asian Journal of Microbiology Biotechnology and Environmental Sciences** 7 (4): 899-902.
3. **R.S. Chudasama**, S.H. Pansuriya, S.B. Bagatharia & V.S. Thaker (2005) Different effects of BAP and KiN on protein profiles of *Morus alba* leaf callus. **Journal of Agricultural Science Research** 66(235): 99-106.
4. Pansuria S.H., **Chudasama R.S.**, Bagatharia S.B. and Thaker V.S. (2006). Production of diphenol and monophenol compounds from the leaf callus of *Morus alba* and studies on their antibacterial activity. **Indian Journal of Plant Physiology** 11:36-40.
5. **R. S. Chudasama** and V. S. Thaker (2007) Free and conjugated IAA and PAA in developing seeds of two varieties of Pigeon pea (*Cajanus cajan*). **General and Applied Plant Physiology** 33 (1): 41-57.
6. **Rita S. Chudasama** and Vrinda S. Thaker (2007) Relationship between Gibberellic acid and growth parameters in developing seed and pod of pigeon pea. **Brazilian Journal of Plant Physiology** 19(1):43-51.
7. **Rita S. Chudasama** and Vrinda S. Thaker (2007) Relationship between endogenous Abscisic acid and dry matter accumulation in developing seed and pod of Pigeon Pea (*Cajanus Cajan*). **World Journal of Agricultural Science** 3(6): 833-842.
8. Meera Kanasagra, Vaishali Pawar, Kunjal Bhatt, **Rita Chudasama** and Vrinda Thaker (2008) Role of cationic and anionic peroxidase in browning of multiple shoots of Carnation (*Dianthus caryophyllus* L.) *in vitro*. **Indian Journal of Plant Physiology** 13(3): 317-319.

9. Manisha G. Ranpariya and **Rita S. Chudasama** (2010) Evaluation of total phenols and antibacterial activity of certain drug plants against some bacterial species. **Journal of Applied and Natural Science** 2(1): 140-144.
10. **Rita S. Chudasama** and Vrinda S. Thaker (2010) Role of cell wall components in sink size development in seeds of *Cajanus cajan*. **Indian Journal of Agricultural Research** 44(4): 259-266
11. Hetal L. Vaghasia, Ghanshyam M. Patel, **Rita S. Chudasama**, Kunjal R. Bhatt (2011) Screening of IAA from Rhizosphere microflora of field crops. **Bioscience discovery** 2(1): 94-100
12. Ghanshyam M. Patel, Hetal L. Vaghasia, Kunjal R. Bhatt and **Rita S. Chudasama** (2011) Screening of potent antioxidant compounds from selected plants. **Journal of Scientific Agriculture Research** 72 (259): 5-15
13. Kiran S. Chudasama, **Rita S. Chudasama** and Vrinda S. Thaker (2014) Understanding the effect of seed pathogenic bacteria in release of conjugated forms of endogenous hormones from the seed of *Cajanus cajan* by Indirect ELISA. **Science Research Reporter** 4(1): 113-118
14. Chudasama K S, Bhatt P R, **Chudasama R S**, Thaker V S (2023) Changes in Phytohormones levels in normal and *Ochrobactrum anthropi* infected Almond (*Prunus dulcis*) seeds: A novel mechanism of Plant Microbe Interactions. **Journal of Soil Science and Plant Physiology** 5(1): 1-5

Annexure 2

Oral Presentations:

1. Role of cell wall components in determination of sink capacity in seeds of *Cajanus cajan*. In: National seminar on plant physiology. 23-25 Nov. 2005 (Navasari Agricultural University, Navasari)
2. Screening of some medicinal plants of Saurashtra region for antioxidant activity. In: UGC-DSA National conference on Bioresources: Utilization and Conservation. 17-18 Feb. 2006 (Department of Biosciences, Saurashtra University)
3. Relationship between water content and Gibberellic acid in pod development of *Cajanus cajan*. In: Golden jubilee conference on challenges and emerging

- strategies for improving plant productivity. 12-14 Nov. 2008 (Indian Agricultural Research Institute, New Delhi)
4. Screening of antioxidant compounds from some plants. In: XXIV Gujarat Science Congress. 21st March 2010 (Gujarat University, Ahmedabad)
 5. Changes in endogenous hormonal levels in normal, abnormal and infected Almond seeds. In: National conference of Plant Physiology. 25-27 Nov. 2010 (Banaras Hindu University, Varanasi)
 6. *In vitro* antifungal activity of Rhizobacteria against *Rhizoctonia* and *Sclerotinia* Species: Biocontrol Approach. In: National conferences of plant physiology on current trends on plant biology research on 13-16th December 2013 (Directorate of Groundnut Research and Junagadh Agricultural University, Junagadh)

Poster Presentations:

1. Influence of different plant growth regulators on protein profiles in callus cells of white Mulberry *Morus alba* L.). In: National conference on environmental biology. 17-18 Oct. 2002 (Bioscience department, Saurashtra University)
2. Influence of sugar concentration and relative change in invertase activities in callus grown from embryonic tissue of *Azadirachta indica*. In: National seminar on environmental management and its impact on national development. 28-29 Feb. 2004 (Birla College, Kalyan, Maharashtra)
3. Selection of cell lines adaptive to various sucrose concentrations in *Azadirachta indica* and evaluation of relative changes in invertase and sugars levels. In: XVIII Gujarat Science Congress, 13 March 2004. (Saurashtra University)
4. Screening of cell lines adaptive to higher sucrose concentrations in the leaf callus of *Gymnema sylvestre*. In: XVIII Gujarat Science Congress, 13 March 2004. (Saurashtra University)
5. Free radical scavenging activities of callus cell induced from embryonic tissue of *Azadirachta indica* and other parts of the plant. In: International workshop on recent trends in environmental science. 24- 26 April 2004. (Jamia Hamdaard University, New Delhi).
6. Induction of cell lines for secondary metabolites production from leaf tissue of *Gymnema sylvestre* and its antibacterial activity. In: international workshop on

recent Trends in Environmental Science. 24- 26 April 2004. (Jamia Hamdaard University, New Delhi).

- 7 Screening of cell lines from *Azadirachta Indica* And *Gymnema Sylvestre*. In: UGC-DSA National conference on Bioresources: Utilization and Conservation. 17-18 Feb. 2006. (Saurashtra University)
- 8 Estimation of endogenous content of free and bound GA in infected seeds of *Cajanus cajan*. In: National conference on Bioresources: Utilization and conservation 17-18 Feb.2006. (Saurashtra University)
- 9 Influence of light intensities on acid and alkaline phosphatase activities in epicotyls of *Cajanus cajan*. In: National seminar on plant physiology 29-30 Nov. & 1 Dec. 2007. (Dr. B. S. Konkan Krishi Vidyapeeth, Dapoli)
- 10 Cleavage of conjugated hormones in the seed by pathogenic organism. In: National seminar on plant physiology. 29-30 Nov. & 1 Dec. 2007. (Dr. B. S. Konkan Krishi Vidyapeeth, Dapoli)
- 11 Release of conjugated forms of phytohormones in seed by bacterial cells. In: Golden jubilee conference on challenges and emerging strategies for improving plant productivity. 12-14 Nov. 2008 (Indian Agricultural Research Institute, New Delhi)
- 12 Antibacterial activity of some selected medicinal plants. In: National symposium on recent trends in cellular research. 9th March, 2009 (Department of Chemistry (Biochemistry, Saurashtra University, Rajkot)
- 13 Screening of IAA producing organisms from the selected field crops soil. In: XXIV Gujarat Science Congress. 21st March, 2010 (Gujarat University, Ahmedabad)
- 14 Influence of bacterial colonization on seed germination. In: UGC sponsored one day national level seminar on "Recent Advances in Microbial Technology", 28th February, 2011 (Department of Microbiology, Shree M. and N. Virani Science College, Rajkot)
- 15 Screening of IAA producing bacterial strains and influence of its colonization on pulses seed germination. In: International Conference on "Perspectives in Phyllosphere Biology", 15-17 February, 2012 (Amity Institute of Biotechnology, Amity University, Uttar Pradesh)

- 16 Screening of rhizobacteria for its antagonistic effect against *Aspergillus niger*. In: 2nd Indian group meeting on “Recent Developments in PGPR for Sustainable Agriculture”, 22-23 October 2012 (Asian PGPR Society for sustainable Agriculture and Department of Biochemistry, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat)
- 17 Biocontrol potential of rhizobacteria against plant pathogenic fungi. In: UGC sponsored national level conference on “Bioscientific Technologies – An Elixir for research in 21st century”, 2nd February, 2013 (Department of Biochemistry, Shree M & N Virani college, Rajkot, Gujarat)
18. Preliminary Phytochemical Analysis of *Adhatoda vasica* and *Nyctanthus arbortritis*. In: 9th National level Science Symposium on 14th February, 2016, Christ College, Rajkot
19. Role of PGPR in Plant Growth Improvement. In: UGC-CAS National Conference on Biodiversity and Bioresource Utilization on 9-10th March, 2017, Bioscience Department, Saurashtra University, Rajkot

Participation in National Webinars/ E-conferences and workshops

1. April 29 and 30, 2020, ‘Introduction to Research Design – From Theory to Practice’ organized by Elphinstone College, Mumbai
2. May 20, 2020, ‘Molecular Taxonomy and DNA Barcoding: Concepts, Methods and Applications’ organized by R D and S H National College and S W A Science College, Mumbai
3. June 5, 2020, ‘Covid-19- Science from Nature’ organized by Bhakta Kavi Narsinh Mehta University, Junagadh
4. June 18, 2020, ‘Probiotics and Immunity: A long but interesting story’ organized by Christ College, Rajkot
5. June 25, 2020, ‘The great role of Botanist in High Quality Authentic Ayurvedic/Herbal Medicine’ organized by Department of Botany, EGRA college, West Bengal
6. August 19, 2020, ‘Avoid Plagiarism in Research: Why and How?’ organized by G M Women’s College, Mumbai
7. October 15, 2020, ‘National webinar on Phytochemicals: Everything the plant have that you want’ organized by M. G. Science College, Ahmedabad

8. January 3, 2021, '**Man vs Microbes: The story of COVID-19**' organized by department of Microbiology, Government Science College, Gandhinagar
9. International E-conference on '**Environment sustainability and Teaching tools in Covid-19 scenario**' May 19, 2020 organized by Jagadambha college of Engineering and Technology, Maharashtra
10. Participated in UGC sponsored workshop on **National Education Policy (NEP)**, 22nd June, 2022 organized by Sardar Patel University, Vallabh Vidyanagar

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