

## Dr. Meenakshi Singh

### Objectives

Taking place the proficiency toward teaching and revolve to endure a Scientist in the field of Arbuscular mycorrhizal fungi, carbon sequestration and Biocontrol Technology and host preference of the soil fungi and interactions with other microorganisms.

### Educational Qualifications

**Ph. D. (Botany)**, 2011. Dr. H.S. Gour University, Sagar MP, India

**Title :** *Studies on evidence of host and environmental preference in arbuscular mycorrhizal fungi associated with vegetable crops of Jhansi region.*

**M. Sc. (Botany)**, 2006. with specialization of Industrial Microbiology at Bundelkhand University, Jhansi (UP)

**B. Sc.** (2004). V.B.S. Purvanchal University, Jaunpur, (UP)

### Teaching Experience

- Presently working as Asst. Professor (ad-hoc) at the Department of Botany, Guru Ghasidas University, Bilaspur
- Teaching of casual classes in session 2007-08 at the Department of Botany in Dr. H.S. Gour University, Sagar

### Publications (07)

1. Singh PK, **Meenakshi Singh**, Tripathi BN (2012). Glomalin : an arbuscular mycorrhizal fungal soil protein. *Protoplasma* (DOI: 10.1007/s00709-012-0453-z).
2. **Meenakshi Singh**, Singh PK, Vyas D. (2011). Mycorrhization in medicinal plants. *Mycorrhiza News*, 23 (1): 19-23.
3. Singh PK, **Meenakshi Singh**, Vyas D. (2010). Biocontrol of *Fusarium* Wilt of Chickpea using Arbuscular Mycorrhizal Fungi and *Rhizobium leguminosorum* Biovar. *Caryologia*, 63(4): 349-353.
4. Singh PK, **Meenakshi Mishra**, Vyas D. (2010). Effect of root exudates of mycorrhizal tomato plants on microconidia germination of *Fusarium oxysporum* f. sp. *lycopersici* than root exudates from non-mycorrhizal tomato plants. *Archives of Phytopathology and Plant Protection*, 43(15): 1495-1503.
5. Singh PK, **Meenakshi Mishra**, Vyas D. (2010). Interactions of vesicular arbuscular mycorrhizal fungi with *Fusarium* wilt and growth of tomato (*Lycopersicon esculentum* Mill.)". *Indian Phytopathology*, 63(1):30-34.
6. **Meenakshi Mishra**, Singh PK, Vyas D. (2009). Phytoprotection role of AM fungi against the *Fusarium* wilt of tomato. *BIOZONE*, 1(2): 98-109.
7. Vyas D, **Meenakshi Mishra**, Yadav R. (2008). Effect of biocontrol agents against the root rot of pan caused by *Phytophthora parasitica* var. *piperina*. *Madhya Bharti* 54:15-18.

### Book

**Meenakshi Singh**, Singh PK (2011). *Ethanobotany*. ISBN No. 978-3-8465-2736-8. Lap Lambert Academic Publishing, Germany.



#### Book Chapters (04)

1. Vyas D, **Meenakshi Mishra**, Singh PK, Shukla A, Gupta RK. (2011). Arbuscular mycorrhizal fungi : The hidden heroes of the soil. In: *Microbial Biotechnology and Ecology* (Eds. Vyas D, Paliwal GS, Khare PK, Gupta RK), 225-255. Daya Publications, New Delhi
2. Dwivedi OP, **Meenkashi Mishra**, Singh PK, Richharia PK, Soni P, Vyas D. (2011). Cumulative effect of VAM fungi. In: *Microbial Biotechnology and Ecology* (Eds. Vyas D, Paliwal GS, Khare PK, Gupta RK), 256-267. Daya Publications, New Delhi
3. **Meenakshi Mishra**, Singh PK, Vyas D. (2011). Arbuscular mycorrhizal fungi as symbiotic bioengineers. In: *Contribution to the Mycological Progress* (Ed. Sati SC), 119-135. Daya Publications, New Delhi
4. Vyas D, Singh PK, **Meenkashi Mishra**, Gupta RK. (2010). Phytoprotection by arbuscular mycorrhizae. In: *Bioinoculants for Integrated Plant Growth* (Ed. Laxman HC), 373-420. MD Publications, New Delhi

#### Symposia / Conferences (08)

- Paper presented entitled “*Biocontrol of Fusarium wilt of tomato ..... Aspergillus niger*” in a National Symposium on **Plant Biology and its Role in Sustainable Food and Energy Production**, held at *Department of Botany, Guru Ghasidas University, Bilaspur (C.G.)*, 17-18 March, 2012.
- Poster presented entitled “*Arbuscular mycorrhizal fungal ..... Madhya Pradesh*” in a National Conference on **Forest, Environment and Climate Change: Issues and Challenges**, held at *Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas University, Bilaspur (C.G.)*, 30-31 January, 2012.
- Paper presented entitled “*Arbuscular Mycorrhizal Fungi: The Symbiotic Bioengineers*” in a National Seminar on **Environmental Safety and Solid Waste Management**, held at *Government Arts and Commerce (Nodal) College, Sagar (M.P.)*, 9-10 March, 2010.
- Paper presented entitled “*Diversity of Vesicular Arbuscular mycorrhizal fungi in Lycopersicon esculentum*” in Silver Jubilee Young Scientist Congress held at *Vigyan Bhavan, Bhopal*, 22-23 February, 2010.
- Poster presented entitled “*Exploitation of AMF for Improvement of Tomato Health Status*” in 97<sup>th</sup> Indian Science Congress held at *Thiruvananthapuram*, January 3-7, 2010.
- Poster presented entitled “*Effect of Mycorrhization on the Growth of Tomato Plant*” in International Symposium on **Plant Biology and Environment: Changing Scenario** held at *Allhabad University, Allhabad*, 17-19 December 2008.
- Poster presented entitled “*Diversity, Distribution of AM Fungi in Some Vegetable Crops of Jhansi Region*” in National Seminar on “**Vision 2008: Current challenges in Biological Science**” held in *Dr. Hari Singh Gour University, Sagar*, 20 - 21 January 2008.
- Poster presented entitled “*Does AM Fungi Control the Fusarium Wilt of Tomatoes*” in 48<sup>th</sup> Annual conference of **Association of Microbiologist of India**, held at *Indian Institute of Technology Madras, Chennai*, 18 - 24 December 2007.