

## **BIO-DATA**

**NAME** : AMIT KUMAR SINGH  
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**E-MAIL** : amitunpg@gmail.com  
**D.O.B.** : 01.08.1975  
**RELIGION** : Hindu  
**CATEGORY** : Dependent of Freedom Fighter (DFF) and SC  
**DESIGNATION & ADDRESS:** ASSISTANT PROFESSOR (Botany), at  
Department Of Botany,  
University Of Lucknow,  
Lucknow, 226007. (India).

**ACADEMIC QUALIFICATIONS:** Ph. D., M.Sc., CSIR-UGC-NET-JRF,

**DISSERTATION TITLE:** *ANTIOXIDATIVE RESPONSES OF SOME CEREAL CROP PLANTS  
TO ZINC STRESS*

**RESEARCH SPECIALIZATION** : PLANT NUTRITION (Plant Physiology).

**RESEARCH PUBLICATIONS** : INTERNATIONAL – (papers 03/ posters 06),  
NATIONAL – (papers 03/ posters 07),

**ORIENTATION/REFRESHER COURSES ATTENDED:** (01) ORIENTATION and  
(01) REFRESHER

**QUALIFICATIONS: ----**

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|-------------------------|---|--|------------------|
| High School             | 1990  | UP board Allahabad   | 1 <sup>st</sup>  |
| Intermediate            | 1992  | UP board Allahabad   | 1 <sup>st</sup>  |
| Graduation              | 1996  | Lucknow University   | 2 <sup>nd</sup>  |
| Post Graduation         | 1998  | Lucknow University   | 1 <sup>st</sup>  |
| CSIR NET (JRF)          | 2000  | UGC-CSIR   | JRF(LS)          |
| Ph.D.                   | 2017  | Lucknow University   | Awarded          |
| Research and Teaching   | Since 1999 to Feb. 2003 and then 24.06.2010 to till date  | Lucknow University and in U.N.P.G. College, Padrauna.      | J.R.F and S.R.F. |
| Others training/courses | Orientation (2010)<br>Training (2013)<br>Refresher (2013) | Lucknow University<br>UPHEG & UPSHEC<br>Lucknow University | A<br>A           |

## CONTRIBUTION TO CORPORATE LIFE AND MANAGEMENT OF INSTITUTION:

1. Presently working as Assistant professor (Botany) at department of Botany, University of Lucknow, Lucknow, India. Pin-226007.
2. Member of **Board of Studies of Department of Botany, Lucknow University, Lucknow.**
3. Acted as **convener** of Flying Squad of PG and UG examination 2015, at district Kushinagar in session 2014-15 exam.
4. Question paper setter in Mahatma Gandhi Kashi Vidya Peeth, Varanasi for B.Sc. 2<sup>nd</sup> year examinations in session 2014-2015 & current session.
5. Appointed as **Executive** in Poster Session of National Conference on Science for Rural India held on 30-31 January 2016.
6. Life member of **Swadeshi Vigyan Sansthanam** (Vijnana Bharati).
7. Life member of **LUBDA** (Lucknow University Botany Department Association).
8. Life member of **Indian Botanical Society (IBS).**
9. Life member of **Indian Society of Soil Science (ISSS).**
10. Life member of **Indian Science Congress (ISC).**
11. Worked as **assistant coordinator** in Lucknow University Agriculture Cell at Department of Jyotirvigyan and also as a team member for conducting annual exams of session 2017-18(M), 2018-19(M) and 2019-2020(M) of Lucknow University, Lucknow.

## WORK EXPERIENCE:

1. **Project** : Protective role of zinc against oxidative damages to plant.  
**Organization** : ICAR  
**Duration** : 1.1.1999 to 30.09.2000.  
**Designation** : JRF
2. **Project** : Reproductive biology of zinc stressed mediated changes in plants  
**Organization** : CSIR  
**Duration** : 30.03.2001 to 10.01.2002.  
**Designation** : JRF
3. **CSIR-NET (Fellow):** Worked as **CSIR-UGC-NET JRF (Junior research fellow)** from 01.02.2002 to 27.02.2003.
4. **Worked as Assistant Malaria Officer (A.M.O.) (after selection from U. P. Public Service Commission, Allahabad, in 1999)** in UP Government under office District malaria officer, District Hardoi (U.P).
5. **Working on the post of Assistant Professor (Botany) since 24 June 2010 after the selection through UPHEC Allahabad in UNPG College Padrauna, Kushinagar (U.P.) and then in Department of Botany in University of Lucknow, Lucknow form 01.09.2016.** Also worked as a team member for conducting annual exams of session 2017-18 (M), 2018-19 (M) and 2019-2020 (M) of Lucknow University, Lucknow.

## Workshop/Short term courses

- 1:** Attended training cum awareness workshop for **Quality Promotion and NAAC accreditation** organized by department of Higher Education, Govt. of Uttar Pradesh and U. P. State Higher Education Council, on **2 & 3 March 2013** at Dr. Ram Manohar Lohiya National Law University Lucknow.
- 2:** Participated in a **workshop** on “*Inculcating Leadership in Higher Education Through Digital Learning, Assessment & Marketing*”, Organised by Internal Quality assessment Cell (IQAC), University of Lucknow on **March 10<sup>th</sup> 2017**.
- 3:** Attended **Workshop on Lichen Identification and Nomenclature: 10-11 November 2017** at BSI Allahabad.
- 4:** Attended the **Multi Disciplinary National Workshop on “Identification & Selection of Problem for Research: Thesis, Dissertation, Action Research & Project Work”** held on **03 March 2019**, at KGMU, Lucknow.

## PUBLICATIONS:

### International Papers:

- 1.** N. Pandey, G.C. Pathak, **A. K. Singh** and C.P. Sharma (2002). Enzymic changes in response to zinc nutrition. *J. Plant Physiol.* **159**: 1151-1153.
- 2.** N. Pandey, G.C. Pathak, **A. K. Singh** (2010). Differential Sensitivity of Maize to Zinc and High Light Intensity. *Plant Stress.* **4(1)**, 18-24.
- 3.** **A. K. Singh** (2018). Responses of Sorghum to Growth, Biochemical Activities And Reproductive Yield At Various Levels Of Zinc Supply, In Sand Culture. *J. Appl. Biosci.*, **43(2)**: 101-106, December, 2017.

### International Poster Presentations:

- 1.** **A. K. Singh**, G.C. Pathak, D. Pandey and N. Pandey (2002). Heavy Metal Stress induced Oxidative damage and anti oxidant responses in spinach. *2<sup>nd</sup> International Conference on Plants and Environmental Pollution*: **4-9, February 2002, pp-64**.
- 2.** N. Pandey, G.C. Pathak, **A. K. Singh** (2003). Micronutrient deficiency induced oxidative damage and antioxidant defense in tomato. *2<sup>nd</sup> International Congress of Plant Physiology on Sustainable Plant Productivity under Changing Environment*, **8-12, January 2003, pp-392**.
- 3.** **A. K. Singh** (2017). Effect of graded levels of zinc supply on growth and enzymes: carbonic anhydrase, aldolase, acid phosphatase and ribonuclease activity in *Sorghum bicolor* L. Monech var. (ICMV-22) plants. *International Conference on Functional Biology and Molecular Interactions: Applications in Health and Agriculture*, Department of Biochemistry, University of Lucknow, Lucknow, **20-22, December 2017**.
- 4.** **A. K. Singh** (2018). Effects of Zinc Supply In Sand Cultured *Sorghum Bicolor* L. Monech var. ICMV-22 On Tissue Zinc And Activity Of Carbonic anhydrase. *International Symposium on Current Trends in Biological Sciences*, Department of Zoology, University of Lucknow, Lucknow, **27-28, March 2018**.

5. **A. K. Singh (2018)**. Different Zinc Supply Effects on Tissue Zinc and Activity of Carbonic Anhydrase In Sand Cultured Triticum aestivum L. (Variety. UP-2338). *International Conference on Sustainable Development: Strategies and Emerging Trends*, Netaji Subhash Chandra Bose Government Girls PG College, Lucknow, **16-17, November, 2018, pp-133-134**.
6. **A. K. Singh (2018)**. Responses of graded levels of zinc supply on growth and enzymes: carbonic anhydrase, aldolase, acid phosphatase and ribonuclease, activity in *Sorghum bicolor* L. Monech var. (ICMV-22) plants. *International Conference on Bio- Innovation for Environmental and Health Sustainable Developments (BEHSD-2018)*, at CSIR- Indian Institute of Toxicology Research, Lucknow, **27-28, November, 2018**.

#### **National Papers:**

1. N. Pandey, **A.K. Singh**, G.C. Pathak and C.P. Sharma (2002). Effect of zinc on antioxidant response in maize leaves. *I. J. Exp. Biology*, **40**: 954-956.

#### **Book Chapter:**

Book Chapter (2017) – **Book Title: Herbal Medicine and Modern Drug Discovery**, *Lenin Media* (ISBN: 978-93-85995-52-1). Chapter title: **A review on Medicinal Plants in India, pp-143-157. 2017.**

**Authors: S.N. Pandey, Amit Kumar Singh and M.M. Abid Ali Khan**

#### **Oral presentation:**

1. **A.K. Singh (2014)**, Zinc deficiency effects on antioxidative capacity of different maize lines. *1<sup>st</sup> National Seminar on Science & Innovation*. **14 Feb. 2014. pp -73.**
2. Y.P. Kohli, **A.K. Singh**, Amarnath and V. Kohli (2014). Phytochemical Studies of *Litsea cubeba* (Laur.) Pers., A Medicinal Plant of Arunachal Pradesh. *National Conference on Challenges of Biological and Environmental Science in 21<sup>st</sup> Century*. **19-20 Dec. 2014. pp - 11.**
3. **A.K. Singh (2015)**, Effects on Antioxidative Capacity of *Sorghum bicolor* L. Monech var. (ICMV- 22) Supplied with Different Zinc Supply. *UGC sponsored National Seminar on The Role of Biology in Bringing Second Green Evolution*. **11-12 October, 2015. pp – 62-63.**
4. **A. K. Singh, (2016)**. Effects of Different Zinc supply on Antioxidative Capacity of *Sorghum bicolor* L. Monech var. (ICMV-22) supplied with Different Zinc Supply. *National Seminar on Conservation of Natural Resource and Its Management*. **25-26 October 2016, pp-16.**

#### **National poster Presentations:**

1. **A.K. Singh**, G.C. Pathak and N. Pandey (2000). Zinc Stress mediated changes in the antioxidant system in maize. *National Seminar on Plant Physiological Paradigm for Fostering Agro and Biotechnology and Augmenting Environmental Productivity in Millenium*. **7-9 Nov. 2000, pp-44.**

2. G.C. Pathak, **A.K. Singh** and N. Pandey (2000). Dry matter production and enzymatic changes in *Vigna mungo* L. I.P.U. – 94, subjected to varying levels of zinc supply. *National Seminar on Plant Physiological Paradigm for Fostering Agro and Biotechnology and Augmenting Environmental Productivity in Millenium*. **7-9 Nov. 2000, pp-01.**
3. N. Pandey, G.C. Pathak, **A.K. Singh** and C.P. Sharma (2002). Zinc Involvement in Reproductive Development of Black gram. *National Symposium on Biosciences: Advances, Impact and Relevance*. **27-29 Oct. 2002, pp -61-62.**
4. **A. K. Singh**, G.C. Pathak and N. Pandey (2003). Antioxidative capacity of maize lines differing in their sensitivity to zinc deficiency. *National conference on Biodiversity and Applied Biology of Plants*. **8-10 Oct. 2003, pp-36-37.**
5. G.C. Pathak, **A.K. Singh**, and N. Pandey (2003). Oxidative Damage in Maize lines Grown under High Light Intensity and Low Zinc Supply. *National Symposium on: Improving Crop Productivity in an Ecofriendly Environment, Physiological and Molecular Approaches*. **15-17. Oct. 2003, pp-32.**
6. **A. K. Singh** (2018). Responses of Graded Levels of zinc Supply on Growth and Enzymes: Carbonic anhydrases, aldolase, Acid phosphatase and ribonuclease Activity in *Sorghum bicolor* L. Monech var. (ICMV-22) Plants. *Ecological Degradation and Its Impact on Socio-economic Development*. **Feb. 2018, pp-51.**
7. **A. K. Singh** (2018). Antioxidative responses of *Sorghum bicolor* L. Monech var. (ICMV-22) at different levels of zinc supply in sand culture. *Climate Change, Environmental pollution and Biodiversity Conservation*. **Feb. 2018, pp-44.**

#### **National Seminar/Conferences attended:**

1. **A. K. Singh** (2013). National Seminar on Himalayan **Devastation and Eco-Balancing**. Department of Botany, University of Lucknow, Lucknow. **August 31, 2013.**
2. **A. K. Singh** (2019). National Conference on **Frontiers in Environment, Health & Biosciences**, at Institute of Biosciences & Biotechnology, C.S.J.M. University, Kanpur, U.P. **February 16-17, 2019.**
3. **A. K. Singh** (2019). National Seminar on **Food Chemistry, Processed Food & Toxicology** at Department of Chemistry, D.A.V. (P.G.) College, (C.S.J.M. University) Kanpur, **25-26 September 2019.**

#### **University/College: (Papers and Ppt.)**

1. **Orientation Programme (08.11.10 – 04.12.10)**
  1. Interactive Effect of Zn Stress and Light Intensity on Maize Varieties.
  2. Nutrition for Health and Development: Nutritional Issues among Adolescents.
2. **Refresher Course (01.02.2013 – 23.02.2013).**
  1. Screening Maize Varieties for their Differential Sensitivity and Efficiency to Zinc Stress.
  2. Zinc an Essential Element for Cereal Plants. (Ppt).

**The information given above is true and correct in my knowledge.**

**(Dr Amit Kumar Singh)**