

Curriculum Vitae

Full Name - Dr. Jai Singh Chauhan
Designation - Professor & Head
Department - Seed Science & Technology
Present Position - Dean, School of Agriculture & Allied Science
Campus - Srinagar Garhwal
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Education Qualification-

Ph.D. (Botany) - 1990, Garhwal University, Srinagar Garhwal
M.Sc. (Botany) - 1984, Garhwal University, Srinagar Garhwal
B.Sc. - 1982 Garhwal University, Srinagar Garhwal

Teaching Experience - 30 Years

Research Experience - 33 Years

Areas of Interest/ Specialization

1. Seed Biology
2. Plant Reproductive Biology
3. Germination ecology (Seed Physiology)
4. Seed Biotechnology

Honours & Awards

1. Awarded the **International Scholarship - MASHAV**, through the Ministry of External Affairs, Government of Israel, ISRAEL. 2009.

Member of Academic Institutions –

1. Member of the Academic Council, HNB Garhwal University, Srinagar Garhwal
2. Member of the Executive Council, HNB Garhwal University, Srinagar Garhwal

Membership of Scientific Organization

1. Member of *Advances in Plant Sciences*: Society for Advancement of Botany
2. Life Member of *Seed Research*, Indian Society of Seed Technology
3. Member of Indian Botanical Society, *Journal of Indian Botanical Society*:

Research Supervision

1. **No. of Ph.D. Degree Awarded under the supervision – 15**
2. **No. of Ph.D. Degree Registered - 01**

Research Project-

Germplasm Collection of French Bean from Garhwal Hills and its Screening for Anthracnose Resistance Using Morphological and Molecular Markers” sanctioned by Uttarakhand Council for Biotechnology, Haldi, U.S. Nagar. **Project No.** UCB//R&D Project/2016/02/377. **Total cost-**5,90,800/- Successfully completed.

Conferences/Symposium/Workshop Attended

Chauhan J. S (2009) Attended one month **International Course** on Biotechnology in Agriculture in a World of Global Environmental Changes, held from February 17 to March 18, 2009 at The Faculty of Agriculture, **Food and Environmental quality Sciences at the Hebrew University of Jerusalem, Rehovot-Israel**

Chauhan, J. S. (2019) Participated as resource person / key note speaker and delivered a lecture on the affect on climatological hazards on crops, ground water, forest ecosystem and flora and fauna of Uttarakhand Himalayas in national conference on “ climate change: Plant , people and planet” organized by PLANTICA – Journal of Planr Science, at Uttarakhand Technical University Campus (Auditorium) Suddhowala Dehradun (16-17 Feb 2019).

Chauhan, J. S. (2019) Presented a paper entitled ‘Effect of seed sources variation and presowing treatments on the Seed germination of *Zanthoxylum armatum*, an endangered medicinal plant in the Himalayan region’ in National seminar on “Strengthening of seed system in the North-Eastern and unreached regions- Problems, prospects and policies”. Organized at R.I.M.S. Jubilee hall, Imphal (Manipur) (3-5 Feb 2019)

Chauhan, J.S. (1993) SEM- Based Spermoderm Pattern Analysis of Seeds of some Western Himalayan Trees presented in National Seminar on Tree Biology of Himalayan Tropical Species held between April 19-21, 1993 at the Department of Botany, HNB Garhwal University, Tehri Campus, Tehri 249001.

Chauhan, J.S. (2010) Determination of Integrity of Seed Membrane Systems and Mineral Ions Leakage in *Macrotyloma Uniflorum* (Geheth) presented in the National Seminar on Impact of Polluted Environment and Global Warming on Agriculture, between December, 03-05, 2010 Sponsored by UGN New Delhi organised at faculty of Agriculture, B.S.M. (P.G.) College Roorkee-Hardwar, Uttarakhand

Chauhan, J.S. (2010) National Seed Congress on Quality Seed for Food Security Organised by Haryana State Seed Certification Agency, Panchkula and National Seed Research and Training Centre, Govt. Of India, Varanasi held at JW Marriot Hotel, Chandigarh Between January 23-25, 2012

Chauhan, J.S. (2010) participated in a Workshop on Statistical Techniques Using SPSS held between November05-06, 2012 at the Department of Statistics, School of Sciences, HNB Garhwal University, Srinagar Garhwal

Chauhan, J.S. (2015) Effect of Plant Growth Substances on Seed Germination of *Asparagus Racemosus* (Satawar) presented in the National Seminar on Climate Change, Resources, Bio-diversity and Environmental Challenges: Issues and Strategies for Sustainable Development held at The Department of Geography, HNB Garhwal University, Srinagar Garhwal between October 28-30, 2015

- Chauhan, J.S.** (2017) Attended the Training programme for Faculty Members entitled 'Ethics and Values in Public Governance' Organised by IQAC at Academic Centre, Chauras Campus from May 28-29, 2017
- Chauhan, J.S.** (2017) International Conference on Conservation and Management of Agricultural & Natural resources: Strategies for Food Security in Developing Countries presented a paper on Root Growth of Phalsa (*Grewia Asiatica* L.) As affected by Type of Cutting and Rooting Media under Garhwal Himalayas Garhwal Himalayas held between November 08-09, 2017 at School of Agricultural Sciences, Career Point University, Kota Rajasthan
- Chauhan, J.S.** (2018) Key Note Speaker in Plant Science Researchers Meet (PSRM) presented a keynote lecture entitled 'Migration, Negative impacts of Flooding Erosion of Biodiversity, Environment and Future Challenges in Uttarakhand held on January 28, 2018 at Town hall Auditorium, Nagar Nigam, Dehradun.
- Chauhan, J.S.** (1996) Seed Development in *Bauhinia variegata* L. National Seminar on Seed Technology, 20-21 Feb. 1996, Department of Botany, HNBGU, Srinagar. Abstract, pp-62.
- Chauhan, J.S.** (1996) SEM-based spermoderm pattern analysis of seeds of some Western Himalayan Tress. National Seminar on Seed Technology, 20-21 Feb. 1996, Department of Botany, HNBGU, Srinagar. Abstract, p.61.
- Chauhan, J.S.** (2011) Investigation on the Enhancement of Seed Germination in *Andrographis Paniculata*- Based on Morphological Variation and Other Germination Treatments presented in the National Seminar on Resources Environment and Development of the Indian Himalayas: issues and Strategies for Sustainable Development held at The Department of Geography, HNB Garhwal University, Srinagar Garhwal between November 02-04, 2011
- Chauhan, J.S.** (2011) Keynote address as a chief speaker at Science Awareness Program, at Triyuginarayan, District- Rudraprayad, Uttarakhand. Organized by GB Pant Himalayan Environment and Development Institute, Garhwal Unit from March 22 - March 26, 2011.
- Chauhan, J.S.** Vinay Prakash Nautiyal & A.S. Rawat (2012) Paper presented entitled 'Need for the Development of Quality and Testing Protocols for Medicinal plant seeds'. National Seed Congress 2012 on Quality Seed for Food Security (from January 23-25, 2012) National Seed Research and Training Centre, Varanasi and Haryana State Seed Certification Agency, Panchkula at JW Marriott Hotel, Chandigarh
- Debarati Mukhopadhyay, S.S. Parihar, **Chauhan, J.S.**, Preeti (2010). Studies on seed morphology, anatomy, dormancy and germination in *Desmodium gangeticum*. Abstract selected from presentation in *National Conference on Biodiversity of Medicinal and Aromatic Plants: Collection, Characterization and Utilization*, held at Anand, India during November 24-25, 2010
- Ganga Dutt, Badoni Anoop, Singh, N. I., Ali Seema, Rawat, A. S., Prakash, Vinay and **Chauhan, J. S.** (2008), Embryo germination of *Fagopyrum esculentum* using embryo culture technique: a conservational approach, *National Seminar on Biodiversity Conservation and Environmental Implications in Himalayan Perspectives*, Oct. 12-13 at G. P. G. College Gopeshwar, Uttarakhand
- Joshi Sunil, Singh, N. I., Badoni Anoop, Ali Seema, **Chauhan J. S.**, Prakash Vinay and Rawat, A. S. (2008), Soybean seed quality evaluation by physical purity, standard germination and seed vigour test, *National Seminar on Biodiversity Conservation and*

Environmental Implications in Himalayan Perspectives, Oct. 12-13 at G. P. G. College Gopeshwar, Uttarakhand

Administrative Experience

- 1. Program Officer**, NSS sponsored by the Ministry of Youth Affairs and Sports, Govt. of India from 24-10-2001-31-07-2003
- 2. Senior Program Officer**, National Service Scheme sponsored by the Ministry of Youth Affairs and Sports, Govt. of India from 01-08-2003-31-10-2004
- 3. Coordinator**, Department of Seed Technology, HNB Garhwal University, Srinagar, 1998-2001
- 4. Member of the Scrutiny Committee of HNB Garhwal University, Srinagar Garhwal** constituted during 2005-2006
- 5. Member** of the University Career Counseling and Placement Service, 2004-2005
- 6. Executive member** of the HNB Garhwal University, Teachers' Association, Faculty representative from 2004-2005

Research Publications

- Badoni Anoop and **Chauhan J. S.** (2009) A Note on Micro Tuber Seed Production of Potato: Necessitate Step for Uttarakhand Hills. *Report and Opinion* **1(5)**: 9-11. ISSN: 1553-9873
- Badoni Anoop & **Chauhan J.S.** (2009) Low cost component protocol for *in vitro* micro tuber seed production of potato: Review and Future Strategy. Biodiversity, Environment and Sustainability (ed. Jagbir Singh), M. D. Publication Pvt. Ltd. New Delhi. ISBN: 978-81-7533
- Badoni Anoop and **Chauhan J. S.** (2009). *In Vitro* Sterilization Protocol for Micropropagation of *Solanum tuberosum* cv. 'Kufri Himalini' *Academia Arena*. **1(5)**: 5-8. ISSN: 1553-992X
- Badoni Anoop and **Chauhan J. S.** (2009). Microtuber: A Source of Germplasm Conservation. *Report and Opinion*; **1(3)**, 69-71.
- Badoni Anoop and **Chauhan J. S.** (2009). Single Node Callus Culture: Improvement for Micropropagation of *Solanum tuberosum* (cv. *Kufri Himalini*) *Nature and Science*. **7(3)**: 99-103. ISSN: 1545-0740
- Badoni Anoop and **Chauhan J. S.** (2008). Low cost component protocol for *in vitro* micro tuber seed production of potato: Review and Future Strategy in Biodiversity, Environment and Sustainability (ed. Jagbir Singh), *M. D. Publication Pvt. Ltd. New Delhi*; pp. 123- 128
- Badoni Anoop and **Chauhan J. S.** (2009) Effect of Growth Regulators on Meristem-tip Development and *in vitro* Multiplication of Potato Cultivar 'Kufri Himalini' *Nature and Science, the United State*. 2009, **7(9)**:31-34.

- Badoni Anoop and **Chauhan J. S.** (2009) Study on Seed Germination and Growth Behavior of Brinjal in Admiration to Effect of NPK and Organic Manure. *Nature and Science*. **7(5)**: 64-66. ISSN: 1545-0740
- Badoni Anoop, Mayank Nautiyal, Kiran Gusain, Manpreet Kaur, Rakhi Dhiman, Chetna Bisht and **Chauhan J. S.** (2009) .Effect of Water uptake on Germinability in Seeds of Some Medicinal Plants, Uttarakhand, India. (2009) **5 (4)**:123-128 *Journal of American Science* (ISSN: 1545-1003)
- Badoni Anoop., Bisht Chetna and **Chauhan J. S.** (2009) Seed Age Effect on Germinability in Seeds of *Rheum emodi* Wall. ex Meissn: An Endangered Medicinal Plant of Garhwal Himalaya. *New York Science Journal*. **2(4)**: 81-84. ISSN: 1554-0200
- Badoni, Anoop and **Chauhan, J.S.** (2010) Importance of Potato Micro Tuber Seed Material for Farmers of Uttarakhand Hills. *International Journal of Sustainable Agriculture*. **2(1)**: 01-09. ISSN 2079-2107
- Chauhan J. S.**, Badoni A., N. Indrakumar Singh, and Seema Ali (2009) Effect of *Alternaria* on Some Members of Family Brassicaceae of Garhwal Himalaya. (2009) **2(6)**: 80-85. *New York Science Journal* (ISSN: 1554-0200)
- Chauhan J. S.**, Tomar, Y.K., N. Indrakumar Singh, Seema Ali, and Debarati (2009) Effect of Growth Hormones on Seed Germination and Seedling Growth of Black Gram and Horse Gram. *Journal of American Science*. **5(5)**:79-84. ISSN: 1545-1003
- Chauhan J.S.**, Y.K. Tomar , Anoop Badoni , N. Indrakumar Singh , Seema Ali, Debarati , A.S. Rawat and V.P.Nautiyal (2009) Morphology and Influence of Various Plant Growth Substances on Germination and Early Seedling Growth in *Macrotyloma uniflorum* (Lam.). **5(6)**: 43-50. *Journal of American Science* (ISSN: 1545-1003)
- Chauhan, J.S.** and Bashist, D.P. (2001). Senescence in the Leaves of *Cucumis maxima* as influence by different concentrations of Growth Substances. *Advances in Plant Sciences*. **14(II)**: 463-465. ISSN: 0970-3586 (NASS rating 2.7)
- Chauhan, J.S.** and Paliwal, G.S. (1992). Seed Germination and Seedling Growth in *Bauhinia variegata*, L.: Influence of Some Growth Regulators. *GEOBIOS*. **(19)** 88-94.
- Chauhan, J.S.** and Rawat Archana (2000). Mitotic Indices and Early Seedling Growth in *Triticale*s. *Ad. Plant. Sci*. **13(1)**: 97-100.
- Chauhan, J.S.**, Tiwari, J.K. and Gaur R.D. (1998). SEM Based Spermoderm Pattern Analysis on Seeds of Some Western Himalayan Forest Trees. *Acta Botanica Indica*. **26**: 187-190.
- Chauhan, J.S.**, Tiwari, P., Bashist, D.P. and Paliwal, G.S. (1998). Morphology and Histology of Stigma and Style of *Bauhinia purpurea* L. *J. Ind. Bot. Soc.* **77**: 167-169.
- Chauhan, J.S.**, Tomar, Y.K., and Bashist, D.P. (1998). Effect of various levels of IAA on the Seed Germination of *Saussurea costus* (Falc.) Lipschitz (*S. lappa*, Decne. Sch.-Bip). *J. Ind. Bot. Soc.* **77**: 175-177.
- Chauhan, J.S.**, Tomar, Y.K., Badoni, Anoop., Singh, N. Indrakumar., Seema Ali and Debarati (2009) Morphology, Germination and early Seedling Growth in *Phaseolus mungo* L. with Reference to the Influence of Various Plant Growth Substances. *Journal of American Science*. **5(7)**: 34-41. ISSN: 1545-1003

- Chauhan, J.S.**, Tomar, Y.K., Singh, N. Indrakumar., Seema Ali and Debarati (2009). Effect of Growth Hormones on Seed Germination and Seedling Growth of Black Gram and Horse Gram. *Journal of American Science*. **5(5)**:79-84. ISSN:1545-1003
- Chauhan, J.S.**, Tomar, Y.K., Singh, N. Indrakumar., Seema Ali., Badoni Anoop., Debarati and Rana, A. (2009) Assessment of Compatible Substratum for *Andrographis paniculata* Standard Seed Germination Testing. *Journal of American Science*. **5(6)**:70-75. ISSN: 1545-1003
- Debarati Mukhopadhyay, **Chauhan J.S.**, Parihar S.S. and Malavika Dadlani (2013) Seed Storage Behaviour in *Berberis Aristata*. *Indian Journal of Agricultural Sciences*. **83(3)**: 304–309
- Deepti Prabha and **J. S. Chauhan** (2014) Physiological Seed Enhancement Techniques. *Popular Kheti*. 2(1): 163-163 ISSN:2321-0001
- Deepti Prabha, Nima Tshering Bhutia, **Chauhan J.S.** and Yogesh Kumar Negi (2018) Effect of Stratification and Different Soaking Treatments on Dormancy release and Germination of *Asparagus racemosus* seeds. *Vegetos* 31(1) March, 2018 Doi: 10.5958/2229-4473.2018.00022.8 Page No: 162-166.
- Ganga Datt and **Chauhan J.S.** (2017)Assessment of seed germination behaviour of endangered medicinal tree *Aegle marmelos* (bael): A conservational approach. *Bulletin of Environment, Pharmacology and Life Sciences Bull. Env. Pharmacol. Life Sci.*, Vol 6[7] June 2017: 45-53
- Ganga Datt, Radha Ballabha, **Chauhan J.S** (2017) Effects of 2, 4-D and 6-BAP on callus induction of *Fagopyrum esculentum* (Buckwheat): An embryo culture technique for regeneration and conservation. *Bulletin of Environment, Pharmacology and Life Sciences*.
- Joshi Sunil Chandra, Singh N. Indrakumar and **Chauhan J. S.** (2009) Soyabean Seed Quality Evaluation. *Nature and Science*. **7(5)**: 82-85. ISSN: 1545-0740
- Mahato P., Badoni Anoop and **Chauhan J. S.** (2009) Effect of *Azotobacter* and Nitrogen on Seed Germination and Early Seedling Growth in Tomato. *Researcher*. **1(4)**, 62-66. ISSN: 1553-9865
- Malasi, C.B., **Chauhan, J.S.** and Paliwal G.S. (1989). Influence of Growth Substances on Pollen Germination, Fruit-Set and Growth in *Berberis asiatica* Roxb. *Indian Journal of Forestry*. **12 (1)**: 29-33.
- Raturi, D.P., P.S. Shukla and **Chauhan, J.S.** (2020) Studies on Combining Ability Analysis between 11- Components in Field Pea (*Pisum sativum* L.) *Trends in Biosciences* 13(8), 01-21, Print : ISSN 0974-8431, 00-00, 2020
- Raturi, D.P., P.S. Shukla, **Chauhan J.S.** and Purti Chaturvedi (2017) Genotypic and Phenotypic Correlation Coefficients of 12- Genotypes in Field Pea (*Pisum sativum* L.) between 11- Components. *Trends in Biosciences* 10(32), 6941-6947, Print : ISSN 0974-8431, 2017
- Raturi, D.P., P.S. Shukla, **Chauhan J.S.** and Purti Chaturvedi (2017) Heterosis and Inbreeding Depression in 12 Genotypes of Field Pea (*Pisum sativum* L.) *Trends in Biosciences* 10(32), 6914-6917, Print : ISSN 0974-8431, , 2017

- Ruchi Bajpai and **Chauhan J.S.** (2016) Effect of plant growth substances on seed germination of *Asparagus racemosus* (Satavar). Res. Environ. Life Sci. 9(10) 1299-1300 ISSN: 0974-4908.
- Ruchi Bajpai and **Chauhan J.S.** (2017) Response of Certain Physical and Chemical Treatments to improve Seed Germination of *Rauvolfia serpentina* (L.) Benth. ex Kurz. Res. Environ. Life Sci . Vol. 9/10, No.12/1, December/January- 2016/2017.
- Singh K. K., **Chauhan, J. S.**, Rawat J. M. S And Rana D. K. (2015) Effect of Different Growing Conditions and Various Concentrations of IBA on the Rooting and Shooting of Hardwood Cutting of Phalsa (*Grewia Asiatica* L.) Under Valley Condition of Garhwal Himalayas. Plant Archives. Vol. 15(1)131-136. ISSN 0972-5210
- Singh N. Indrakumar and **Chauhan J.S.** (2010) Quality Prediction of Carry-Over Soybean Seed. 2(3):66-69 *Researcher*. ISSN: 1553-9865
- Singh N. Indrakumar and **Chauhan J.S.** (2010). Evaluation of Quantitative Physiological Traits of Some Hybrid Maize. *World Journal of Agricultural Sciences*. **6(3)**: 297-300. ISSN 1817-3047
- Singh N. Indrakumar and **Chauhan J.S.** (2009) Response of French Bean (*Phaseolus Vulgaris* L.) to Organic Manures and Inorganic Fertilizer on Growth & Yield Parameters under Irrigated Condition. *Nature and Science*; **7(5)**, 52-54.
- Singh N. Indrakumar, Seema Ali and **Chauhan J. S.** (2009) Effect of Seed Size on Quality within Seed Lot of Pea and Correlation of Standard Germination, Vigour with Field Emergence Test. *Nature and Science*. **7(4)**: 72-78. ISSN: 1545-0740
- Singh N. Indrakumar., Kishor Kumar Verma and **J.S. Chauhan** (2010) Comparative Efficacy of Different Vigour Test Parameters of Pea (*Pisum sativum* L.) Seed Testing. *Libyan Agriculture Research Center Journal International*. **1 (5)**: 332-335. ISSN 2219-4304
- Singh, K.K. and **Chauhan J. S.** (2016) The Effect of Different Times Collecting Cutting, Growing Conditions and Auxin Treatments of the Rooting in Phalsa (*Grewia asiatica* L.) Stem Cutting Under Vally Condition of Garahwl. Plant Archives, 16(2)781-788. ISSN 0972-5210
- Singh, K.K., Rawat, J.M.S., **Chauhan J. S.** and Prabhat Kumar (2020) Multiplication of *Grewia asiatica* L. (Phalsa) via Cutting. Current Research in Agriculture and Farming. (2020) 1(4), 24-30, ISSN: 2582 – 7146; www.agrifarming.org , DOI: <http://dx.doi.org/10.18782/2582-7146.123>
- Singh, N. Indrakumar and **Chauhan, J.S.** (2010). Assessment of Pure Live Seed, Optimum Seeding Rate and Best Buy Value in Maize (*Zea mays* L.). **Vol. Seed Research**. **37(1&2)**:53-55. ISSN: 0379-5594 (NASS rating 4.7)
- Singh, N. Indrakumar and **J. S. Chauhan** (2010)Assessment of Pure Live Seed, Optimum Seeding Rate and Best Buy Value in Maize (*Zea mays* L.). Vol. 37(1&2):53-55. *Seed Research* (ISSN: 0379-5594
- Singh, N. Indrakumar, and **Chauhan, J.S.** (2009). Quality determination of stress-cracked maize (*Zea mays* L.) Kernels. *Journal of Indian Botanical Society*. **Vol. 88(1 & 2)**: 87-91. ISSN:0019-4468
- Sobha and **Chauhan, J.S** (2018) Regeneration of *Taxus baccata* through vegetative propagation using different concentrations of IBA and NAA. Journal of

Pharmacognosy and Phytochemistry 2018; 7(4): 1853-1857.

Sobha1 and **Chauhan, J. S.** (2017) Conservation of an Endangered Medicinal Plant (*Taxus baccata* L. Subsp. *Wallichiana*) of Uttarakhand Himalaya through Embryo Culture. *Int. J. Pure App. Biosci.* 5 (6): 312-317

Sunil Chandra Joshi, N. Indrakumar Singh and **Chauhan, J.S.** (2009) Soyabean Seed Quality Evaluation. (2009) **7(5)**: 82-85. *Nature and Science* (ISSN: 1545-0740)

Vinay Prakash, Atul Nainwal, Awaneendra Singh Rawat, **Chauhan, J.S.**, Hemlata Bisht (2013). Enhancement of germination in *Abrus precatorius* L. seeds by specific pre showing treatments. *International Journal of Conservation Science.* 4(2):237-242.

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