

Personal Details

Dr. Sharda Choudhary

Senior Scientist

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Research Interest : Molecular biology and Biotechnology

M.Sc. : Choudhary Charan Singh University, Meerut (UP)

Ph.D. : Choudhary Charan Singh University, Meerut (UP)

Joining date in ICAR (yyyy/mm/dd) : 2008/06/26

Google Scholar:

Publications (Top 10 Publications having NAAS rating 6 and above with first or corresponding author only) :

1. Choudhary S., M.B.N. Naika and R.D. Meena (2020) Identification and expression analysis for candidate genes associated with stem gall disease in Coriander (*Coriandrum sativum* L.) cultivars. *Molecular Biology reports*. 47, 5403–5409.
2. Choudhary S., M.B.N. Naika, R. Sharma, R.D. Meena, R. Singh (2019) Transcriptome profiling of coriander: a dual purpose crop unravels stem gall resistance genes. *J Genet* 98:19.
3. Choudhary S., Mishra B. K. Singh R. and Sharma R. (2021). Bacterial diversity and bio- chemical properties in the rhizosphere soils of Cumin and Coriander. *Tropical Ecology*. <https://doi.org/10.1007/s42965-021-00155-4>.
4. Choudhary S, Sharma R, Jethra G, Vishal MK, Tripathi A (2019) Molecular diversity in coriander (*Coriandrum sativum*) using RAPD and ISSR markers. *Indian Journal of Agricultural Sciences* 89: 193-198.
5. Choudhary S., Singh R., Meena R.S. and Jethra G. (2016) Secondary and tertiary structure prediction of fenugreek (*Trigonella foenum-graecum*) protein. *Legume Research*, 39 (1) 2016: 48-51.
6. Choudhary S., Meena R.S., Singh R., Vishal M.K., Jethra G., Saini M. and Panwar A. (2015). Analysis of diversity among cumin (*Cuminum cyminum*) cultivars using RAPD markers. *Indian Journal of Agricultural Sciences* 85 (3): 409-13.
7. Choudhary S., Meena R.S., Singh R., Vishal M.K., Choudhary V. and Panwar A. (2013). Assessment of genetic Diversity among Indian fenugreek (*Trigonella Foenum -Graecum* L.) Varieties using morphological and RAPD markers. *Legume Research*, 36, (4) 289-298.
8. Panwar A., Sharma Y.K., Meena R.S, Solanki R.K., Aishwath O.P., Singh R. and Choudhary S. * Corresponding author. (2017). Genetic variability, association studies and genetic divergence in Indian fenugreek (*Trigonella foenum- graecum* L.) varieties. *Legume Research*. DOI: 10.18805/LR-3803.
9. Choudhary M., Sharma P.C., Jat H.S., A McDonald, Jat M.L., Choudhary S., Garg. N. (2018) Soil biological properties and fungal diversity under conservation agriculture in Indo-Gangetic Plains of India. *Journal of Soil Science and Plant Nutrition* 18 (4), 1142-1156.
10. Choudhary S., Gupta N., Jethra G., Gour D. S. (2015) Genetic evidence for susceptibility and resistance against scrapie in Indian sheep. *Journal of Genetics*, 94, 129-133.

Patent / Technologies / Varieties / Methodologies / System etc. (Five only) :

1. Identification and validation of five candidate genes associated with stem gall disease in Coriander (NCBI ID MT053859, MT053860, MT053861, MT053862 and MT053863)

2. Development and characterization of nine genic SSR-FDM for Stem Gall Disease resistance in Coriander (NCBI with Bankit ids MT759811, MT759812, MT759813, MT759814, MT759815, MT759816, MT759817, MT759818 and MT759819.)
3. Development/Identification and validation of SSRs molecular markers for coriander (*Coriandrum sativum*) using coriander ESTs (NCBI ,SRA accession number SRP102969)
4. Identification of metagenome about taxonomic and other details of Coriander and Cumin growing soils (NCBI SRA under bioproject PRJNA377848 having five biosamples with accession numbers SAMN06473293, SAMN06473335, SAMN06473337, SAMN06473339 and SAMN06473340.
5. Twelve microbial 16S rDNA gene sequence have been submitted to NCBI and registered for identification of microbial strains. NCBI registration number for the sequences is KX231808, KX231809, KX231810, KX223364, KX228234, KX228235, KX658678, KX658679, KX658680, KX658681, KX659982, KX658653.

No. of Students Guided : M.Sc : 06 Ph.D : 1

Awards / Recognitions / Fellowship (Five only) :

1. **Young Women Scientist Award**, 2019 in 2nd International Conference on “Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development” held at Dr. YSP University of Hort. Solan from 27 to 29 Sept.2019.
2. **Scientist of the Year Award- 2017** “Scientist of the year Award 2017” in 6th International Conference on Recent Advances in Agriculture and Horticulture Sciences held at Delhi, from 16-17 December, 2017.
3. **Fellow, Indian Society of Seed Spices**, 2011
4. **Young Scientist Award- 2016** “Young Scientist Award 2016” in 4th International Conference on Recent Advances in Agriculture and Horticulture Sciences held at Jodhpur, Rajasthan from 30-31 December, 2016.
5. **Manad Upadhi 2016** “Krishi Vigyan Gaurav 2016” Maanad Upadhi, Bhartiya Krishi Anusandhan Patrika mai apne maulik shodh patar chapwane tatha rashtra evam rajbhasha hindi ki sewa karne ke liye. Bhartiya Krishi Anusandhan Samiti tatha Krishi Anusandhan Sanchar Kendra, Karnal dwara.

International exposure:

1. **Visited USA:** Three months foreign (USA) training in the area of “Marker Assisted Selection (Horticulture)” in the Department of Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, Arkansas, USA from December-15-2013 to March-15-2014 under the training grant of the World Bank funded NAIP project, under the guidance Prof. Andy Pereira, Anheuser-Busch Endowed Professor of Plant Molecular Genetics.

Ongoing research projects (institutional / external funded -as PI or CCPI):

1. Identification of molecular marker associated with stem gall in Coriander (PI)
2. Transcriptome-based mining of genes and pathways related to disease (*Ramularia blight*) and quality (secondary metabolites) in fennel (PI)