

CURRICULUM VITAE

Dr. IRAM SIDDIQUE

(Assistant Professor)

Department of Botany and Microbiology

College of Science

King Saud University, P. O. Box 22452

Riyadh, 11495, Saudi Arabia

Specialization: Plant Biotechnology (Plant Tissue Culture)

Present Position: Working as an **Assistant Professor** in the Department of Botany and Microbiology, King Saud University, Riyadh, Kingdom of Saudi Arabia.

Research Project: **CO-PI** in a Research group project funded by Deanship of Scientific Research, King Saud University, Riyadh, KSA.

Research Publications:

Papers Published in International Journals:

1. Bokhari NA, **Siddique I** & Perveen K (2016) Preculturing effect of thidiazuron on *in vitro* shoot multiplication and Micropropagation round in *Capparis decidua* (forsk.) an important multipurpose plant. **Acta Biologica Hungarica** 67: 297-304.
2. Perveen K, Bokhari NA, **Siddique I** & Siddiqui I (2016) Influence of soil types on the growth parameters, essential oil yield and biochemical contents of *Mentha arvensis* L. **Journal of Essential Oil Bearing Plants** 19: 76-81.
3. Bokhari NA, Siddiqui I, Perveen K, **Siddique I** & Soliman DAW (2015) Mycocidal ability of *Toona ciliata* against *Rhizoctonia solani*. **The Journal of Animal and Plant Sciences** 25: 1477-1481.
4. **Siddique I**, Bokhari NA, Perveen K & Siddiqui I (2015) Influence of plant growth regulators on *in vitro* shoot multiplication and plantlet formation in *Cassia angustifolia* Vahl. **Brazilian Archives of Biology and Technology** 58:686-691.
5. Bokhari NA, **Siddique I**, Perveen K, Siddiqui I & Wahibi MS (2014) Synthetic seed production and physio-biochemical studies In *Cassia angustifolia* Vahl.- a medicinal plant. **Acta Biologica Hungarica** 65: 355-367.

6. Bokhari NA, Siddiqui I, Perveen K, **Siddique I**, Wahibi MS, Soliman DAW & Moodi Al-Subeie (2014) Potential of Different Parts of Neem (*Azadirachta indica*) Extracts in controlling *Rhizoctonia solani* Infestation. **International Journal of Agriculture and Biology** 6: 639- 643.
7. Bokhari NA, Perveen K, Siddiqui I, **Siddique I**, Wahibi MS, & Soliman DAW (2013) Antifungal activity of *Citrullus colocynthis* against *Fusarium oxysporum*, *Alternaria alternata*, *Macrophomina phaseolina* and *Colletotrichum musae*. **Journal of Pure and Applied Microbiology** 7: 2981-2986.
8. Bokhari NA, Siddiqui I, Perveen K, **Siddique I**, Rizwana H & Soliman DAW (2013) Management of anthracnose of banana by UV irradiation. **The Journal of Animal and Plant Sciences** 23: 1211-1214.
9. **Siddique I**, Bokhari NA, Perveen K, Siddiqui I & Anis M (2013) Pre-Culturing of nodal explants in thidiazuron supplemented liquid medium Improves *In vitro* shoot multiplication of *Cassia angustifolia* . **Acta Biologica Hungarica** 64: 377-384.
10. **Siddique I**, Javed SB, Al- Othman MR & Anis M (2013) Stimulation of *in vitro* organogenesis from epicotyls explants and successive micropropagation round in *Cassia angustifolia* Vahl.: an important source of sennosides. **Agroforestry Systems** 87: 583-590.
11. Perveen K, Bokhari NA, **Siddique I**, Siddiqui I & Soliman DAW (2012) Mineral analysis of *Phoenix dactylifera* L. leaves by inductively coupled plasma optical emission spectroscopy. **African Journal of Pharmacy and Pharmacology** 6: 2782-2786.
12. Khan H, **Siddique I**, Anis M & Khan PR (2011) *In vitro* organogenesis and plant regeneration from stem derived callus of *Capsicum annum* L. **Journal of Plant Biochemistry and Biotechnology** 20: 84-89.
13. **Siddique I** & Anis M (2010) *In vitro* adventitious shoot regeneration via indirect organogenesis from petiole explants of *Cassia angustifolia* Vahl.- a potential medicinal plant. **Applied Biochemistry and Biotechnology** 162: 2067-2074.
14. Anis M, Varshney A & **Siddique I** (2010) *In vitro* clonal propagation of *Balanites aegyptiaca* L. (Del.). **Agroforestry Systems** 78: 151-158.
15. **Siddique I** & Anis M (2009) Morphogenic response of the alginate encapsulated nodal segment and antioxidative enzymes analysis during acclimatization of *Ocimum basilicum* L. **Journal of Crop Science and Biotechnology** 12: 233-238.

16. **Siddique I & Anis M (2009)** Direct plant regeneration from nodal explants of *Balanites aegyptiaca* L (Del.) - a valuable medicinal tree. **New Forests** 37: 53-62.
17. Khan Z, Anis M & **Siddique I (2009)** *In vitro* regeneration of plantlets of *Solanum melongena* L. using cotyledonary node explants. **Journal of Indian Botanical Society** 88: 141-145.
18. **Siddique I & Anis M (2008)** An improved plant regeneration system and *ex vitro* acclimatization of *Ocimum basilicum* L. **Acta Physiologiae Plantarum** 30: 493-499.
19. **Siddique I & Anis M (2007)** High frequency multiple shoot regeneration and plantlet formation in *Cassia angustifolia* (Vahl.) using thidiazuron. **Medicinal and Aromatic Plant Science and Biotechnology** 1: 282-284.
20. **Siddique I & Anis M (2007)** Rapid micropropagation of *Ocimum basilicum* L. using shoot tip explants pre- cultured in thidiazuron supplemented liquid medium. **Biologia Plantarum** 51:787-790.
21. **Siddique I & Anis M (2007)** *In vitro* shoot multiplication and plantlet regeneration from nodal explants of *Cassia angustifolia* (Vahl.) - a medicinal plant. **Acta Physiologiae Plantarum** 29: 233 -238.
22. **Siddique I, Anis M & Jahan A A (2006)** Rapid multiplication of *Nyctanthes arbor - tristis* L. through *in vitro* axillary shoot proliferation. **World Journal of Agricultural Sciences** 2: 188-192.
23. **Siddique I & Anis M (2006)** Thidiazuron induced high frequency shoot bud formation and plant regeneration from cotyledonary node explants in *Capsicum annuum*. **Indian Journal of Biotechnology** 5: 303-308.
24. Khan H, **Siddique I & Anis M (2006)** Thidiazuron induced somatic embryogenesis and plant regeneration in *Capsicum annuum* L. **Biologia Plantarum** 50: 789 – 792.
25. Ahmad N, **Siddique I & Anis M (2006)** Improved plant regeneration in *Capsicum annuum* L. from nodal segments. **Biologia Plantarum** 50: 701-704.
26. Faisal M, **Siddique I & Anis M (2006)** An efficient plant regeneration system of *Mucuna pruriens* (L.) DC. using cotyledonary node explants. **In Vitro Cellular & Developmental Biology of Plants** 42: 59 -64.
27. Faisal M, **Siddique I & Anis M (2006)** *In vitro* rapid regeneration of plantlets from nodal explants of *Mucuna pruriens* L. a valuable medicinal plant. **Annals of Applied Biology** 148: 1-6.

Book Chapters:

1. Anis M, **Siddique I**, Naz R, Ahmed MR and Aref IM (2012) Advances in micropropagation of a highly important Cassia species- A Review. In: Bandani AR, **New Perspectives in Plant Protection, InTech Publishers, Croatia** 191-206.
2. Anis M, Ahmad N, **Siddique I**, Varshney A, Naz R, Parveen S, Khan MI, Husain MK, Khan MR, Khan PR and Aref IM (2011) Biotechnological approaches for the conservation of some forest tree species. In: Joshua A. Jenkins, **Forest Decline: Causes and Impacts, Nova Science Publishers Inc., USA**, pp. 1-39.
3. Anis M, Husain MK, Faisal M, Shahzad A, Ahmad N, **Siddique I** & Khan H (2009) *In vitro* approaches for plant regeneration and conservation of some potential medicinal plants. (Eds) Kumar A and Shekhawat NS. **Plant Tissue Culture and Molecular Markers Their Role in Improving Crop Productivity. I.K. International Pvt. Ltd. India**, pp 407-419.
4. **Siddique I** & Anis M (2007) Rapid clonal multiplication of *Ocimum basilicum* L. through shoot tip culture. (Eds) AK Kukreja et al. **Proceeding of National Symposium on Plant Biotechnology: New Frontiers, CIMAP Lucknow, India**. pp. 207-212.

Research Experience:

Eight years in Plant Tissue Culture (after Ph.D.)

Teaching and Research Positions:

- | | |
|---|---|
| 17thFeb 2012-Till -date: | Assistant Professor in Department of Botany and Microbiology, College of Science, Female centre for Scientific and Medical Colleges, King Saud University, Riyadh, Saudi Arabia. |
| 1st April 2009 –15 Feb 2012: | Research Associateship awarded by Council of Scientific & Industrial Research (CSIR), Govt. of India |
| 1st Sept 2009-31st January 2010: | Taught B.Sc. (Hons) Botany in women's college, Aligarh Muslim University, Aligarh. |
| 1st August 2009-15th Feb 2012: | Taught Advanced Diploma (Post M.Sc.) in Plant Tissue Culture and Micropropagation sponsored by Department of Biotechnology, New Delhi in Department of Botany, Aligarh Muslim University, Aligarh. |

1st April 2007 – 31st March 2009: Senior Research Fellowship awarded by Council of Scientific & Industrial Research (CSIR), Govt. of India.

1st May 2006 – 31st March 2007: Project Fellow in Major Research Project entitled sanctioned by UGC, Govt. of India.

Honors and Awards:

1. Awarded **FAST TRACK Proposal for Young Scientist** of **Department of Science and Technology (DST)** Govt. of India, New Delhi for 03 (2012-2015) years in the Department of Botany, Aligarh Muslim University, Aligarh.
2. Awarded **Post Doctoral Fellowship for Women** of the **University Grants Commission (UGC)** for five Years (**2012-2017**) in the Department of Botany, Aligarh Muslim University, Aligarh.
3. Awarded and nominate to visit **Faculty of Agriculture, University of Mauritius** under **University Grants Commission, India** and **Tertiary Education Commission, Mauritius Consortium agreement** from **Sept 11 – Oct 13, 2011**.
4. Awarded **Junior Scientist of the Year 2011** award by National Environmental Science Academy (NESA), New Delhi.
5. Felicitated by Prof. P. K. Abdul Azis (V.C., AMU, Aligarh) on 19th Feb. 2011 for bringing laurels to the University in the form of **Young Scientist of the year 2009-2010** Award by **CST, UP, Lucknow**.
6. Awarded **“YOUNG SCIENTIST AWARD”** of the year **2009-10** by **Uttar Pradesh Council of Science and Technology, Lucknow**.
7. Invited to participate in the **ICGEB** sponsored workshop on **“Recent Advances in biotic stress tolerance in plants”** at Genetic Engineering Research Centre, Faculty of Agriculture, **Cairo University, Giza, Egypt** from **13-20 February, 2010**.
8. Appointed as **Reviewer** of African Journal of Biotechnology.
9. Appointed as **Guest Editor** of Journal of Medicinal and Aromatic Plant Science and Biotechnology, Japan.

Papers Presented in Seminar/ Symposia:

1. **Stimulation of *in vitro* organogenesis from epicotyl explants and successive micropropagation round in *Cassia angustifolia* Vahl.: an important source of sennosides.** A two day seminar organized by Research centre, Deanship of Scientific Research, King Saud University, Riyadh, Saudi Arabia, **December 16-17, 2014.**
2. ***In vitro* organogenesis from epicotyl explants in *Cassia angustifolia* Vahl. – an important source of Sennosides.** 3rd Annual International Conference on BioTech 2013 Advances in Biotechnology. Global Science and Technology Forum, Singapore, **March 18-19 2013.**
3. **Rapid reproducible *in vitro* regeneration protocol for *Cassia angustifolia* Vahl. Via indirect organogenesis.** National Seminar on Recent Advances in Plant Biotechnology: Prospects and Potentials. Department of Botany, Aligarh Muslim University, Aligarh. **February 19-20, 2011.**
4. ***In vitro* adventitious shoot regeneration via indirect organogenesis from petiole explants of *Cassia angustifolia* Vahl.- a potential medicinal plant.** XXXII Annual meeting of Plant Tissue Culture Association (India) and National symposium on Recent Advances in Plant Tissue Culture and Biotechnological researches in India. M.N. Institute of Applied Sciences, Bikaner. **February 4-6, 2011.**
5. **Direct shoot multiplication and *ex vitro* acclimatization of *Mucuna pruriens* L. (DC.).** National Seminar on “Plant Biotechnology: Advances, Impact and relevance” Department of Botany, Aligarh Muslim University, Aligarh, **March 20, 2010.**
6. **Rapid micropropagation of *Mucuna pruriens* L. (DC.) using nodal segment explants pre-cultured in thidiazuron supplemented liquid medium.** XXXI Annual meeting of Plant Tissue Culture Association (India) and National symposium on “Plant Cell Tissue & Organ Culture: The Present Scenario”, Department of Botany, University of Calcutta, Calcutta. **March 3-5, 2010.**
7. **High frequency induction of adventitious shoots from excised root culture in *Balanites aegyptiaca* Del. (L.).** 30th Annual meeting of Plant Tissue Culture Association (India) and National seminar on “Plant Propagation, Conservation, Modification and Characterization”, at Institute of Himalayan Bioresource Technology, Palampur. **April 3-4, 2009.**
8. ***In vitro* multiple shoot induction and plant regeneration in *Balanites aegyptiaca* L. (Del.) – a valuable medicinal tree.** 29th Annual meeting of Plant Tissue Culture Association (India) and National seminar on “Plant Biotechnology for Conservation, Characterization and Crop Improvement”, at M.L. Sukhadia University, Udaipur. **Feb. 8-10, 2008.**

9. ***In vitro* regeneration of *Cassia angustifolia* Vahl. Stimulation of direct organogenesis using cytokinins.** 30th All Indian Botanical Conference and National Seminar on “Emerging Trends in Plant Science: Biodiversity, Biotechnology & Environmental Conservation” at Jiwaji University, Gwalior, **Nov. 28-30, 2007.**
10. **High frequency multiple shoot regeneration and plantlet formation in *Cassia angustifolia* (Vahl.) using thidiazuron.** 28th Annual meeting of Plant Tissue Culture Association (India) & National symposium on Plant Biotechnology: *In vitro* regeneration and cloning technique at FRI, Dehradun, **Oct. 12-14, 2006.**
11. ***In vitro* clonal propagation of *Ocimum basilicum* L. - an aromatic and medicinal plant.** 27th Annual meeting of Plant Tissue Culture Association (India) & National symposium on Plant Biotechnology: New Frontiers at CIMAP, Lucknow, **Nov. 18 – 20, 2005.**
12. ***In vitro* propagation of *Psoralea corylifolia* L.** 26th All India Botanical Conference & National Symposium on Plant Biology and Biodiversity in Changing Environment at Hamdard University, New Delhi, **Dec. 29-31, 2003.**

Abstract published:

1. **Siddique I (2014)** Stimulation of *in vitro* organogenesis from epicotyl explants and successive micropropagation round in *Cassia angustifolia* Vahl.: an important source of sennosides. A two day seminar organized by Research centre, Deanship of Scientific Research, King Saud University, Riyadh, Saudi Arabia, **December 16-17**, p. 23.
2. **Siddique I (2013)** *In vitro* organogenesis from epicotyl explants in *Cassia angustifolia* Vahl. – an important source of Sennosides. 3rd Annual International Conference on BioTech 2013 Advances in Biotechnology. Global Science and Technology Forum, Singapore, **March 18-19**, p. 21.
3. **Siddique I & Anis M (2012)** *In vitro* approaches for plant regeneration and conservation of two potential medicinal plants. XXXIII Annual meeting of Plant Tissue Culture Association (India) and National Symposium on Impact of Plant Tissue Culture on Advances in Plant Biology. St. Xavier’s College, Ahmedabad. **January 19-21**, p.108.
4. **Siddique I, Javed SB & Anis M (2011)** Rapid reproducible *in vitro* regeneration protocol for *Cassia angustifolia* Vahl. Via indirect organogenesis. National seminar on Recent Advances in Plant Biotechnology: Prospects and Potentials. Department of Botany, Aligarh Muslim University, Aligarh. **February 19-20**, p. 81.
5. **Siddique I, Javed SB & Anis M (2011)** *In vitro* adventitious shoot regeneration via indirect organogenesis from petiole explants of *Cassia angustifolia* Vahl.- a

potential medicinal plant. XXXII Annual meeting of Plant Tissue Culture Association (India) and National symposium on Recent Advances in Plant Tissue Culture and Biotechnological researches in India. M.N. Institute of Applied Sciences, Bikaner. **February 4-6**, p. 79.

6. **Siddique I & Anis M (2010)** Direct shoot multiplication and *ex vitro* acclimatization of *Mucuna pruriens* L. (DC.). National Seminar on “Plant Biotechnology: Advances, Impact and relevance” Department of Botany, Aligarh Muslim University, Aligarh, **March 20**, p. 38.
7. **Siddique I & Anis M (2010)** Rapid micropropagation of *Mucuna pruriens* L. (DC.) using nodal segment explants pre-cultured in thidiazuron supplemented liquid medium. XXXI Annual meeting of Plant Tissue Culture Association (India) and National symposium on “Plant Cell Tissue & Organ Culture: The Present Scenario”, Department of Botany, University of Calcutta, Calcutta. **March 3-5**, p. 93.
8. Varshney A, Anis M & **Siddique I (2009)** High frequency induction of adventitious shoots from excised root culture in *Balanites aegyptiaca* Del. (L.). 30th Annual meeting of Plant Tissue Culture Association (India) and National seminar on “Plant Propagation, Conservation, Modification and Characterization”, Institute of Himalayan Bioresource Technology, Palampur, **April 3-4**, p. 31.
9. Varshney A, **Siddique I & Anis M (2008)** *In vitro* multiple shoot regeneration from intact seedling explants of a multipurpose xerophytic tree, *Balanites aegyptiaca* (L.) Del. 31st All India Botanical Conference and International Symposium on “Plant Biology and Environment: Changing Scenario”, Allahabad University, Allahabad. **Dec. 17-20**, p. 187.
10. **Siddique I (2008)** *In vitro* regeneration and propagation of *Mucuna pruriens* L. (DC.) and *Ocimum basilicum* L. 31st All India Botanical Conference and International Symposium on “Plant Biology and Environment: Changing Scenario”, Allahabad University, Allahabad. **Dec. 17-20**, p. 187-188.
11. **Siddique I, Varshney A & Anis M (2008)** *In vitro* multiple shoot induction and plant regeneration in *Balanites aegyptiaca* L. (Del.) – a valuable medicinal tree. 29th Annual meeting of Plant Tissue Culture Association (India) and National seminar on “Plant Biotechnology for Conservation, Characterization and Crop Improvement”, M.L. Sukhadia University, Udaipur. **Feb. 8-10**, p. 49.
12. **Siddique I & Anis M (2007)** *In vitro* regeneration of *Cassia angustifolia* Vahl. Stimulation of direct organogenesis using cytokinins. 30th All Indian Botanical Conference and National Seminar on “Emerging Trends in Plant Science: Biodiversity, Biotechnology & Environmental Conservation”, Jiwaji University, Gwalior. **Nov. 28-30**, p. 174.

13. **Siddique I & Anis M (2006)** High frequency multiple shoot regeneration and plantlet formation in *Cassia angustifolia* (Vahl.) using thidiazuron. National Symposium on Plant Biotechnology: *In vitro* regeneration and cloning technique, FRI, Dehradun. **Oct. 12 – 14**, p. 40.
14. **Siddique I & Anis M (2005)** *In vitro* clonal propagation of *Ocimum basilicum* L. - an aromatic and medicinal plant. National symposium on Plant Biotechnology: New frontiers, CIMAP Lucknow. **Nov. 18- 20**, p. 81.
15. Faisal M, **Siddique I & Anis M (2005)** Efficient plant regeneration protocol for *Mucuna pruriens* L. (DC.): effect of medium, pH, solidifying agent and growth regulator. National Conference on Advancing Frontiers in Biotechnology for Sustainable Agriculture and Health, Bareilly College, Bareilly. **April 28-29**, p. 39.
16. Faisal M, **Siddique I & Anis M (2005)** Biotechnological intervention for conservation of biodiversity of some rare and endangered medicinal plants. National conference on medicinal plants: Resources, application and conservation in India. Jadavpur University, Kolkata. **Feb. 11-12**, p. 10.
17. Ahmad N, **Siddique I & Anis M (2004)** Improved plant regeneration from cultured nodal segments in *Capsicum annum* cv. PJ using thidiazuron. 27th Annual conference of Indian Botanical society. S. K. University, Anantapur. **Oct. 29-31**, p. 60.
18. Anis M, Faisal M, **Siddique I & Shahzad A (2003)** *In vitro* propagation of *Psoralea corylifolia* L. National Symposium on Plant Biology and Biodiversity in Changing Environment. Hamdard University, New Delhi. **Dec. 29-31**, p. 40.

Countries visited:

1. Visited **Faculty of Agriculture, University of Mauritius** under University Grants Commission, India and Tertiary Education Commission, Mauritius Consortium agreement from **Sept 11 –Oct 13, 2011**.
2. Visited **Singapore** for 3rd Annual International Conference on **BioTech 2013** Advances in Biotechnology, organized by Global Science and Technology Forum, Singapore, **March 18-19, 2013**.
3. Visited **Addis Ababa, Ethiopia** from **October 10- 20, 2013**.
4. Visited **UAE** from **September 12-18, 2016**.

Scholarship:

Dr. Mohd. Farooq Memorial Scholarship in **2003** during M.Sc. from Aligarh Muslim University, Aligarh.

Training Programme:

Sixth All India summer Research Training programme on **Molecular Techniques** Organized by SMART, Sengunthar Arts and Science College, Tiruchengode, Tamil Nadu. **May 19-June 02, 2008.**

Refresher Course:

An interaction programme on “**Research Methodology in Biological Sciences**” Organized by UGC Academic Staff College, Aligarh Muslim University, Aligarh, India, **14 Dec. 2010-06 Jan. 2011.**

Workshop Attended:

- **King Abdullah University for Science and Technology (KAUST)** sponsored **2nd Winter Enrichment Programme** at KAUST, Thuwal, Kingdom of Saudi Arabia, **January 2013.**
- King Abdul Aziz City for Science and Technology (KACST) sponsored Conference on “**The 2nd Saudi International Nanotechnology Conference 2012**” at, KACST Head quarters, Riyadh, Kingdom of Saudi Arabia, **November 11-13, 2012.**
- King Abdul Aziz City for Science and Technology (KACST) sponsored Conference on “**The Saudi International Biotechnology Conference 2012**” at, KACST Head quarters, Riyadh, Kingdom of Saudi Arabia, **September 18-19, 2012.**
- UGC sponsored workshop on “**NanoScience and NanoTechnology: Aligarh Nano I**” at Department of Applied Physics, AMU, Aligarh, **March 26-27, 2011.**
- DBT sponsored workshop on “**Exploring Genomes with Bioinformatics**” at Department of Biotechnology, AMU, Aligarh, **Feb. 22 – 23, 2006.**

Technical Expertise:

- Excellent communication, analytical and presentation skills.
- Compatible in a working environment, able to handle work independently and in a group.
- Expertise in Plant Tissue Culture via various techniques: Micropropagation, Somatic embryogenesis, Direct and indirect organogenesis, control of cell and tissue differentiation by light, plant growth regulators and nutrient media.
- Proficiency in determination of various physiological and biochemical (enzymatic and non enzymatic) changes during acclimatization.
- Have studied cytology and histology of cultures at different stages as well as of regenerated plants.
- Molecular Biology and Genetic transformation techniques viz., Genomic DNA isolation from plant and bacterial cells, Isolation of plasmid DNA, Ligation, restriction digestion, PCR and RAPD, Southern blotting, Agarose gel electrophoresis, Competent cells of *E. coli* and *Agrobacterium* strain, *Agrobacterium* mediated genetic transformation in rice, bacterial transformation.

Membership of Professional Bodies:

1. Life Member, National Environmental Science Academy (NESA)
2. Member, International Association of Plant Biotechnology (IAPB)
3. Member, Indian Botanical Society (JIBS)

Educational Profile:

Ph. D. (Botany) in **2008** from Aligarh Muslim University, Aligarh- 202 002, UP, India.

Specialization : **Plant Tissue Culture**
Thesis Title : **Studies on *in vitro* regeneration potential of *Mucuna pruriens* L. and *Ocimum basilicum* L.”**

M.Sc. (Botany) in **2003** with first Division (74.8 %) from Aligarh Muslim University, Aligarh- 202 002, UP, India.

Specialization : **Cytogenetics, Plant Breeding and Molecular Biology.**

Dissertation : **Studies on the genotoxic effect of pollution on *Solanum melongena* (Brinjal) growing around Harduaganj thermal power plant**".

B.Sc. (Biology) in **2001** with first Division (68.0%) in Zoology, Botany and Chemistry, from Dr. Bheem Rao Ambedker University, Agra, UP, India.