

Name: **Dr. Nitin Kumar Garg**

Designation: **Assistant Professor**

Institute: **Rajasthan Agricultural Research Institute (SKNAU-Jobner) Durgapura, Jaipur, (Rajasthan) India-302018**

**Education** (Post-Graduation onwards & Professional Career)

	<b>Year</b>	<b>Institute</b>	<b>Subject</b>
B.Sc.	2012	MPKV, Rahuri (Maharashtra)	Agriculture
M.Sc.	2014	IARI, New Delhi	Plant Biochemistry
Ph.D.	2021	IARI, New Delhi	Plant Biochemistry

#### **A. Position and Honors**

**Position and Employment** (Starting with the most recent employment)

Post held	Duration	Institute
Assistant Professor	February 2018 to till date	Rajasthan Agricultural Research Institute (SKNAU-Jobner), Durgapura, Jaipur-302018

#### **Honors/Awards**

1. Awarded with NET scholarship, 2008 during the UG program
2. Awarded with ICAR scholarship, 2012 during the PG program
3. Awarded with IARI scholarship, 2014 during Ph.D.
4. Awarded with ICAR-NET, 2015

#### **Professional Experience**

- Expertise in maize biochemical studies during the PG program at IARI under the thesis titled “Biochemical studies towards understanding starch digestibility characteristics of Indian maize genotypes”.
- Experience in rice physio-biochemical and molecular studies during the Ph.D. at IARI under the thesis titled “Amelioration of water deficit stress in rice through paclobutrazol induced changes in ABA homeostasis”.
- Expertise in Wheat Quality analysis such as Hectolitre weight, Sedimentation value, Phenol score and protein content during my service.
- Expertise in Pearl millet physiobiochemical studies during my service.
- Teaching Experience of Biochemistry course for UG programme during my service.

#### **B. Publications** (Numbers only)

Book Chapter – **01**

Research Papers: **16**

General articles: 08

**Google Scholar and Researchgate Link:**

[https://scholar.google.com/citations?user=\\_wTy-r4AAAAJ&hl=en](https://scholar.google.com/citations?user=_wTy-r4AAAAJ&hl=en)

<https://www.researchgate.net/profile/Nitin-Garg>

## Selected peer-reviewed publications

1. **Garg, N.K.**, Maheshwari, C., Changan, S.S., Kumar, V., Kumar, A., Singh, A., Ali, K. and Tyagi, A., 2019. Paclobutrazol induced physio-biochemical manifestations to ameliorate water deficit stress in rice (*Oryza sativa*). *Indian Journal of Agricultural Sciences*, 89(11), pp.1832-6.
2. Maheshwari, C., **Garg, N.K.**, Hassan, M. and Tyagi, A., 2021. An insight: Impact of reduced Rubisco on plant physiology and biochemistry. *Indian journal of agricultural sciences*, 91(1), pp.16-20.
3. Yadav, M.R., Choudhary, M., Singh, J., Lal, M.K., Jha, P.K., Udwat, P., Gupta, N.K., Rajput, V.D., **Garg, N.K.**, Maheshwari, C. and Hasan, M., 2022. Impacts, Tolerance, Adaptation, and Mitigation of Heat Stress on Wheat under Changing Climates. *International Journal of Molecular Sciences*, 23(5), p.2838.
4. Maheshwari, C., **Garg, N. K.**, Hasan, M., Prathap, V., Meena, N. L., Singh, A., & Tyagi, A. (2022). Insight of PBZ mediated drought amelioration in crop plants. *Frontiers in Plant Science*, 13.
5. Prakash, S., Radha, Kumar, M., Kumari, N., Thakur, M., Rathour, S., ..**Garg, N.K.**.... & Mekhemar, M. (2021). Plant-based antioxidant extracts and compounds in the management of oral cancer. *Antioxidants*, 10(9), 1358.
6. Changan, S. S., Ali, K., Kumar, V., **Garg, N. K.**, & Tyagi, A. (2018). Abscisic acid biosynthesis under water stress: anomalous behavior of the 9-cis-epoxycarotenoid dioxygenase1 (NCED1) gene in rice. *Biologia plantarum*, 62, 663-670.
7. Kumar, S., Sharma, P. K., Yadav, M. R., Sexena, R., Gupta, K. C., Kumar, Rakesh, **Garg, N. K.** & Yadav, H. L. (2019). Effect of irrigation levels and moisture conserving polymers on growth, productivity and profitability of wheat. *Indian Journal of Agricultural Sciences*, 89(3), 509-514.
8. Kumar, S., Sharma, P. K., Yadav, M. R., Sexena, R., Gupta, K. C., **Garg, N. K.**, & Yadav, H. L. (2019). Impact of nutrient management practices and plant growth regulators on growth, productivity and profitability of wheat (*Triticum aestivum*). *Indian Journal of Agricultural Sciences*, 89(4), 604-609.
9. **Garg, N. K.**, Dahuja, A., & Singh, A. (2020). Understanding the starch digestibility characteristics of Indian maize hybrids. *Indian Journal of Experimental Biology*, 58, 738-744.
10. Kumar, Vaibhav., ALI, K., Kumar, A., Tewari, K., **Garg, N. K.**, Changan, S. S., & Tyagi, A. (2018). Cloning and Heterologous expression of Os-AP2/ERF-N22 drought inducible rice transcription factor in *E. Coli*. *Indian Journal of Agricultural Sciences*, 88(10), 1515-20.
11. Gupta, N.K, Gupta, S., Singh, J., **Garg, N. K.**, Saha, D., Singhal, R.K., Javed, T., Al-Huqail, A.A., Ali, H.M., Kumar, R., Siddiqui,M.H. (2022). On-farm hydro and nutrient priming increases yield of rainfed pearl millet through physio-biochemical adjustments and anti-oxidative defense mechanism. *Plos one*, 17(6), e0265325.
12. Kumar, V., Kumar, A., Tewari, K., **Garg, N. K.**, Changan, S. S., & Tyagi, A. (2022). Isolation and characterization of drought and ABA responsive promoter of a transcription factor encoding gene from rice. *Physiology and Molecular Biology of Plants*, 1-19.
13. Yadav, M. R., Kumar, Y., Pooniya, Vijay., Gupta, K. C., Saxena, R., **Garg, N. K.**, & Singh, Ajeet. (2019). Performance of groundnut (*Arachis hypogaea*) under different phosphorus management options in semi-arid environment of Rajasthan. *Indian Journal of Agricultural Sciences*, 89(6), 946-50.
14. Kumawat, S., Gupta, S., Purohit, S., **Garg, N. K.**, Singh, J., & Gupta, N. K. (2019). Effect of peg induced water deficit stress on physio-biochemical characteristics of different pearl millet varieties. *Journal of Plant Development Sciences*, 11(3), 143-150.

15. Kumar, A., Kumar, V., Maheshwari, C., **Garg, N. K.**, Mawlong, I., & Tyagi, A. (2023). Nuclear localization and target genes analysis of an ABA and drought-responsive transcription factor (RDA1) in rice. *Indian Journal of Biotechnology*, 20, 364-374.
16. Maheshwari, C., **Garg, N. K.**, Singh, A., & Tyagi, A. (2023). Optimization of paclobutrazol dose for mitigation of water-deficit stress in rice (*Oryza Sativa L.*). *Biochemical Systematics and Ecology*, 107, 104596.

### **Biography:**

I was born in Village-Sapotra, Distt. Karauli in Rajasthan, India. I started my primary schooling in my hometown and later for higher secondary moved to Govt. Sr. Sec.School, Gangapur City, India. After completing of schooling, I joined the college of agriculture Kolhapur, Maharashtra as an undergraduate student in agriculture course. I was awarded a NET scholarship during UG (2008-2012).

After completing UG from Kolhapur in 2012, I joined as a PG student at Indian Agricultural Research Institute (IARI), New Delhi in the Plant Biochemistry department. I was awarded ICAR scholarship during my PG (2008-2012). During PG I had working experience with various molecular and biochemical techniques.

In continuation after completing of PG, I joined as a Ph.D. student at IARI, Plant Biochemistry division. Afterwards I got selected as an assistant Professor in SKNAU-Jobner where I got posting at Rajasthan Agricultural Research Institute Durgapura, Jaipur.

### **Webinar attended**

1. Participated in 58<sup>th</sup> All India Wheat & Barley Research Workers's meet held at ICAR-IARI, Regional Station, Indore during 24-26 August, 2019.
2. Participated in International Agribusiness Conclave on Production, Processing and value addition of millets held at RARI, Durgapura, Jaipur during March 21-22,2023.
3. Participated in National workshop on Role of nano fertilizers in agriculture at RARI, Durgapura on 2<sup>nd</sup> March 2023.
4. Participated in Brainstorming workshop on Emerging role of Sulphur and zinc in balanced plant nutrition at RARI,Durgapura on 31<sup>st</sup> October, 2018.

### **Training attended**

1. Attended 21days training program on Genome utilization and editing of plant for useful traits at ICAR-NIPB, New Delhi from 30<sup>th</sup> November to 20<sup>th</sup> December, 2022.
2. Attended 21days National training course on entrepreneurship strategies in agriculture, horticulture,animal husbandry & allied sectors for economic development of India organized by AEDS during 01-21, 2021 via virtual mode.
3. Attended five days training programme on Methodologies for evaluation of wheat quality organized by ICAR-IIWBR,Karnal during 05-09 March 2018.
4. Attended 3<sup>rd</sup> orientation Programme organized by the Directorate of HRD, SKNAU-Jobner during February 6-26, 2020.