

## Bio Data

- Name : Dr. (Mrs.) Rekha Gupta
- Husband's name : Dr. Manoj Gupta
- Date of Birth : 13<sup>th</sup> May 1962

### Educational Qualification:

Degree	Year	Subject	Percentage	University
M.Sc	1984	Botany *	66%	Delhi University
M.Phil.	1986	Botany	73%	Delhi University
Ph.D.	1990	Botany		Delhi University

\* - Specialization in (i). Genetics and Plant Breeding (ii). Applied microbial Ecology

### • Fellowships:

JRF	Delhi University	UGC	1986-1988
SRF	Delhi University	UGC	1988-1989
RA	NCL, Pune	CSIR	1991-1996
SRA	Pune University	CSIR	1997-1999

### • Other Qualification:

- **Recognized guide** for M.Phil. and Ph.D. of University Pune ( 2005-2008) in the subject of Botany and in the subject of Biotechnology from 2017 – 2022.
- **Member of Board of Studies (BOS) Biotechnology** Pune University (2012-2014)  
And from **2018**
- A certificate course in Animal Tissue culture from University of Pune

### • Field of Specialization : Plant Biotechnology, Plant Tissue Culture, Applied Microbiology, Plant Sciences

### • Research Projects completed

- Major Research project Funded by ISRO Govt. of India (2011- 2014)
- Minor Research project Funded by BCUD, Savitribai Phule Pune University (2009-2011)

- **Teaching Experience:**

**Pune University** (1997 – 1999): M.Sc. (Part I & II) Sub- Mycology (spl.) Quantitative analysis in Biological sciences.

**Fergusson College, Pune** (1999 – 2001): B.Sc. (F. Y., S.Y., T.Y.) Sub. Molecular Biology, Plant Protection, Tissue culture, Bio Statistics, Morphology, Cytogenetics, Biotechnology, Botany.

**Wadia College, Pune** (Dec. 2001 ) S.Y. B.Sc sub. Plant Physiology.

DES RESOLVE (2001 – 2002) Certificate courses in Biotechnology.

**Modern College Ganeshkhind, Pune** (2002 - onwards). B.Sc. (F.Y., S.Y., T.Y. Biotechnology)  
**M.Sc.** Biotechnology, Plant Biotechnology, Cell biology

**Other Achievements:**

- Member of selection panel (subject Expert) for selection of lecturers at various colleges under Pune University
- Experience of setting up of Biotechnology laboratory at modern college, Ganeshkhind, Pune.
- Invited member of Board of Studies (Biotechnology) Pune University.
- Examiner and paper setter for B.Sc (biotech), Pune University.
- Examiner and paper setter for M.Sc (biotech), Pune University.
- Chairperson and coordinator for S.Y.B.Sc. (Biotech) examinations.
- Chairperson of Examination Committee, S.Y. B.Sc. (Biotechnology), Pune University (2006-2007).
- Chairperson and member for Lab certification committee to D.Y. Patil college, Akurdi , K.T.H.M. Nasik , Sihagad institute, Fergusson college Pune .
- Chairperson and member for Lab certification committee for B.Sc. (Biotech) to New Arts college, Ahmadnagar, KTHM college Nasik.
- Member for LIC committee for BSc. Biotechnology to V.P.College Pravranagar, and H.P.T.R.Y.K college, Nasik , K.T.H.M. Nasik , Sihagad institute, Fergusson college Pune, AbaSaheb Garware college Pune, New Arts college, Ahmadnagar, School of Biotechnology, Vidya Pratishthan Baramati.
- Chairperson and member for Lab certification committee to D.Y. Patil , Akurdi , K.T.H.M. Nasik , Sihagad institute Pune.

- Member for LIC committee for MSc. Biotechnology to V.P.College Pravranagar, , Fergusson college Pune, AbaSaheb Garware college Pune, New Arts college, Ahmadnagar, School of Biotechnology, Vidya Pratishthan Baramati.
- Member for LIC committee for recognition of research lab at Praj Industries, School of Biotechnology, Vidya Pratishthan Baramati

**Publications:** Research Papers- More than 20 research papers in Journals of National and International repute (List attached).

**Books:**

Basic Biosciences – Botany	Vision Publication	2004
Revised Basic Biosciences – Botany	Vision Publication	2005
Microscopy and use of computer	Vision Publication	2004
Fundamentals of Botany	Vision Publication	2004
Basic Biosciences – Botany	Vision Publication	2008

**Conference/Symposium attended:** Participated in Various National and International Seminars and Workshops (List attached).

**Research Experience:** I have about 23 years of research experience in the field of Biotechnology, Applied Microbiology, Plant Biotechnology

**Specialization in:** Plant Tissue Culture techniques

- Mycorrhizal Techniques
- Soil analyses
- Stress related studies
- Biodegradation methods
- Plant related studies

**Research Publications:**

1. Rekha Rani and K.G. Mukerji 1986. Influence of VA mycorrhizal inoculation on growth of Zea mays and Avena sativa. J. Rec. Adv. Appl. Sci.1:100 – 102.
2. Rekha Rani 1985. Ectomycorrhiza . Botanica 35: 68-69.
3. Rekha Rani and K.G. Mukerji 1987. Mycorrhizal status of some ornamental plants at their reproductive and vegetative stage. Acta Botanica Indica. 15: 311 – 313.
4. Rekha Rani 1987. VAM fungi and their utility Botanica 37: 71-73
5. Rekha Rani and K.G. Mukerji 1988. Indian Vesicular Arbuscular mycorrhizal fungi. In Proc. Nat. Workshop on Mycorrhiza JNU Delhi, pp 166 – 180.

6. Rano jagpal, Rekha Rani, mamta bali and K.G. Mukerji 198. Morphology and anatomy of Endomycorrhizal fungi. . In Proc. Nat. Workshop on Mycorrhiza JNU Delhi, pp 190 – 210.
7. Rekha Rani and K.G. Mukerji 1988. Distribution of Mycorrhizal fungi in some Indian soil. In Proc. Nat. Sym. Fungal Ecology in Relation to Human welfare, Hyderabad.
8. Rekha Rani and K.G. Mukerji 1988. The distribution of mycorrhizal fungi in India. Acta Microbiologica Hungarica. 37: 3 – 7.
9. Rekha Rani and K.G. Mukerji 1988. Vesicular Arbuscular mycorrhizal fungi, Factors affecting distribution. Microbios CRC press 72 – 78.
10. Rekha Rani and K.G. Mukerji 1988. TaxONOMY OF Indian Vesicular Arbuscular mycorrhizal Fungi. In Proc. Asian Conference on Mycorrhiza, Madras, India, pp 103 -105.
11. Rekha Rani and K.G. Mukerji 1988. Effect of VA mycorrhiza inoculated on roots of Zea mays In proc. Plant Roots and their environment Uppsala Univ. Sweden.
12. Mukerji K.G. Rano jagpal, Mamta bali and Rekha Rani 1988. Importance of Mycorrhiza for roots. In proc. Plant Roots and their environment Uppsala Univ. Sweden.
13. **Rekha Rani** and K.G. Mukerji 1989. Mycorrhizal distribution in India. Mycorrhiza News letter 1(4): 1 -2.
14. **Rekha Rani** and K.V. Krishnamurthy 1994. Receptivity of various wheat cultivar to VA mycorrhizal inoculations. J. Phytological Research 7 (2): 183- 187.
15. Mehta U., Hazra S., **Rekha Gupta**, Dhage and Krishnamurthy K.V. 1994. Tissue Culture of ornamental and orchids at NCL. In National seminar on ornamental, Horticulture and Environment". By Agric. Hort. Soc. India Calcutta.
16. **Rekha Gupta** 1995. Plant Production and improvement through mycorrhiza and Plant Tissue Culture Techniques. In. Biotechnological Application plant Tissue Culture Techniques pp. 9- 10.
17. Mehta U., Hazra S., **Rekha Gupta**, Dhage and Krishnamurthy K.V. 1994. Tissue Culture of orchids and ornamental plants In Biotechnological Application plant Tissue Culture Techniques pp. 1- 4
18. **Rekha Gupta** and K.V. Krishnamurthy 1996. Response of mycorrhizal and non-mycorrhizal *Arachis hypogaea* to NaCl and acid stress conditions. Mycorrhiza 6: 145 – 149.
19. Dhage A.B. **Rekha Gupta**, Mehta U. Hazra S. and K.V. Krishnamurthy 1996. Propagation of ornamental plants by Tissue Culture. In. Symposium on Genetics and Plant Breeding Research: Present and Future strategies". Maharashtra Soc. of Genetics and Plant Breeding. Rahuri. Pp. 22 – 23.
20. **Rekha Gupta** 1996. Inoculation and Establishment of mycorrhizal fungi in micropropagated Eucalyptus: Mycorrhiza 7. pp 140-141.
21. **Rekha Gupta** and K.V. Krishnamurthy 1996. Response of mycorrhizal and non mycorrhizal *Arachis hypogaea* to fertilizer, acidic and alkaline stress conditions. In. 2<sup>nd</sup> International Crop Science Congress on "Crop productivity and shaping the future" pp.207
22. **Rekha Gupta** 1997. Response of AM on *Helianthus annuus* Plant under salt stress condition. In. national Symposium on "Microbes in Plant Improvement and environment protection" at Delhi University pp. 47.
23. **Rekha Gupta** and P.K. Jite 1998. Influence of Arbuscular Mycorrhizal Fungi on *Arachis hypogaea* under saline and alkaline stress conditions. International Symposium on "Ecology of fungi". organized by International Mycological Association committee for Asia/mycological society of India. 22<sup>nd</sup> Jan 1998.
24. Ashwini C Makhale , Parikshit A Bhamburkar , **Rekha Gupta** , Aditi Deshpande ; **2011** ; Isolation of alkalophilic protease producing bacteria from soil and optimization of

- parameters for protease activity ; Asian Journal of Microbiology , Biotechnology and Environmental Sciences ; Vol 13 , No(2); 371-376
25. Adwant, R, Mahalunkar SA and **Rekha Gupta 2012**. To study the effect of chemical pesticide and biopesticide on Fenugreek *Trigonella foenum graecum*. National conference on “Birds Eye View of Biosciences research and Academics – 2012”. organized by MGM-IBT and DBT- JNEC, Aurangabad.
  26. Borkar P., Diwanji G, Yewale D., Mahalunkar SA and **Rekha Gupta**. 2012. Biodegradation and decolorization of Malachite Green by *Bacillus*, *Pseudomonas*, *Actinomyces species*. National Seminar on “Recent Advances in Chemical and Environmental Sciences”. organized by P.D.E.A.’s Prof. Ram Krishna More College Akurdi Pune.
  27. **Rekha Gupta** and Shobha Soni 2012. Physiological and Biochemical studies on effect of perchlorate stress on Eucalyptus Plant National Seminar of Plant Physiology on “Physiological and molecular approaches for development of Climate Resilient crops” organized by Indian society of Plant Physiology, December 2012.
  28. **Rekha Gupta & Shobha Soni 2014** “Studies on Rhizoremediation of perchlorate and its effect on physiological and biochemical parameters of Peltophorum plant in presence of mycorrhiza” at International conference on Environmental Conservation Adopting new technologies” organized by Modern College, Shivaji Nagar ( 28<sup>th</sup>-29<sup>th</sup> January 2014) published in National Journal-“Environment Observer”, ISSN No. 2320-5997, Vol.18. **Received 2<sup>nd</sup> Prize**
  29. **Rekha Gupta & Shobha Soni 2013**. “Studies on effect of perchlorate on growth, physiological and biochemical parameters of Populus plant" in International Conference on Advances in biotechnology and Bioinformatics organized by D.Y.Patil University, Pune (25-27 Nov, 2013) BRSI ISBN- 978-81-926619-1-9.
  30. **Rekha Gupta & Shobha Soni 2014** “Green tool for uptake and depletion of perchlorate from soil” presentation at National conference on Biosciences and Health Engineering: Current Scenario BHE 2014, organized by Department of Biosciences and Technology, Defense Institute of Advanced Technology (DU), Pune.
  31. **Rekha Gupta** and Shobha Soni 2012. “Physiological and Biochemical studies on effect of perchlorate stress on Eucalyptus Plant” in National Seminar of Plant Physiology on “Physiological and Molecular Approaches for Development of Climate Resilient Crops ( 12 Dec, 2012) organized by Department of crop physiology, Acharya N.G. Ranga Agricultural University and Indian Society for Plant Physiology, New Delhi.
  32. **Rekha Gupta** and Shobha Soni 2015. “Studies on phytoremediation of perchlorate and its effect on physiological, biochemical and growth parameters of eucalyptus plant. In **International journal of agriculture, Environment and Biotechnology 8 (2) 335-346**.
  33. Rekha Gupta and Aditi Deshpande 2014. “Degradation and Decolorization of synthetic dye” *Asian journal of Microbiology, Biotechnology & Environmental science* Vol 16, 641-646.
  34. **Gupta, Rekha**; Prathemesh, Madhuri Rathi, Nikhil N Jadhav 2015. isolation/characterization and identification of endophytic bacteria by 16S rRNA partial sequencing technique from roots and leaves of Prosopis cineraria plant. *Asian Journal of Plant Science and Research 5*, 335-346
  35. Gupta, Rekha; Kedari, Ashwini 2015. Comparative studies on phytochemical analysis, relative antioxidant potential and free radical scavenging activity from different parts of plant Tridax. *European Journal of Biotechnology and Bioscience* vol. 3

36. Ashwini Kedari, **Rekha Gupta** 2017. Evaluation of hemostatic and antimicrobial ability of different parts of plant *Tridax procumbens* with phytochemical screening. *International Journal of Plant, Animal and Environmental Sciences* **6(4)**.



