CURRICULUM VITAE

MANOJ KUMAR SHARMA

Current Position	Professor & Head (Plant Physiology), Department Plant Physiology, SKN College of Agriculture, SKNAU, Jobner, Jaipur, Rajasthan (303329), INDIA
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ACADEMIC RECORD

Examination passed	Year of passing	University/Institute	OGPA / (%)	Subject
Doctor of Philosophy in Plant Physiology (Ph.D.)	2007	**I. Ag. Sc., BHU, Varanasi Uttar Pradesh, INDIA**	7.07/10.00	Major: Pl. Physiology Minor: PBG, Agronomy
Master of Science (Agriculture) in Plant Physiology (M. Sc.)	2003	**I. Ag. Sc., BHU, Varanasi Uttar Pradesh, INDIA**	7.92/10.00	Major: Pl. Physiology Minor: Agronomy, Horticulture
Bachelor of Science (Agriculture) Honours (B.Sc.)	2001	**Rajasthan Agriculture University Bikaner, Rajasthan, INDIA**	69.72	Agriculture Sciences
ASRB (NET)	2004	**ICAR-ASRB, New Delhi**	Qualified	Plant Physiology

FELLOWSHIPS /AWARDS/ ACHIEVEMENTS:

- ✓ First rank in CRET (BHU)
- ✓ Awarded UGC Research Fellowship
- ✓ GNRSA-Fellow Award (Plant Physiology)-2020, by Agricultural Technology Development Society (ATDS)-Ghaziabad (UP)

LIFE MEMBERSHIP IN SCIENTIFIC SOCIETY:

1. Indian Society for Plant Physiology, Division of Plant Physiology, IARI, New Delhi-110012
2. The Gujarat Association for Agricultural Sciences, Vasana, Ahmedabad-380007
3. Phosphate Rich Organic Manure Society, Udaipur-313001
4. Indian Society of Agribusiness Professionals, New Delhi-110030
5. Agricultural Technology Development Society (ATDS)-Ghaziabad-UP-201206
6. Indian Society of Oilseeds Research, Rajendranagar, Hyderabad – 500030

DOCTORAL RESEARCH IN BRIEF

***Thesis Title*:** Effect of nitrate salt and plant growth regulator hardened seeds on salinity resistance in wheat (*Triticum aestivum* L.)

Investigation was carried out to determine the efficacy of seed hardening treatments under saline condition. The studies were made under two categories (a) short term (laboratory condition) and (b) long term (pot culture). Wheat seeds were hardened either with nitrate containing salts like $Mg(NO_3)_2$ and KNO_3 or plant growth regulators like gibberellic acid and 6-benzyl adenine.

Results revealed that seed hardening treatments with nitrate salts and plant growth regulators alone or in combination may ameliorate the adverse effect in saline condition by inducing resistance in wheat plants and the recommendation made for wheat growers **that use 15mM KNO_3 (1.52 g L^{-1}) and it's combination with 10ppm GA_3 (10 mg L^{-1}) the seed soaking (for 16 h) of wheat seeds during hardening to get healthy and vigorous seedlings, vegetative growth and increased yield of this crop under saline soil condition as well as in non-saline soil condition.**

Work Experience: Teaching (UG & PG), research and extension (>15 year)

A.	Teaching Period	No. of Years	UG/PG Class	Institution
1.	01/07/2007 to15/08/2008 **(Lecturer Botany)**	1Year& 1month	UG	Jobner PG College, Jobner Jaipur (Rajasthan)
2.	27/08/2008 to 31/08/2015 **(Assistant Professor)**	7Year	**UG/ PG**	JAU, Junagadh (Gujarat)
3.	01/09/2015 to 01/03/2018 **(Associate Professor)**	2Year& 4month	**PG**	JAU, Junagadh, (Gujarat)
4.	05/03/2018 to 04/03/2021 **(Associate Professor)**	3Year	**UG/ PG**	SKNAU, Jobner, Jaipur Rajasthan
5.	05/03/2021 to Contd. **(Professor)**	4Year& 11 months	**UG/ PG**	SKNAU, Jobner, Jaipur Rajasthan

B.	Research & Extension Period	No. of Years	Institution	Remarks
1.	27/08/2008 to 31/08/2015	7Year	Junagadh Agril. University, Junagadh (Gujarat)	Oilseeds, Krushi rath etc.
2.	01/09/2015 to 01/03/2018	2Year& 4month	Junagadh Agril. University, Junagadh (Gujarat)	Pearmillet Krushi rath etc
3.	05/03/2018 to Contd.	5Year& 6month	**UG/ PG Teaching & guiding** SKNAU, Jobner, Jaipur Rajasthan	Trainings/ PVT/ Karshi mela etc

Computer Literacy:

1. Computer-Z certificate from S T G Int. Ltd. (2002).
2. Passed CCC+ organized by SPIPA, Ahmadabad (2008).

Summer School/ Trainings/OP:

1. Winter school on "**Emerging trends in Plant Physiological and Biotechnological Paradigms for Sustainable Agriculture**" organized by ICAR, N. Delhi & Department of Plant Physiology, Institute of Agricultural Sciences, B.H.U., Varanasi from 02-22 February, 2009. **(21 days)**
2. National training cum Workshop on "**Agri-Bioinformatics Promotion Programme**" organized by Ministry of Communication & Information Technology, Department of Information Technology, New Delhi & S.D. Agricultural University, Sardarkrushinagar from 09-14 November, 2009. **(7 days)**
3. **"Orientation Programme: 106"** Sponsored by UGC, Conducted by UGC: ASC, Saurashtra University, Rajkot, Gujarat from December 01, 2014 to December 28, 2014 (Obtained Grade: A).

4. **Short course on** "Recent developments in the organic production of oilseeds for ushering productivity, soil health and export" from 21/02/2023 to 02/03/2023 at IIOR, Hyderabad.

Online Courses:

1. Teaching Tools to Knockdown the Lockdown" from May 16th to 20th , 2020 (5 day), organized by CoA, Balaghat, JNKVV, Jabalpur
2. "Research Support Tools: Effective e-Learning with Smart Tools & Techniques" from May 28th to 30th , 2020 (3 day), CoA, Powarkheda, JNKVV, Jabalpur

Congress/Conferences/Symposium/Seminars/ workshops attended:

1. International level : 2
2. National level : 7
3. State level : 2

After Joining SKNAU: **3**

1. International conference on "Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA- 2020 during Pandemic Era of COVID-19" organized by Agricultural Technology Development Society (ATDS) Ghaziabad, UP at Shobhit Deemed University, Modipuram, Meerut, UP, India on February 26 - 28, 2021.
2. In 5th International conference on "Advances in SmartAgriculture and Biodiversity for Sustainable Development (SABCD-2022)" organized by Agricultural Technology Development Society (ATDS) Ghaziabad, UP, India at Jaipur National University, Jaipur, Rajasthan on March 04 – 06, 2022.
3. 9th Rajasthan Science Congress on Harnessing Frontier Sciences and Technologies for Food, Nutrition, Health and Environmental Security organised by SKNAU, Jobner on September 13-15, 2022.

Publications: **26 (19 + 7)**

1. Research Papers : 15
2. Book : 01
3. Review Article/Book Chapters : 02 (1 +1)
4. Abstracts/ Papers in Proceedings : 07
5. Popular Article : 01

Sr. No.	Title of the Paper and Author	Name of the Journal/ book/ procedding in which it is published	Volume Year & No. of Journal	Remark
1.	Effect of seed hardening with nitrate salts on seedling emergence, plant growth and nitrate assimilation of wheat (*Triticum aestivum* L.) **M. K. Sharma** and Bandana Bose	*Physiol. Mol. Biol. Plants*	2006 12(2): 173-176	Research
2.	Effect of seed hardening with nitrate salts on physiological attributes at ear head emergence stage and yield of wheat (*Triticum aestivum* L.). **M. K. Sharma,** B. Bose and A. K. Shrivastava	*International Journal of Agricultural Science*	2009 5(2): 439-442	Research
3.	Seed Soaking treatment with nitrate salts *vis a vis* physiology of germination and seedling vigor in rice (*Oryza sativa* L. Var. Ratna) Bandana Bose, V. P. Nigam and **M. K. Sharma**	*International Journal of Agricultural Science*	2010 6(2): 564-568	Research
4.	Biochemical and molecular analysis of cms, maintainer and restorer lines in pearlmillet	Progressive Research: An International	2014 9(S): 709-714	Research

	(Pennisetum glaucum (L.) r. br.). Z.V. Jogia and **M. K. Sharma**	Journal		
5.	Effect of Bio-fertilizers and Micronutrients on Morpho-physiological and Biochemical parameters of Groundnut (*Arachis hypogia* L.) S. Sree Ganesh, **M. K. Sharma**, A. V. Narwade and Neethu T. M.	*International Journal of Tropical Agriculture*	2015 33(2): 927-930	Research
6.	Impact of Bio-fertilizers and Micro-nutrients on yield and yield contributing characters of Groundnut (*Arachia hypogia* L.) S. Sree Ganesh, **M. K. Sharma**, A. V. Narwade and Neethu T. M.	*International Journal of Tropical Agriculture*	2015 33(2): 931-934	Research
7.	Effect of Micronutrients and Biofertilisers on Morphophysiological Parameters and Productivity of Summer Groundnut (Arachis hypogaea L.) **M. K. Sharma**, R. A.Jat and S. Sree Ganesh	*Indian Journal of Fertilizers*	2017 13(3): 56-59	Research
8.	Seed Priming with Salts of Nitrate Enhances Nitrogen use Efficiency in Rice A K. srivastava, A. Siddique, **M. K. Sharma,** and B. Bose	*Vegetos*	2017 **30.4:** 99-104	Research
9.	Investigate the effect of salt stress on yield and yield attributes of wheat. Dadrwal Basant Kumar, BL Kakralya, DL Bagdi, MK Sharma, Dadarwal Pinki, Sumitra Budaniya and SL Dabariya(2018)	*Journal of Pharmacognosy and Phytochemistry*	2018 **7(4):** 2094-2096	Research
10.	Correlation and Path Analysis in Fennel (*Foeniculum vulgare* Mill.) in Normal and Drought Condition. Pushpendra Singh1, B.L. Kakralya, Mahaveer Prasad Ola, **M.K. Sharma** and Kanta Kumawat	. *Int.J.Curr.Microbiol.App.Sci,.*	2020 (Special Issue) **-11:** 1342-1348	Research
11.	Efficacy of growth retardants on physiology and yield of pearl millet under rainfed condition. Sunita Gupta, **MK Sharma**, NK Jain, RC Meena, VP Agarwal and NK Gupta	*Indian Journal of Agricultural Sciences*	202, **3:** 398-401	Research
12.	Alleviation of adverse effects of salinity in Ber by foliar treatment with antioxidant. DL Bagdi, S Gupta, BL Kakralya, NK Gupta, N Yadav, **MK Sharma**, PL Saroj, BD Sharma and U Singh	*The Pharma Innovation*	2021 **10** (4): 227-229.	Research
13.	Roles of Nitric Oxide in Conferring Multiple Abiotic Stress Tolerance in Plants and Crosstalk with Other Plant Growth Regulators. Rajesh Kumar Singhal, Hanuman Singh Jatav, Tariq Aftab, Saurabh Pandey, Udit Nandan, Mishra,Jyoti Chauhan, Subhash Chand, Indu,Debanjana Saha5, Basant Kumar Dadarwal, Kailash Chandra, Mudasser Ahmed Khan, Vishnu D. Rajput, Tatiana Minkina8, Eetela Sathya Narayana, **Manoj Kumar Sharma**, Shahid Ahmed	*Journal of Plant Growth Regulation*	2021 40:2303–2328	Review
14.	Effect of growth substances on morpho-	Journal of	2021	Research

	physiological traits and yield in pearl millet under rainfed condition. GM Parmar, PR Patel, SK Parmar, KD Mungra and **MK Sharma**	Pharmacognosy and Phytochemistry,	**10(2):** 971-974.	
15.	Physiological and Molecular Action of Salicylate in Plants P. K. Singh, B. Bose, **M. K. Sharma** and A. Singh	*Developments in Physiology, Biochemistry and Molecular Biology of Plants, (Editors: Bandana Bose and A. Hemantaranjan)*	2008 2: 135-155.	Book Chapter
16.	SEED SCIENCE TREATISE. **Manoj Kumar Sharma**, Manohar Ram, Bajrang Lal Kakrala and Laxmikant Shama	*AGROBIOS (INDIA)*	2022	Book
17.	"वर्टिकल फार्मिंग या खड़ी खेती: कम जमीन में ज्यादा मुनाफा" राजू यादव, डॉ. बलराज सिंह एवम डॉ. मनोज कुमार शर्मा	कृषि स्मारिका प्रसार निदेशालय, श्री कर्ण नरेंद्र कृषि विश्वविद्यालय, जोबनेर	2024 पेज नं. 40-41,	Popular Article
18.	Foliar Application of Cow Urine Enhances Morphological Traits and Yield in Mungbean (*Vigna 5adiate* L.) Cultivars under Drought Stress Manju Jat, **Manoj Kumar Sharma**, Manoj Kumar Sharma, Basant Kumar Dadrwal	Agricultural Science Digest- A Research Journal of Agriculture, Animal and 6 Veterinary Sciences	2026: 10.18805/ag .D-6437	Research
19.	Response of Clusterbean (Cymopsis tetragonoloba L.) Varieties to Foliar Application of Micronutrients and Liquid Manures Sarita, AC Shivran, DK Jajoria, **MK Sharma**, SK Dadich, SS Punia and Bharti Devi	International Journal of Research in Agronomy	2026; 9(2): 181-185 DOI: https://www.doi.org/10.33545/2618060X.2026.v9.i2c.4851	Research

Recommendations:3 (State) (THE ELEVENTH MEETING OF COMBINED JOINT AGRICULTURAL RESEARCH COUNCIL OF SAUs – 2014-15 ORGANIZED BY ANAND AGRICULTURAL UNIVERSITY (APRIL 07-09, 2015)

1. "It is recommended to the **scientific community** that the genotypes DRT-2004-7 and J-53 possessed drought tolerance under unirrigated condition. Both genotypes recorded higher pod, haulm and biological yield. Harvest index and partitioning to pod were also highest along with high LAI and number of nodules at 70 DAS, thereby having better assimilation of photosynthates towards sink under rainfed condition. These genotypes may be used as parents in breeding programme for development of drought tolerant varieties."
2. "**The farmers of South Saurashtra Agro climatic zone** growing kharif groundnut are advised to go for foliar application of chlormequat chloride 50% SL @ 1000 ppm (2.0 ml/lit) at 50 DAS to suppress the excess vegetative growth and to get higher pod yield and net return."
3. "**The farmers of South Saurashtra Agro climatic zone** growing kharif groundnut are advised to go for foliar application of Cycocel @ 1000 ppm (2.0 ml/lit) at 30 DAS to suppress the excess vegetative growth and to get higher pod yield and net return."

1 (AICRP-PM, 2016-17)

1. "**The farmers of North Saurashtra Agro climatic zone** growing kharif pearl millet are advised to go for foliar application of potassium chloride 1.50 % (7.5 Kg ha-1 in

500 liter water) at 30-35 and 50-55 DAS for proper vegetative growth and to get higher seed yield and net" (AICRP-PM)

M. Sc. Students Guided Till Date: 7

SN	Name of student	Research Title	Year
1.	S. Sree Ganesh	Effect of Micro-nutrients and Bio-fertilizers on Morpho-physiological and Biochemical parameters and Productivity of Summer Groundnut (*Arachis hypogia* L.)	2014
2.	Kanta Kumawat	Effect of Organic Compounds on Morpho-physiological Traits and Yield of Wheat (*Triticum aestivum* L.) under Salt Stress	2020
3.	Manju Jat	Effect of Foliar Application of Cow Urine on Morpho-Physiological Characters and Yield of Different Cultivars of Mungbean [*Vigna 6adiate* (L.) Wilczek] Under Drought Condition	2021
3.	Priyanka Bochaliya	Effect of Foliar Application of Plant Growth Regulators on Morpho-physiological and Yield Parameters of Rainfed Cow Pea [*Vigna unguiculata* (L.)Walp]	2022
4.	Ajay Meena	Physio-biochemical Mechanisms in Wheat (*Triticum aestivum* L.) Genotypes Under Heat Stress	2022
5.	Ashish Kulhery	Morpho-physiological Responses of Mapiquat Chloride on Taramira (*Eruca sativa* Mill.) under Rainfed Condition	2023
6.	Sundaram Meghwal	Morphophysiological response of mepiquat chloride and Hydrogel in mustard [*Brassica juncea* (L.)] under limited irrigation.	2023
7.	Prakash Nagar	Drought and Salinity Tolerance at Seedling Stage in Pearl Millet [*Pennisetum glaucum* (L.) R. Br.] by Seed Hardening	2024
8.	Manoj Palsaniya	Response of Wheat [*Triticum aestivum* L.] to Foliar application of Micro- nutrients	2025
9.	Sanjay Sharma	Responses of Barley (*Hordeum vulgare* L.) to Plant Growth Regulators under Limited Water Condition	2025

Other Important Contributory Activities:

1. UG Teaching at **COA, Fatehpur-Shekhawati, COA- Lalsot, COA, Kisangadh Bas COA, Bhusawar and COABA, Jobner and** PG Teaching and Guiding at **Department Plant Physiology, SKNCOA, since joining.**
2. In charge of Store, PG Communication & seminar and HOD (December, 2019 to February 2020 and December, 2019 to February 2020 and March, 2024 to **Contd.**)
3. Member in various committees: Sporsts, Krish mela, Physical verification, NaHEP (purchase) etc.
4. Active participation in other important University & College level activities (EL Unit, technical cell, convocation, conferences, seminars, workshop etc.)

Extra Curricular Activities:

1. N.C.C. certificates (**A, B & C**)
2. Sports: (Participation in zonal level football tournament)

(Manoj Kumar Sharma)