

# Curriculum vitae

## DR. SHAILESH KUMAR JAIN

**Designation:** Associate Professor

**Discipline:** Plant Breeding and Genetics

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**Date of Birth** 07-08-1976

**Institution** Address: Division of Plant Breeding and Genetics  
Rajasthan Agricultural Research Institute  
(SKN Agriculture University)  
Durgapura, Jaipur: 302018

### Academic qualifications

Examination/ Degree	Board/University	Subjects/Specializa tion	Year of passing	Division
Senior Secondary	Raj Board Ajmer (Raj)	Agriculture	1994	I <sup>st</sup>
Graduation	RAU Bikaner (Raj)	Agriculture	1998	Ist
Post Graduation	RAU Bikaner (Raj.)	Plant Breeding and Genetics	2000	Ist
Ph.D	MPUAT Udaipur (Raj.)	Plant Breeding and Genetics	2004	Ist

### NET ASRB- ICAR (2001)

1. Title of the Ph D Thesis: "Induction of variability through mutagenesis in Black gram (*Vigna mungo* L. Hepper)
2. Title of the MSc Thesis: Line x Tester analysis for yield and yield traits in Wheat (*Triticum aestivum* L.)

### Employment record & Experience

Degree	Organization	Institution & place of posting	Period (From-to)	Total period
Assistant Research Scientist (PBG)	S. D. Agricultural University, Gujarat	Sorghum Research Station, Deesa, Gujarat	18-1- 2008 to 27 Feb. 2018	10 years
Associate Professor (PBG)	SKNAU Jobner (Rajasthan)	COA Lalsot	28 Feb. 2018 to 28 August 2019	1.5 years
Associate Professor (PBG)	SKNAU Jobner (Rajasthan)	RARI, Durgapura, Jaipur	29 August 2019 to cont....	3 Year

Professor (PBG)	SKNAU (Rajasthan)	Jobner	RARI, Durgapura, Jaipur	27 Feb. 2021 to Cont..	4 Year
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**Leadership position in research organization/programmes - Head of Department / Division onwards**

Sl. No.	Position	Name of organization / programmes	Year
1.	Head	Deptt. of Genetics & Plant Breeding, RARI, SKNAU, Durgapura, Jaipur	2023 to Cont.
2	Incharge	AINP on Arid Legumes, RARI, SKNAU, Durgapura, Jaipur	2020 to 2023
3.	Incharge	AICRP on Chickpea, RARI, SKNAU, Durgapura, Jaipur	2019 to Cont..
4.	Incharge	AICRP on Pearl millet, RARI, SKNAU, Durgapura, Jaipur	2023 to Cont..
5.	Nodal Officer	Seed Hub, Pulses, RARI, SKNAU, Durgapura, Jaipur	2020 to 2023
6.	DDO	Potato Research Station, S. D. Agricultural University, Deesa, Gujarat	2012 to 2018

**List of cultivars developed, released and notified:**

S. No	Details of Variety	Details of notification	CVRC/ SVRC	Breeder Seed Indent (q)	Lead Developer /Proposer/ Co- developer
1	Chickpea: RSGD 1155 (Karna Chana 20) Suitable for late sown conditions in NEPZ zone	Notification No. S.O. No. 2128(E), dated 13 <sup>th</sup> May, 2025	CVRC	20 (K 2025)	Lead Developer
2	Chickpea (Kabuli) Karan Kabuli 4 • Bold seeded and high yield • Early maturity • High demand in South India	Notification No. S.O. No. 8 (E), dated 24th December, 2021	CVRC	2.0 (Rabi 2023- 24)	Lead Developer
3	Chickpea: RSGD 926 (Karan Chana 19) Suitable for Rain fed areas of Rajasthan	Submitted to state release	SVRC	-	Lead Developer
4	Chickpea: RSGD 1245 (Karna Chana 21) Bold seeded suitable for mechanical harvesting	Submitted to state release	SVRC	-	Lead Developer

5	Pearl millet Hybrid: RHB 273 suitable for Arid region of India (A1 Zone), <b>World first Three way Hybrid of Pearl millet</b>	Notification No. S.O. No. 6123 (E), dated 31 <sup>st</sup> Dec. 2025.	CVRC		Lead Developer
6	Cluster bean variety: Karan Guar 14 (Cluster bean) <ul style="list-style-type: none"> <li>• Karan Guar 14 notified in March 2023 is highest yielding guar variety with high gum and viscosity profile</li> <li>• Seed of this variety is in very high demand. Its commercialization has started 10 q DAC indent received in 2023.</li> </ul>	Notification No. S.O. No. 1056 (E), dated 06 <sup>th</sup> March, 2023	CVRC	20.0 (K 2023)	Lead Developer
7	GJ 43 (Gujarat Jowar 43): <ul style="list-style-type: none"> <li>• Released for rain fed conditions</li> <li>• Drought and disease tolerance</li> <li>• Dual purpose with Excellent fodder quality</li> <li>• High demand in Gujarat/Rajasthan</li> </ul>	Notification No. S.O.6318 (E) dated 26 December 2018	SVRC	State Indent	Lead Developer
8	GDJ-1 (Banas Surya 1) <ul style="list-style-type: none"> <li>• High grain and fodder yield</li> <li>• Mature in 100 days</li> <li>• High quality fodder</li> </ul>	Notification No. S.O. No. 4065 (E), dated 31 August 2022	SVRC	State Indent	Lead Developer
9	Gujarat Cowpea-6 Bold seeded, high yield, High DAC indent	Notification No. S.O. No. 1379 (E), dated 27 March 2018	SVRC	State Indent	Collaborator
10	GFS 6 (Gujarat Fodder Sorghum 6): <ul style="list-style-type: none"> <li>• Good in fodder quality parameters</li> <li>• Less infestation of leaf blight and anthracnose.</li> <li>• Good seed indent</li> </ul>	Notification No. S.O. No. 3220 (E), dated 5 Sept. 2019	SVRC	0.40 (K 2022-23) 0.50 (K 2021-22)	Collaborator

11	GNJ 1 (Sorghum) • Good in seed yield and dry fodder quality • High demand in Gujarat	Notification No. S.O. No. 1379 (E), dated 27 March 2018	SVRC	0.10 (K 2021)	Collaborator
12	CSV 21 F • Suitable for green and dry fodder • Lowest HCN content (68 ppm) • High seed indent	Notification No. S.O. No. 3540 (E), dated 22 Nov. 2016	CVRC	0.40 (K 2017-18)	Collaborator
13	Dantiwada Field Pea-1 (SKNP 04-09) • High yielded 15-20 q/ha • Resistant with powdery mildew • Mature in 100-110 days.	Notification No. S.O. 632(E) 25.03.2011).	CVRC	50.0 (2016-17) 25.0 (2017-18), 49.38 (2018-19), 44.75 (2019-20), 123.71 (2021-22) 22.0 (2022-23)	Collaborator
14	Karan Guar 15 (RGr 20-15)	(Notification Proposal Submitted)	CVRC	-	Lead Developer
15	Banas Chari GFS 8 (DSF 168)	2023 (Notification Proposal Submitted)	SVRC	-	Lead Developer
16	GJ 45 (DS 189)	2023 (Notification Proposal Submitted)	SVRC	-	Lead Developer
17	Gujarat Isabgol-4	47 <sup>th</sup> State Variety Release committee meeting, Gandhi nagar, Gujarat 2016	SVRC	-	Collaborator

### Externally funded Projects

SN	Project	Duration	Funding Agency	Association as
1	Socio economic upliftment of tribal farmers using improved sorghum production technology under TSP	2013-16	ICAR GOVT of India	PI
2.	HOPE project of Bajara	2009-2016	ICRISAT-Bill & Melinda Gates Foundation	CCPI

3.	Development of Genomics and Marker assisted breeding tools for Pearl millet	2010-11-2013-14	RKVY	PI
4	Germplasm Characterization Under CRP Agro Biodiversity, SDAU Gujarat	6/2015 to 3/2016	NBPGR, New Delhi	PI
5	Germplasm Characterization for drought and DRR in chickpea, RARI Durgapura	29 August 2019 to Cont	NBPGR, New Delhi	PI
6	Creation of seed Hub for increasing indigenous production of Pulses in India	April 2016 to cont..	Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Government of India	PI
7	Consortia for Research Platform (CRP) in 'Biofortification in selected crops for nutritional security'.	June 2023 to cont..	ICAR/IRRI, Hyderabad	PI

### Recent Awards and reorganizations:

1. **STAR Excellence Award:** For significant contribution in research and development in chickpea and millet crops by Science and Technology Applications Remodel (STAR) Society Jaipur (Rajasthan) on the occasion of National Conference organized by STAR society and SKNAU Jobner during, Feb. 23-25, 2025
2. **Best oral presentation award(Silver Medel):** Received for paper presented entitled "Combining ability and heterosis studies for yield, grain iron and zinc content in pearl millet" during National Conference organized by STAR society and SKNAU Jobner during Feb. 23-25, 2025
3. Received the "Certificate of Appreciation for significant performance in Zone A ICAR-AICRP Pearl Millet Centre in the 57<sup>th</sup> Annual Group meet held on 3<sup>rd</sup> March 2022. Being part of AICRP team
4. **Sadvichar Parivar award**, 2019 from the Gujarat Association for Agricultural Sciences, Gujarat for development of a novel high yielding dual sorghum variety GJ 43. By GAAS Gujarat.
5. **Young scientist award**, GRISAAS, 2018, RARI Durgapura
6. **Best article award** from Jawar sorabh, Indian Institute of Millet Research (ICAR) Hyderabad
7. **Certificate of excellence**, special mention (scientific category), 2<sup>nd</sup> Academic Brand Award 2017, EET CRS research wing for Excellence in Professional Education and Industry, Research and Branding Company, New Delhi.
8. **Fellow of Indian Society of Pulse Research and Development, 2026.** ICAR-Indian Institute of Pulse Research, Kanpur, India, Received during NC Pulses on Planet and People: Sustainable Livelihood and Nutritional Security Under Changing Climate Scenario, Feb. 10-12, 2026, ICAR-IIPR Kanpur.

9. **Vice Chancellor Appreciation Award (2026)** – In recognition of outstanding research contribution, Sri Karan Narendra Agriculture University, Jobner (26 January 2026).

### **Other professional Activities:**

1. Members of professional societies:
  - Indian society of Genetics and Plant Breeding (Life)
  - Indian Society of millet Research(Life)
  - Indian Society of Pulse Research and Development, IIPR Kanpur (Life)
  - Gujarat Agricultural Research Association(Life)
2. Team member of AICRP monitoring team
3. Councilor North Zone, ISPRD Kanpur, 2023-2026

### **Publications**

1. Ola M. P., **Jain, S. K.**, Choudhary R., Punia S. S. and Bhardwaj C. (2025). Physio-Biochemical trait characterization using generation mean analysis in chickpea (*Cicer arietinum*) under timely and late sown conditions. *Indian Journal of Genetics and Plant Breeding*, 2025, 85 (2).321-324.
2. **Jain S. K.\***, Sharma S. K., Gupta D. K., Khandelwal V., Sharma R. K., Anuradha , Sharma V., Dhaka B. L. and Gupta S. K. (2025). Combining ability and heterosis studies for yield, grain iron and zinc content in pearl millet [*Pennisetum glaucum* (L.) R. Br.] under varied environmental conditions. *Indian Journal of Agricultural Sciences*, 95 (6): 611-616.
3. **Jain, S. K.** and Shekhawat S. S. (2024). Variety Karan guar 15 (RGr 20-15). *Indian Journal of Genetics and Plant Breeding*, 84(2):314-315.
4. **Jain, S. K.**, Sharma, L. D., Singh, S. J., Gupta, K. C., Kumar, V. and Sharma R. S. (2022). Variety CSJK 174 (Karan Kabuli 4). *Indian Journal of Genetics and Plant Breeding*, 82 (3): 376-377.
5. Choudhary, R., **Jain, S. K\*.**, Ola, M. P., and Bhardwaj, C. (2023). Genetic effects and heterosis for seed yield and physio-biochemical traits in chickpea (*Cicer arietinum*). *The Indian Journal of Agricultural Sciences*, 93(8), 850–855. <https://doi.org/10.56093/ijas.v93i8.135459>.
6. Choudhary, R., **Jain, S. K.**, Ola, M. P. and Gupta, D. (2023). Gene action and combining ability for yield and other quantitative traits under timely and late sown conditions in chickpea (*Cicer arietinum* L.). *Indian Journal of Genetics and Plant Breeding*, 83(02), 273–277.
7. **Jain S K**, Sharma LD, Gupta KC, Vipin Kumar and Yadav MR (2023). Variability and character association for yield and quantitative traits under late sown conditions in Chickpea (*Cicer arietinum* L.). *Legume Research*. 46(4): 408-412. DOI 10.18805/LR-4432.
8. **Jain S. K.**, Sharma LD, Gupta KC, Vipin Kumar and Sharma, R. S. (2023). Principal Component and Genetic Diversity Analysis for Seed Yield and Its Related Components in the Genotypes of Chickpea (*Cicer arietinum* L.). *Legume Research*. 46 (9): 1174-1178. DOI 10.18805/LR 4489.
9. **Jain, S. K.**, Shekhawat S. S. and Gupta, K. C. (2023). Karan guar 14: A new high-yielding and quality gum content variety for India's rain-fed conditions. *Indian Journal of Agricultural Sciences*, 93 (4) 460-463. [10.56093/ijas.v93i4.133493](https://doi.org/10.56093/ijas.v93i4.133493).

10. **Jain, S.K.**; Wettberg, E; Punia, S.S.; Parihar, A.K.; Lamichaney, A.; Kumar, J.; Gupta, D.S.; Ahmad, S.; Pant, N.C.; Dixit, G.P.; et al. 2023. Genomic-Mediated Breeding Strategies for Global Warming in Chickpeas (*Cicer arietinum* L.). *Agriculture*, 13, 1721. <https://doi.org/10.3390/agriculture 13091721>
11. Choudhary A.K., **Shailesh Kumar Jain**, Abhishek Kumar Dubey, Jitendra Kumar, Mamta Sharma, K. C. Gupta, L. D. Sharma, Vedprakash and Saurabh Kumar. (2023). Conventional and Molecular Breeding for Disease Resistance in Chickpea: Status and Strategies. *Biotechnology and Genetic Engineering Reviews*, 39 (2): 193-224.
12. **Jain, SK**, Gupta, KC, Kumar, V, Jakhar, BL and Meena, O P (2022). Principal component analysis and genetic diversity for seed and fodder yield in cowpea (*Vigna unguiculata* (L.) Walp.). *Range Management & Agro forestry*, (43) 2: 224-230.
13. Gupta K. C., Saxena R., Jain, S. K., Kumar, V., Yadav, M. R. (2021). Yield and nutrient fortification of chickpea by foliar Fe and Zn applications. *Journal of Crop and Weed*, 17 (3): 29-34.
14. Gupta KC, Praharaj CS , **Jain SK** , Kumar Vipn and Yadav M R (2020) .Crop, water productivity and economics in chickpea as influenced by application of hydrogel and foliar nutrition. *Journal of food legumes* 33(4):252-256.
15. Kumar Vipin, Gupta, K.C , **Jain S.K**, Chawla Nitin (2022) Effect of Larval Density of *Helicoverpa armigera* (Hubner) on Pod Damage and Yield of Chickpea. *Agricultural Science Digest* 42: 76-79.
16. Ola M. P. , **Jain S. K.** and Choudhay R. (2024). Genetic Studies through Generation Mean Analysis in Chickpea under Timely and Delayed Planting. *Journal of Food Legumes* 37(3):262-269.
17. Ola, M. P., **Jain, S. K.**, Nehra, M. R., Choudhary, R., and Nehra, A. (2022). Genetic Analysis for Phenological Characters in Desi x Desi Crosses of Chickpea (*Cicer arietinum* L.) under Timely and Late Sown Conditions. *International Journal of Environment and Climate Change*, 12(11), 3706-3715.
18. Punia S. S. , Singh K. , Ahmad S. , Ram B. , Dheer M. , Verma P., Jat V. S, Solanki R. K. , Parihar A. K. , **Jain S. K.** , Dalip, Khan K., Agrawal S. K. and Gupta S. (2024). New lentil variety RKL 58F-3715: a case study depicting the emergence of desirable transgressive segregants. *Journal of Food Legumes* 37(1): 22-33.
19. Choudhary R., **S.K. Jain** , Mahaveer Prasad Ola, Anita Burdak and Deepak Gupta (2022). Assessment of Genetic Variability Parameters for Yield and Yield Components in Chickpea (*Cicer arietinum* L.). *Biological Forum – An International Journal* 14(4): 150-153.
20. Choudhary R., **S. K. Jain**, Seema Jat, Mahaveer Prasad Ola, Anita Burdak, and Deepak Gupta. 2023. “Estimation of Heterosis for Seed Yield and Yield Contributing Characters of Desi X Desi Crosses of Chickpea (*Cicer arietinum* L.) under Late Sown Condition”. *International Journal of Environment and Climate Change* 13 (2):83–94.
21. **Jain SK**, Gayacharan , Sharma LD, Gupta KC , Sharma RS, Kumar V ,Singh N, Pandey S, Dixit GP and Ashok Kumar (2022). Trait associations and Diversity analysis based on quantitative traits under moisture stress conditions in Chickpea (*Cicer arietinum* L.). *Journal of Food Legumes*, 35 (1): 3-10.
22. **Jain SK**, Sharma LD, Gupta KC and Vipin Kumar (2021). Association among yield and yield contributing characters in Chickpea (*Cicer arietinum* L.). *Journal of Food Legumes* 33(3): 164-169.
23. **Jain S. K.**, Sharma LD, Gupta KC, Vipin Kumar and Yadav MR (2021). Principal Component and Genetic Diversity Analysis for Seed Yield and Its Related Components

- in the Genotypes of Chickpea (*Cicer arietinum* L.). Legume Research. (LR 4489) Published online (NAAS: 6.34).
24. **Jain S. K.**, Sharma LD, Gupta KC, Vipin Kumar and Yadav MR (2020). Variability and character association for yield and quantitative traits under late sown conditions in Chickpea (*Cicer arietinum* L.). Legume Research. DOI:[10.18805/LR-4432](https://doi.org/10.18805/LR-4432) Published online (NAAS: 6.34).
  25. Ghosaliya, B. K., Mittal. G. K. , Shivran A. C., Sharma S. K., Saxena S. N. and Jain S. K. (2020). Water stress induced changes in seed quality of fenugreek (*Trigonella foenum- graecum* L.) genotypes. Legume Research. (LR 4493) Accepted (NAAS: 6.34).
  26. Chawla Nitin, Kumar Vipen, Bagri R K and **Jain S K.** 2020. Survivability of soil bio-agents in presence of organic amendment in arid condition of Rajasthan, India. *Int j Curr Microbiol App Sci* 9(3): 3124-3129. (NAAS: 5.31)
  27. **Jain S. K.**, Elangovan M., Patel P. R. , Tyagi R. K., Pandey Sushil and Tonapi Vilas A. (2019). Characterization of Sorghum (*Sorghum bicolor* (L.) Moench) Germplasm under CRP-Agro Biodiversity (2019) Indian Journal of Plant Genetic Resources 32 (1): 107-109. I 082: 5.12
  28. **Jain, S. K.** and Patel, PR (2019). Stability of newly developed genotypes in Kharif Sorghum (*Sorghum bicolor* L.) J. Soils and Crops. 29 (1): 74-77. J 476: 4.46
  29. Patel, PR, **SK Jain**, RM Chouhan and PT Patel (2019). Stability analysis for fodder yield and its contributing traits in forage sorghum. Electronic Journal of Plant Breeding, 10 (2): 353-363.e 038: 4.97
  30. Patel, PR, RM Chouhan and **SK Jain** and DG Patel (2019). Combining ability and heterosis for fodder yield, quality and its component traits in forage sorghum. International Journal of Chemical Studies, 7 (2): 3931-38. I 185: 5.31
  31. Chongtham, SK, **SK Jain** and PR Patel (2018). Effect of production resource constraints on yield and economics of kharif sorghum in the Northern Gujarat region. *Journal of Pharmacognosy and Phytochemistry* 7(3): 3221-3223.j 399: 5.21
  32. **Jain S. K.** and Patel P. R. (2018). A new sorghum variety “Gujarat Jowar 43 (GJ 43)” for feed and fodder security of milch animals in Gujarat. *Green Farming* Vol. 9 (6) : 944-948. **G046: 4.38**
  33. Patel, PR, Jain S. K. and Sharma M. (2018). Stability analysis of component characters in cowpea (*Vigna unguiculata* L.). Trends in Biosciences 11(47) 4368-70. T 088: 3.94
  34. Patel, PR, RM Chouhan and **SK Jain** (2018). Heterosis for fodder yield and quality traits in forage sorghum. Forage Res., 44 (1): 32-37. F 064: 4.48
  35. Chongtham, SK, **SK Jain** and PR Patel (2018). Yield, Productivity and Economics as Influenced by Different Fertility Levels and Genotypes in Single Cut Forage Sorghum under Rainfed Environment of the Northern Gujarat. *Annals of Arid Zone* 57(1&2): 23-26. A 183: 3.02
  36. Aruna C, SK. Pahuja, PK. Shrotria, **SK. Jain**, S. Sivakumar and DT Deshmukh (2017). Identification of stable forage sorghum genotypes using univariate and multivariate analyses. Forage Res., 43 (3): 181-186. F 064: 4.48
  37. **Jain, SK** and Patel PR. 2016. Genetic diversity and principal component analysis for fodder yield and their component traits in genotypes of forage sorghum [*Sorghum bicolor* (L.) Moench]. *Annals and Arid Zone*, 55 (1&2): 17-23. F 064: 4.48
  38. **Jain, SK** and Patel PR. 2016. Genetic parameters and character associations for yield and yield contributing traits in dual sorghum [*Sorghum bicolor* (L.) Moench]. *GAU Research Journal*, 42 (2): 66-72. G 052: 2.72
  39. **Jain, SK** and Patel PR. 2016. Principal component and cluster analysis in sorghum [*Sorghum bicolor* (L.) Moench]. *Forage Research*, 42 (2): 90-95. F 064: 4.48

40. **Jain, SK** and Patel PR. 2016. Combining ability and gene action for yield and other quantitative traits in half diallel crosses of Sorghum [*Sorghum bicolor* (L.) Moench]. ***The Bioscan***, **11** (2): 1027-1031.t 017: 5.26
41. **Jain, SK** and Patel PR. 2016. Genetic variability in parents and crosses of dual sorghum. ***Annals of Plant and Soil Research***, **18** (3):257-261.a 197: 4.39
42. **Jain, SK** and Patel PR. 2016. An assessment of Combining ability and heterosis for yield and yield attributes in Sorghum [*Sorghum bicolor* (L.) Moench]. ***Green Farming***, **7** (4):791-794.
43. Aruna, C, Rakshit S, Shrotriya PK, Pahuja SK, **Jain SK**, Siv Kumar, Modi ND, Deshmukh DT, Kapoor E and Patil JV. 2016. Assessing genotype-by-environment interactions and trait associations in forage sorghum using GGE biplot analysis. ***Journal of Agricultural Science, Cambridge***, **154** (1): 73-86.
44. Prajapati A, Patel CK, Singh N, **Jain SK**, Chongtham SK, Maheshwari MN, Patel CR and Patel RN. 2016. Evaluation of seaweed extract on growth and yield of potato. ***Environment and Ecology***, **34** (2): 605-608.
45. **Jain, SK** and Patel PR. 2015. Characters association and path analysis in sorghum (*Sorghum bicolor* (L.) Moench) F<sub>1</sub>s and their parents. ***Annals of Plant and Soil Research***, **16** (2):107-110.
46. Elangovan, M, **Jain SK**, Patel NV, Patel PR, Raghavendra Rao KV, Kiran Babu P and Jhansi Rani M. 2015. Diversity of Sorghum [*Sorghum bicolor* (L.) Moench] germplasm from Gujarat India. ***International Journal of Advanced Research***. **3** (3): 760-777.
47. **Jain, SK** and Patel PR. 2014. Combining ability and heterosis for grain yield, fodder yield and other Agronomic traits in Sorghum [*Sorghum bicolor* (L.) Moench]. ***Electronic Journal of Plant Breeding***, **5** (2):152-157.
48. Elangovan, M, **Jain SK** and Patel NV. 2013. Genetic evaluation and characterization of Sorghum Germplasm Collected from Gujarat. ***Indian Journal of Plant Genetic Resources***, **26**: 42-46.
49. Jain, UK, Ramkrishana and **Jain SK**. 2013. Comparative mutagenic efficiency, effectiveness and induced polygenic variability in Mothbeen (*Vigna acontifolia* L.). ***Indian Journal of Genetics and Plant Breeding***, **73** (1):57-63.
50. **Jain, SK** and Patel PR. 2013. Heterosis studies for yield and its attributing traits in Sorghum (*sorghum bicolor* (L.) moench). ***Forage Research***, **39** (3): 114-117.
51. **Jain, SK** and Patel PR. 2013. Variability, correlation and path analysis studies in sorghum (*Sorghum bicolor* (L.) Moench). ***Forage Research***, **39** (1): 27-30.
52. Gomashe, S, Elangovan M, **Jain SK** and Samdur MY. 2013. Evaluation of sorghum genotypes for earliness and photoperiod response. ***Sorghum Times***, **10** (1): 9-11.
53. **Jain, SK** and Patel PR. 2013. Multivariate analyses in sorghum (*Sorghum bicolor* L. Moench) for fodder yield and their attributes. (***Agriculture. Science. Digest.***, **33** (3): 215-218.
54. **Jain, SK** and Sastry EVD 2012. Heterosis and combining ability for grain yield and its contributed attributes in wheat (*Triticum aestivum* L.). ***RRJAAS***, **1** (1):17-22.
55. **Jain, SK** and Sastry EVD 2012. Variation for major plant nutrient uptake in a set of wheat lines and their crosses. ***Journal of Plant Development Sciences***, **4** (3): 387-390.
56. **Jain, SK** and Patel PR 2012. Stability analysis for yield and yield their component traits in breeding lines of Guar (*Cyamopsis teteragonoloba* L.). ***Legume Research***, **35** (4): 327-331.
57. Patel, PR and **Jain SK** 2012. Stability analysis for yield and yield component traits in new breeding lines of cowpea (*Vigna unguiculata* L.). ***Legume Research***, **35** (1): 23-27.

58. **Jain, SK**, Patel PR and Elangovan M. 2012. Genetic divergence in local land races of forage sorghum (*Sorghum bicolor* (L.) Moench) collected from different geographical origin. *Research on Crops*, **13** (2): 556-561.
59. Rakshit, S, Ganapathy KN, Gomashe SS, Rathore A, Ghorade RB, Nagesh KMV, **Jain SK**, Kamatar MY, Sachan JS, Ambaker SS, Ranwah BR, Kanawade DG, Balusamy M, Sarkar A, Tonapi VA, Patil JV. 2012. GGE biplot analysis to evaluate genotype, environment and their interactions in sorghum multi-location data. *Euphytica*, **185**:465-479.
60. **Jain, SK** and Patel PR. 2012. Genetic variability in land races of forage Sorghum {*Sorghum bicolor* (L) Moench} collected from different geographical origin of India. *International Journal of Agriculture Sciences*, **4** (2): 182-185.
61. **Jain, SK**, Elangovan M and Patel PR. 2011. Variation and association among fodder yield and other traits in germplasm of forage sorghum (*Sorghum bicolor* (L.) Moench). *Indian Journal of Plant Genetic Resources*, **24** (3) 327-331.
62. **Jain, SK**, Elangovan M and Patel NV. 2010. Correlation and Path Coefficient Analysis for Agronomical Traits in Forage Sorghum [*Sorghum bicolor* (L.) Moench]. *Indian Journal of Plant Genetic Resources*, **23** (1):15-18.
63. **Jain, SK** and Khandelwal V. 2009. Induced polygenic variability in Black gram [*Vigna mungo* (L.) Hepper]. *Indian Journal of Genetics and Plant Breeding*, **69**(1):72-75.
64. **Jain, SK**, Elangovan M and Patel NV. 2009. Genetic and environmental variability in dual sorghum (*Sorghum bicolor* (L.) Moench) for yield and related traits. *Forage Research*, **34** (4):201-204.
65. **Jain, SK** and Khandelwal V. 2009. Mutagenic effect of EMS and DMS on frequency and spectrum of macro mutations in black gram [*Vigna mungo* (L.) Hepper]. *Journal of Food Legume*, **22** (4): 264-268.
66. Dubey, RB, **Jain SK** and Maloo SR. (2009). Genetic diversity in Isabgol (*Plantago ovata*) Forsk ). *Journal of Medicinal and Aromatic Plant Sciences*, **31**: 29-32.
67. **Jain, SK** and Jain DK. 2009. Experimental mutagenesis to induced resistance to downy mildew incited by *Perenospora plantaginis* in Isabgol. *Journal of Medicinal and Aromatic Plant Sciences*, **31**: 219-222.
68. **Jain, SK**, Mathur VL and Khandelwal V. 2008. Comparative Mutagenic efficiency and effectiveness of EMS and DMS in black gram (*Vigna mungo* L. Hepper). *Crop Improvement*, **35** (2):146-53.
69. Dubey, RB, **Jain SK**. and Maloo SR. 2007. Combining ability and heterosis for latex yield, seed yield and other agronomic traits in opium poppy (*Papaver somniferum* L.). *Indian Journal of Genetics and Plant Breeding*, **67**(4):392-95.
70. Neemar, DP, **Jain SK** and Mathur VL. 2007. Estimation of Genetic variability for nitrogen fixation in black gram genotypes with different strains of *Rhizobium*. *Legume Research*, **30** (4):275-278.
71. **Jain, SK**, Bordia PC and Joshi A. 2007. Genetic diversity in Ashwagandha (*Withania somnifera*). *Journal of Medicinal and Aromatic Plant Sciences*, **29**: 11-15.
72. **Jain, SK**, Dodiya NS and Joshi A. 2006. Genetic variability and character association in Opium poppy (*Papaver somniferum*). *Journal of Medicinal and Aromatic Plant Sciences* **28**: 190-193.
73. **Jain, SK** and Mathur VL. 2006. Efficiency and effectiveness of chemical mutagens and their combinations with plant growth regulators in urdbean. *Journal of Food Legume*, **19** (2): 251-252. J203:3.19

74. Dodiya, NS, **Jain SK.** and Joshi A. 2005. Heterosis and combining ability in opium poppy (*Papaver somniferum* L.). *Journal of Medicinal and Aromatic Plant Sciences*, **27**: 431-434.
75. Jain, DK, **Jain SK,** Bordia PC. and Joshi A. 2005. Study of genetic variability and correlation in Opium poppy (*Papaver somniferum*). *Research on Crops*, **6** (1): 112-115.
76. **Jain, SK,** Jat VS., Jain DK, Bordia PC and Singh DP. 2002. Genetic correlation and path coefficient studies for seed yield in Opium poppy (*Papaver somniferum*). *Annals of Plant and Soil Research*, **4** (2): 337-338.
77. Jain UK, Singh D and **Jain SK** 2002. Assessment of genetic variability in coriander. *Annals of Plant and Soil Research*, **4** (2): 329-330.
78. Jat VS, Jain DK, **Jain SK** and Bordia PC 2002. An assessment of genetic variability in Opium poppy (*Papaver somniferum*). *Acta Ecology*, **42** (2): 191-194.

#### Review Articles

1. **Jain, S. K.** and Omprakash (2019). Pre-breeding: A bridge between genetic resources and crop improvement. *Int. J. Curr. Microbiol. App. Sci.* **8**(2): 1998-2007. **I199:5.38.**
2. **Jain, S K** 2018. Participatory plant breeding an approach for crop improvement. *Indian Farmer*. **5** (12): 1475-81.
3. **Jain, S K** 2017. Sweet sorghum: An alternative for bio ethanol production. *Indian Farmer*. **4** (11): 865-87.

#### Popular Articles

1. Jain, S. K. (May 2019). Javprodyogiki faslen evam unka kshetra evam upyogita. Vishav Krushi Sanchar. Pp 15-16.
2. Jain, S. K. (2018). Participatory plant breeding an approach for crop improvement. *Indian Farmer* **5**(2): 1773-1481.
- 3.
4. एस. के. जैन, एस.एस. शर्मा एवं सुदेश कुमार (2018). जीरा राजस्थान की एक महत्वपूर्ण बीज मसाला फसल: गिरनार, अंक-5, 2018.
5. एस. के. जैन. (जन. 2019). उन्नत खेती का आधार : उत्तम एवं शुद्ध बीज। मध्य भारत कृषक भारती 17-18.
6. **जैन एस. के.** 2017. बहु कटाई वाली चारा ज्वार की खेती तकनीक | *कृषिसेवा* Pp 1-5.
7. **जैन एस. के.** 2016. भारत में चारा ज्वार की उन्नत खेती | *खेती रो ज्ञान* Pp 1-4
8. **जैन एस. के.** 2016. भारत में चारा ज्वर की उन्नत कृषि प्रोद्योगिकी | *कृषि जीवन* 4-6: 14-15.
9. **जैन एस. के. एवं पी. आर. पटेल** 2015. उत्तर गुजरात हेतु चारा ज्वार की उन्नत किस्म "सीएसवी 21 एफ " के मुख्य गुणधर्म एवं उन्नत कृषि क्रियाएँ | *ज्वार सोरभ* **6**: 25-28.
10. **जैन एस. के.** 2015. दाना उत्पादन हेतु संकर ज्वार की उन्नत खेती | *खेती दुनिया* Pp 3&6.

11. **जैन एस. के.** 2015. भारत में खाद्यान्न ज्वार की उन्नत खेती | *खेती रो ज्ञान* Pp 3-7.
12. **जैन एस. के.** 2015 भारत में खाद्यान्न ज्वार का महत्व एवं उत्पादन की उन्नत प्रोद्योगिकी | *किसान खेती* 2 (1) : 31-38.
13. **जैन एस. के.** 2015. खाद्यान्न ज्वार के अधिक उत्पादन के लिए उन्नत किस्मों की करें बुआई *कृषि जीवन* 18 (4): 11-13.
14. **जैन एस. के.** एवं गोमाशय एस. 2015. भारत में खाद्यान्न ज्वार का महत्व एवं उत्पादन की उन्नत प्रोद्योगिकी | *किसान खेती* 2 (1) : 31-38.
15. **जैन एस. के.** 2015. संकर ज्वार का बीज उत्पादन एक फायदे का सोदा | *किसान खेती* | 2 (3) : 7-14.
16. **जैन एस. के.** 2014. गुजरात में ज्वार का वर्तमान परिदृश्य एवं भावी संभावनाएँ, *ज्वार सोरभ* 5: 6-10.
17. **जैन एस. के.** 2013. उत्तर गुजरात में चारा ज्वार उत्पादन की उन्नत कृषि प्रोद्योगिकी, *ज्वार सोरभ* 4: 25-27.
18. **जैन एस. के.** 2012. उत्तर गुजरात में द्विउद्देश्य ज्वार जी. जे. 39 की उन्नत खेती, *ज्वार सोरभ* 3: 11-13
19. दुबे आर. बी., **जैन एस. के.** एवं चावला एस. एल. 2008. मेन्था की अधिक पैदावार लेवें फल फूल (आई. सी. ए. आर. ), पेज. नंबर 16-20.

#### Conference Proceeding Papers/Abstracts

1. **Jain SK** and Patel PR. 2016. Study of combining ability and gene action for yield and other quantitative traits in Sorghum [*Sorghum bicolor* (L.) Moench] In: Proceeding of National seminar on BAU Ranchi.
2. Gomashe S, Ganpathy KN, **Jain SK**, Samdur MY and Patil JV. 2015. Photoperiod response, stability and GGE biplot analysis in Sorghum [*Sorghum bicolor* (L.) Moench] In: Proceeding of the 2<sup>nd</sup> International conference on bio resources and stress management during 7-10 Jan. 2015 at PJTSAU, Rajendranagar, Hyderabad India Pp 85.
3. **Jain, SK** and Pate PR. 2014. Genetic analysis for yield and other important traits in Sorghum [*Sorghum bicolor* (L.) Moench]. In: Proceeding of National Symposium on Crop Improvement for Sustainable Development held on Nov. 7-9, 2014 at PAU, Ludhiana. Pp.128-130.
4. **Jain, SK** and Patel PR. 2013. Combining ability and heterosis for grain yield, fodder yield and other agronomic traits in Sorghum [*Sorghum bicolor* (L.) Moench]. In: *Global Consultation on Millets Promotion for Health and Nutritional Security December 18-20, 2013 at DRR Hyderabad* Pp 303-304.
5. **Jain, SK** and Patel PR. 2012. Genetic variability and yield potential of single cut fodder varieties of sorghum (*Sorghum bicolor* L. Moench). In: International conference on sustainable agriculture for food and livelihood security held during 27-29, 2012 organized by CISI, Ludhiana, Punjab, India Pp 359-360.
6. **Jain, SK** Patel PR. and Elangovan M. 2011. Divergence in land races of forage sorghum (*Sorghum bicolor* (L.) Moench) In: National Symposium on Resource

Utilization through Integrated Farming System and Biodiversity Conservation in Dry lands to be held during 20-22, 2011 organized by RRS, CAZRI, Bhuj. Pp 23.

7. **Jain, SK.** and Patel PR. 2011 Multivariate analyses in sorghum (*Sorghum bicolor* L. Moench) for fodder yield and their attributes In: National Symposium on Resource Utilization through Integrated Farming System and Biodiversity Conservation in Dry lands to be held during 20-22, 2011 organized by RRS, CAZRI, Bhuj. Pp 22.
8. Sujay Rakshit , KN. Ganapathy, SS. Gomashe, RB. Ghorade, MV. Nagesh Kumar, K. Ganeshmurthy, **SK. Jain** , M.Y. Kamtar, JS. Sachan , SS. Ambekar, BR. Ranwa, DG. Kanawade, M. Balusamy, D. Kadam, S. Audilakshmi, VA. Tonapi and JV. Patil.GGE Biplot analysis of genotype by environment interactions in Indian sorghum multi-location data 2011. Published in National Seminar on “Contemporary Approaches to Crop Improvement 22nd - 23rd April, 2011 by Indian Society of Genetics & Plant New Delhi and University of Agricultural Sciences, (GKVK Campus), Bangalore, PS II 63. Page No 119-120.
9. **Jain, SK.**, Elangovan, M. and Patel, N. V. 2009. Correlation and path coefficient analysis for agronomic traits in forage sorghum (*Sorghum bicolor* (L.) Moench In : National symposium on recent global development in the management of plant genetic resources, December 17-18, NBPGR, New Delhi, India. C92.

#### **Books and Book Chapters**

1. **Jain, SK** 2012. Fundamental of Plant Breeding and Agricultural Botany. Lambert Academic Publication (LAP), Germany ISBN 978-3-659-13354-31, PP 1-256.
2. **Jain, SK**, Elengovan M. and Patel PR 2016. Genetic Divergence analysis in Land races of forage sorghum (*Sorghum bicolor* L. Moench), Page No. 151-163. Improving productivity of dry Lands by sustainable Resource Utilization and Management, 2016, editors, Devi Dayal, Deepak Machiwal and Shamsudhin, Mangalassery and R. S. Tripathi, New India Publishing Agency, New Delhi, ISBN 978-93-85516-19-1, PP 1-355.
3. **Jain, SK** and Patel, PR. 2016. Multivariate analyses in sorghum (*Sorghum bicolor* L. Moench) for fodder yield and their attributes under semi arid condition of Gujarat . Page No. 197-204, Improving productivity of dry Lands by sustainable Resource Utilization and Management, 2016, editors, Devi Dayal, Deepak Machiwal and Shamsudhin, Mangalassery and R. S. Tripathi, New India Publishing Agency, New Delhi, ISBN 978-93-85516-19-1, PP 1-355.
4. Mithlesh Kumar, Kirti Rani, **Shailesh Kumar Jain** and M. L. Mehriya. 2024. Cluster Bean (*Cyamopsis tetragonoloba*). Potential Pulses: Genetic and Genomic Resources, R. Chandara, T. Basavaraja and A. Pratap, CAB International, Pp 78-99, DOI: 10.1079/9781800624658.0005. **Jain, S. K.** 2024. Participatory Plant Breeding an Approach of Crop
5. Gupta, D. K., **S.K. Jain** and V. Khandelwal 2025. Improvement. Breeding Approaches: For Resilient sustainable Agriculture for Ensuring food Security, Sharma S. N., Choudhary M. K., Sharma S. and Purohit A. K.). Agro-bios Research Jodhpur ISBN: 978-93-49045-57-6. Pp 134-138,
6. S.S. Rajput, **S.K. Jain**, Preeti Verma, Khajan Singh, Vijay Prakash, H.R. Mahala and S.S. Punia. 2025. Varietal Improvement in Pulses. The Scenario of Pulses in Rajasthan: Scope and Opportunity, Punia, S. S., Jain S. K., Rajput, S. S., Sharma, Manish, Choudhary, R. R., Kajala, S. L. ICAR-AICRP on Kharif Pulses, Rajasthan Agricultural

Research, Institute (SKNAU), Durgapura, Jaipur (Rajasthan). No, SKNAU/2025/92: 12-46.

7. **K. Jain**, S.S. Rajput, Preeti Verma, Khajan Singh, Vijay Prakash, H.R. Mahala and S.S. Punia. 2025. Breeder Seed Production of Major Pulses in Rajasthan. In: The Scenario of Pulses in Rajasthan: Scope and Opportunity. The Scenario of Pulses in Rajasthan: Scope and Opportunity Punia, S. S., Jain S. K., Rajput, S. S., Sharma, Manish, Choudhary, R. R., Kajala, S. L. ICAR-AICRP on Kharif Pulses, Rajasthan Agricultural Research Institute (SKNAU), Durgapura, Jaipur (Rajasthan)., No, SKNAU/2025/92: 47-57.
8. Punia S. S., Rajput S. S. **Jain S. K.**, Manish Kumar, Choudhary R. R. Choudhary R. N. and Kajla S. L. (2025) Pulses: Nutritional value, cultivation and Global impact. SKN Agricultural University, Jobner, Jaipur (Rajasthan) 303329; 91: 1-111.
9. Punia S. S., **Jain, S. K.**, Rajput S. S., Manish Kumar, Choudhary R. R. Choudhary R. N. and Kajla S. L. (2025). The scenario of pulses in Rajasthan: Scope and opportunity. SKN Agricultural University, Jobner, Jaipur (Rajasthan) 303329; 92: 1-85.
10. Punia S. S., Rajput S. S., Choudhary R. R., Manish Kumar, **S. K. Jain**, Roshan Choudhary and N. K. Gupta (2025). Seed Production at SKNAU: Assessing current status and out lining future Direction. SKN Agricultural University, Jobner, Jaipur (Rajasthan) 303329; 77: 1-42.