

## FACULTY PROFILE



Name : **Dr. Sunil Choudhary**  
Subject : **Botany**  
Address : V/P- Inana, Tehsil- Marwar Mundwa, District - Nagaur, Rajasthan  
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### Educational qualifications:

Examination	Year of passing	University/ Institution	Percentage
M.Sc. (Botany)	2010	J.N.V. University, Jodhpur	79.73
B.Sc.	2008	J.N.V. University, Jodhpur	65.67
Sr. Secondary	2004	BSER, Ajmer	60.31
Secondary	2002	BSER, Ajmer	77.33

### Professional qualifications:

- **CSIR- Senior Research Fellow.**
- **CSIR- Junior Research Fellow.**
- **Ph.D.-** 2017 from Jai Narain Vyas University, Jodhpur. Thesis entitled on “Characterization of root nodule bacterial diversity associated with trees of *Acacia* native to arid regions of Western Rajasthan”
- **CSIR NET-JRF- Examination:** June 2011(AIR-47) & December 2012 (AIR-52).
- **UGC NET-JRF Examination:** December 2014 (AIR-67), June 2014(AIR-33), June 2012(AIR-67), June 2013 (AIR-69).
- **RPSC SET Examination: 2012**
- **ARS-NET (ASRB) Examination: 2012 (Basic Plant Sciences)**
- **GATE Examination: 2011**

### Teaching experience:

- One year experience of teaching under graduate classes (Both theory and practical) for the session 2011-12 at Dept. of Botany, J.N.V. University, Jodhpur.
- Four-year experience of teaching under graduate classes (Both theory and practical) at College Education Department, Jaipur.

### Orientation/ Refresher courses:

- Attended orientation course at Human Resource Development (HRD) center, Maharshi Dayanand Saraswati University, Ajmer from 5<sup>th</sup> December to 24<sup>th</sup> December 2019.
- Attended refresher course at Human Resource Development (HRD) center, Jai Narain Vyas University, Jodhpur from 15<sup>th</sup> November to 30<sup>th</sup> November 2021.

### Online faculty development programs:

- Attended Six days Gyan Ganga Subject specific Short Term Online Training Program “Initiative for Teaching Learning Excellence in Botany” jointly organized by Commissionerate of College Education, Rajasthan and Government Dungar College Bikaner during 11<sup>th</sup> January 2021 to 16<sup>th</sup> January 2021.
- Attended Six days Gyan Ganga Subject specific Short Term Online Training Program “Initiative for Teaching Learning Excellence in Botany” jointly organized by Commissionerate of College Education, Rajasthan and Government College Bundi during 15<sup>th</sup> February 2021 to 20<sup>th</sup> February 2021.

### Research guidance:

Name of Student	Degree	University	Date of Reg.	Reg. No.	Supervisor/ Co-supervisor	Status
Vipula Vyas	Ph.D.	F.R.I Dehradun	01.03.2021	20/Ph.D./655	Co-Supervisor	Pursuing

### Research publication:

- Gehlot P., Solanki D. S., Tak A., Sharma K. and **Choudhary S.**, (2022). Antifungal proteins: An ecofriendly approach for sustainable alternative of biocontrol against the disease-causing agents in plants. ***Kavaka* (Mycological society of India)**, 58 (4): 60-75. (NAAS rating: 5.04)
- **Choudhary S.**, Singh J., Tak A., Sharma K. and Gehlot P., (2021). Nutraceutical, pharmaceuticals and industrial bioactive compounds of gasteroid fungi: A review. ***Kavaka* (Mycological society of India)**, 57: 38-53. (NAAS rating: 5.04)
- **Choudhary S.**, Tak, N., Bissa, G., Chouhan, B., Choudhary, P., Sprent, J.I., James, E.K. and Gehlot, H.S. (2020). The widely distributed legume tree *Vachellia (Acacia) nilotica* subsp. indica is nodulated by genetically diverse Ensifer strains in India. ***Symbiosis***, 80(1): 15-31. (Thomson Reuters IF: 2.268)
- **Choudhary, S.**, Tak, N. and Gehlot, H.S., 2018. Phylogeny and genetic diversity assessment of Ensifer strains nodulating Senegalia (Acacia) senegal (L.) Britton. in arid regions of Western Rajasthan, India. ***Microbiology***, 87(1): 127-142. (Thomson Reuters Impact factor: 1.572)
- Gaur S, Tak N, Rathi S, **Choudhary S**, Gehlot HS (2018). Identification and molecular characterization of root nodule-microsymbiont of *Trigonella foenum-graecum* L. growing in different soils from Western Rajasthan, India. ***Journal of Environmental Biology*** 39:684–69. (Thomson Reuters IF: 0.719)

- Sankhla, I.S., Meghwal, R.R., **Choudhary, S.**, Rathi, S., Tak, N., Tak, A. and Gehlot, H.S. (2018). Molecular characterization of microsymbionts associated with root nodules of *Crotalaria burhia* Buch.-Ham. ex Benth., a native keystone legume species from Thar Desert of India. *Indian Journal of Experimental Biology* 56:373-384. **(Thomson Reuters IF: 0.818)**
- **Choudhary, S.**, Meghwal, R.R., Sankhla, I.S., Tak, N. and Gehlot, H.S. (2017). Molecular characterization and phylogeny of novel diverse nitrogen fixing microsymbionts associated with *Vachellia (Acacia) leucophloea* in arid and semi-arid regions of Rajasthan. *Indian Forester*, 143(3): 266-278. **(NAAS rating 5.10)**
- Sankhla, I.S., Tak, N., Meghwal, R.R., **Choudhary, S.**, Tak, A., Rathi, S., Sprent, J.I., James, E.K. and Gehlot, H.S., 2017. Molecular characterization of nitrogen fixing microsymbionts from root nodules of *Vachellia (Acacia) jacquemontii*, a native legume from the Thar Desert of India. *Plant and Soil*, 410(1-2): 21-40. **(Thomson Reuters IF: 4.192)**
- Nirwan, B., Choudhary, S., Sharma, K. and Singh, S. (2016). In vitro studies on management of root rot disease caused by *Ganoderma lucidum* in *Prosopis cineraria*. *Current Life Sciences*, 2(4): 118-126.
- Singh, S., Nirwan, B., Sharma, K., **Choudhary, S.** (2016). Development of microbial consortia for overall improvement of *Azadirachta indica* seedlings. *Plant Archives*, 16(2): 918-924. **(NAAS rating 4.73)**
- Tak, N., Gehlot, H.S., Kaushik, M., **Choudhary, S.**, Tiwari, R., Tian, R., Hill, Y., Bräu, L., Goodwin, L., Han, J. and Liolios, K. (2013). Genome sequence of *Ensifer* sp. TW10; a *Tephrosia wallichii* (Biyani) microsymbiont native to the Indian Thar Desert. *Standards in genomic sciences*, 9(2): 304-314. **(Thomson Reuters IF: 3.17)**

#### Abstracts & poster presented in national and international conferences:

- **Choudhary, S.**, 2022, Biofertilizers for sustainable agricultural practices. In International conference on multidisciplinary approach towards sustainable development and climate change for a viable future. 12<sup>th</sup> to 14<sup>th</sup> August 2022, Alwar, Rajasthan.
- **Choudhary, S.**, 2019. Sustainable Development. In National Conference on recent trends in environmental sustainability and green practices. 15<sup>th</sup> to 16<sup>th</sup> November 2019, Bundi, Rajasthan.
- **Choudhary, S.**, 2019. Phenotypic characterization and assessment of plant growth promoting activities associated with root nodulating bacterial strains of *Prosopis cineraria*. In An international conference on emerging challenges. Their solutions and recent advances in science. 4<sup>th</sup> to 5<sup>th</sup> October 2019, Sikar, Rajasthan.
- **Choudhary, S.**, 2019. Ganoderma: Root rot fungus infecting important trees in arid regions. In International conference on Recent trends in environment and natural sciences. 12<sup>th</sup> to 13<sup>th</sup> February 2019, Sikar, Rajasthan.

- **Choudhary, S.**, 2015. Nodulation in *Senegalia (Acacia) senegal* native to Thar Desert of India and characterization of its root nodule bacteria (RNB) at phenotypic, biochemical and molecular level. 38<sup>th</sup> All India Botanical Conference & National Symposium on Emerging trends in Plant Sciences, Department of Botany, University of Rajasthan, Jaipur.
- Nirwan, B., Singh, S., **Choudhary, S.**, 2015. Integrated management of *Ganoderma* species: A destructive white rot fungus of trees. International conference on reforestation challenges, Belgrade, Serbia.
- Singh, S., Nirwan, B., **Choudhary, S.**, 2015. Application of biofertilizers for promoting growth in *Azadiracta indica* A. Juss. (Neem). International conference on reforestation challenges, Belgrade, Serbia.
- **Choudhary, S.**, 2013. Root Nodule Bacterial Diversity and Molecular Characterization of Microsymbionts Associated with *Acacia nilotica* native to Indian Thar Desert. In 54<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI-2013), Rohtak, Haryana.
- Tak, N., **Choudhary, S.**, 2013. Whole Genome Sequence of Novel Nodulating *Ensifer* Strains (TW10) Native to Indian Thar Desert. In 54<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI-2013), Rohtak, Haryana.

#### Book chapters:

- **Choudhary S.**, Characterization and applications of mushroom exopolysaccharides In Singh, J. and Gehlot, P. eds., 2020. *New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of Fungi and Fungal Metabolites: Environmental and Industrial Aspects.* **Elsevier**, pp.171-178
- **Choudhary S.**, Genome mining for identification of gene clusters encoding important fungal metabolites In Singh, J. and Gehlot, P. eds., 2020. *New and Future Developments in Microbial Biotechnology and Bioengineering: Recent Advances in Application of Fungi and Fungal Metabolites: Applications in Healthcare.* **Elsevier**, pp-47-53
- Singh, S., Bhatnagar, S., **Choudhary, S.**, Nirwan, B. and Sharma, K., 2018. Fungi as Biocontrol Agent: An Alternate to Chemicals. In *Fungi and their Role in Sustainable Development: Current Perspectives* (). **Springer**, Singapore, pp. 23-33.
- Singh, S., Joshi, K., **Choudhary, S.**, Nagar, R., Nirwan, B., Sharma, N., Sharma, K., Bhatnagar, S., Bhola, D. and Varma, A., 2019. Impact of Biofertilizer on Crop Yield of Isabgol (*Plantago ovata*) and Senna (*Cassia alexandrina*). In *Plant Growth Promoting Rhizobacteria (PGPR): Prospects for Sustainable Agriculture.* **Springer**, Singapore, pp. 125-131.
- Singh, S., **Choudhary, S.**, Nirwan, B., Sharma, K., Bhatnagar, S. and Shrivastava, K.K., 2015. Factors Affecting Diversity of Rhizospheric Fungal Population. In *Microbes: In Action*, **Agrobios**, India, p.135.