

CURRICULUM VITAE

Name: Dr. Neeru Kaushal
E mail: neerukatna@gmail.com
Ph. +91-7018037197



Area of Interest:

Plant stress Physiology (Heat and cold stress), Plant Tissue Culture, Plant Molecular Biology, Biochemistry and medicinal plants.

Objective:

Seeking to build on strong research skills gained through studies so far as a research associate and to eventually have broad based academic career including teaching, research and management responsibilities.

Fellowships/Scholarships:

ICRISAT Hyderabad sponsored Fellowship for research project on “Improving Heat Tolerance in Chickpea or Enhancing its productivity In Warm Growing Conditions and Mitigating Impacts of Climate Change”

DST, Department of Science & Technology, New Delhi sponsored Fellowship for research project on “Eco-geographical and physiological approaches to improve chilling tolerance in chickpea in Australia and India” (under India- Australia Fund for Scientific and Technological Co-Operation Programme).

Teaching Experience:

Assistant Professor in Department of Botany on regular basis in Gautam College Hamirpur from Aug 2015 till date.

Education:

Ph. D. with Course Work – Botany (Plant Physiology), 2010-2014, Dept. of Botany, Punjab University, Chandigarh.

Thesis Title: “Probing the mechanisms governing heat sensitivity at reproductive stage in Chickpea (*Cicer arietinum* L.)”.

M.Phil. - Botany (Specialization: Plant Physiology), 2008 – 2009 -76%, **1st class with distinction**, Dept. of Botany, Punjab University, Chandigarh.

Research: “Response of wheat to toxic metal: Evaluation of role of proline.”

M.Sc. (H.S) – Botany, 2006 – 2008 – 75%, **1st class with distinction**, Punjab University, Chandigarh.

B.Sc. (H.S) – 2003 – 2006 – 69.4%, **1st class with distinction**, Punjab University, Chandigarh.

10 + 2 (Medical) -2002 – 62.2%, DAV School Hamirpur.

10th – 2000 – 76%, **1st class with distinction**, Govt Senior Secondary School Badhani (Hamirpur).

Research Publications:

1. **Neeru Kaushal**¹, Kalpna Bhandari¹, Kadambot.H.M. Siddique² and Harsh Nayyar³Heat stress in food crops: responses and mechanisms to address heat tolerance (Ready for publication)
2. **Neeru Kaushal**, Kalpna Bhandari and Harsh Nayyar*Thermo-protectants: functional aspect and relevance in heat-stressed plants (In process of publication)
3. Rashmi Awasthi, **Neeru Kaushal**, Vincent Vadez, Neil C. Turner, Jens Berger, Kadambot H. M. Siddique and Harsh Nayyar (2014) Individual and combined effects of drought and heat stress on carbon assimilation and seed filling in chickpea'. Functional Plant Physiology. <http://dx.doi.org/10.1071/FP13340>
4. **Neeru Kaushal**, Rashmi Awasthi, Kriti Gupta, P Gaur, KHM Siddique, Harsh Nayyar (2013)Heat-stress-induced reproductive failures in chickpea (*Cicer arietinum*) are associated with impaired sucrose metabolism in leaves and anthers. Functional Plant Biology <http://dx.doi.org/10.1071/FP13082>
5. Sanjeev Kumar, **Neeru Kaushal**, Harsh Nayyar and P. Gaur (2012) Absciscic acid induces heat tolerance in chickpea (*Cicer arietinum* L.) seedlings by facilitated accumulation of osmoprotectants. Acta physiologiae plantarum. 34: 1651-1657
6. Sanjeev Kumar, Prince Thakur, **Neeru Kaushal**,Jahid A Malik,P. Gaur, Harsh Nayyar(2012) Effect of varying high temperatures during reproductive growth on reproductive function, oxidative stress and seed yield in chickpea genotypes differing in heat sensitivity. Archives of Agronomy and Soil Science. 59: 823-843.
7. **Neeru Kaushal**, Kriti Gupta, Kalpna Bhandari,Sanjeev Kumar, Prince Thakur and Harsh Nayyar (2011) Proline induces heat tolerance in chickpea (*Cicer arietinum* L.) plants by protecting vital enzymes of carbon and antioxidative metabolism. Physiology and Molecular Biology of Plants.17: 203-213
8. Sanjeev Kumar, Ramanpreet Kaur, Navneet Kaur, Kalpna Bhandari, **Neeru Kaushal**, Kriti Gupta, T. S. Bains and Harsh Nayyar. (2011) Heat-stress induced inhibition in growth and chlorosis in mungbean (*Phaseolus aureus* Roxb.) is partly mitigated by ascorbic acid application and is related to reduction in oxidative stress. Acta Physiologiae Plantarum. 33: 2091-2101
9. Jahid Ali Malik, Sanjeev Kumar, Prince Thakur, Suchi Sharma, NavneetKaur, RamanPreetKaur, D. Pathania, Kalpna Bhandari, **Neeru Kaushal**, Kamaljit Singh, Alok Srivastav, Harsh Nayyar (2010)Promotion of Growth in Mungbean (*Phaseolus aureus* Roxb.) by Selenium is Associated with Stimulation of Carbohydrate Metabolism . Biological Trace Element Research. 143: 530-539.
10. Mini Aggarwal, Suchi Sharma, Navneet Kaur, Dhirender Pathania, Kalpna Bhandari, **Neeru Kaushal**, Ramanpreet Kaur, Kamaljit Singh, Alok Srivastava and Harsh Nayyar (2010) Exogenous Proline Application Reduces Phytotoxic Effects of Selenium by Minimising Oxidative stress and Improves Growth in Bean (*Phaseolus vulgaris* L.) Seedlings. Biological Trace Element Research. 140: 354-67

Academic Achievements/Awards:

- 87th rank in matriculation examination throughout Himachal Pradesh.
- Meritorious Student's Scholarship holder throughout All Academics.
- Received National Scholarship in Matriculation Examination.
- Awarded merit certificate by H.P. Board of School Education, Dharamshala.

Book chapter:

Pratibha , Nitesh Kumar , Harinder Singh Banyal, Sanjeev Kumar, Manju Sharma & **Neeru Kaushal**, "A review of Algal Diversity in H.P and various strategies for algal conservation"
Bharti Publication, 2023 Chapter 2 , 20-30

Special Academic achievements:

Approved by the selection committee of HPU Shimla as Assistant Professor in Botany (Gautam College Staff) in 2016

One month online faculty Induction Programme (Guru Daksha) held from 16-08-2021 to 14-09-2021 (FIP 06) under HRDC HPU Shimla, sponsored by UGC and obtained A grade.

Administrative Experience:

Working as HOD Department of Botany Gautam College Hamirpur HP 2012-2013.

Works as member of various college committees Gautam College Hamirpur HP
CSCA selection committee
Sexual Harassment committee
College placement cell

Seminars, Webinar & Conferences Participated/Attended:

- Three days workshop on "Zero waste" DAV College Bathinda, Central University of Punjab and Indian National Young academy of Sciences New Delhi India (Online) 2020
- International E Conference on "Recent trends in Life Science Research: Challenges and promises" Department of Botany, SS College Shahjahanpur UP, Govt PG College Bazpur Uttarakhand and Society for research in Biological science 2020
- International Webinar on "Integrated Microbial phyto – power system a sustainable approach for waste water treatment and energy generation plants" Botany division Career Point University Hamirpur HP 2020
- A Seminar on "Environmental Concerns and Sustainable Development : issue and challenges" DDM Sai College of Education HP India 2018
- Webinar on research – Innovation – Incubation Career Point University HP 2020
- 8th National seminar on orchid conservation improvement and commercialization 2006.
- National Symposium on Phycology, 2007.
- National Symposium on New Biology in Agriculture, 2008.
- 1st Chandigarh Science Congress (CHASCON, 2008).
- 2nd Chandigarh Science Congress (CHASCON, 2008).
- 3rd Chandigarh Science Congress (CHASCON, 2009).
- 4th Chandigarh Science Congress (CHASCON, 2010).

- National Seminar on Global environmental Issues and Climate Change, 2010.
- National Seminar-cum-Workshop on Exploring New Vistas in Biodiversity Research for Sustainable Development, 2011.
- International Conference on preparing agriculture for climate change. Feb 6-8, 2011.
- 6th Chandigarh Science Congress (CHASCON, 2012).
- Golden Jubilee Symposium on Prospects & Perspectives in Biochemistry, 2012.
- National Conference on Plant & Microbial Biodiversity, Present Scenario, Threats and Conservation Strategies, 2012

Extra Curriculum Achievements:

- Awarded merit certificate on the account of on the spot Hindi and English essay writing competition at school level.
- Participated in various school quiz team.
- Received merit certificate from Panjab University Botanical Society for 1st position in carom (Doubles and mixed doubles).

References:-

Professor Harsh Nayyar (Ph.D.Supervisor)
Punjab University Chandigarh
harshnayyar@hotmail.com
+91-9815905976

Dr. Nitesh Kumar (Assistant Professor)
Department of Biosciences
niteshchauhan7@gmail.com 7876042204

Personal Details:

Date of Birth : 01.01.1986
Gender : Female
City : Hamirpur
State : HP
Nationality : Indian
Marital Status : Married
Religion : Hindu
Language Known : English, Hindi, Pahari

Declaration:

I hereby declare that the above provided information is true to best of my knowledge.

Dr. Neeru kaushal