

**Name: Dr. (Smt.) Jite Paramjit Kaur Kishan Singh**

**Designation:** Associate Professor

**Department:** Department of Botany

**Date of Birth:** 03 June 1953



**Area of Specialization:** Mycology and Plant Pathology, Fungal Physiology

**Publications:**

1. **David S. B. and Jite P. K.** (1979), Incidence of *Hapalophragmiopsis ponderosum* on *Acacia leucophloea* Metabolic changes in plants due to fungal infections, *Current science* **6**:263-264
2. **Jite P.K. and David S.B.** (1987), Studies on sugars, organic acids, and polyphenols: Metabolic changes in plants due to fungal infections *Geobios* **14**: 105-106
3. **Jite P. K. and David S. B.** (1991), Studies on total nucleic acids, RNA, DNA and aminoacids content *Biol. Indica*, Vol **1 & 2**:27-31
4. **Dharmadhikari M. S. and Jite P. K.** (1992), *In-vitro* culture of *Acacia leucophloea* infected with *Hapalophragmiopsis ponderosa*, *Biovigyanam* **18**(1): 59-63.
5. **Dharmadhikari M. S. and Jite P. K.** (1993), Phytoalexin like substances in *Acacia leucophloea* infected with *Hapalophragmiopsis ponderosa*, *Biologia Indica* **4**: 7-10.
6. **Jite P. K. and Samina Shaikh** (1995), Activity of peroxidase, polyphenol oxidase, and nucleic acid in *Parmalia incurve*, *Geobios* **22**: 151-152.
7. **Jite P. K. and Dharmadhikari M. S.** (1996), Effect of *Hapalophragmiopsis ponderosa* on *Acacia leucophloea* metabolism, *Geobios* **23**: 37-39
8. **Dharmadhikari M. S. and Jite P. K.** (1997), Studies on changes in total sugars and ascorbic acid in *Acacia leucophloea* infected with *Hapalophragmiopsis ponderosa*, *Indian J. Mycol. and Plant Pathology* **26**: 199-201
9. **Jite P. K. and Tressa J.** (1999), Biochemical changes in *Jasminum grandiflorum* infected by *Uromyces hobsonii*, *Indian Phytopath.* **52**:77-78
10. **Jacob A and Jite P. K.** (2003), Use of image analysis to study the effect of phosphate on honeydew formation & clavinet alkaloid syn. *In-vitro* culture of *Claviceps fusiformis*, *Current science*, **85**(11),1616-1619.
11. **Sinha P., Kadu L.N., Jite P. K., Dhandapani and Vishwadhar** (2008), Pathogenic variability in *Fusarium udum* isolates causing pigeon pea wilt. *Indian journal of Agricultural Sciences*.vol. **78** (5)- 453-458.
12. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "Role of Bioinoculant (AM fungi) Increasing in Growth, Flavor Content and Yield in *Allium sativum* L. Under Field Condition". *Notulae Botanicae Horti Agrobotanici*. 37(2) 2009, 124-128.
13. **Borde Mahesh, Haresh Kedar and Jite P. K.** (2009), Growth performance of *Vitis vinifera* inoculated with *Glomus fasciculatum*. *Mycorrhiza News*. 21(2), 12-15.
14. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "Diversity of AM fungi in some tree species from dry land area of central Maharashtra (India)" *Archives of phytopathology and plant protection*. DOI: 10.1080/03235400902753683 **In press**
15. **Dudhane Mayura, Borde Mahesh and Jite P. K.** "Changes in antioxidant activity in *Gmelina arborea* (Verbenaceae) inoculated with *Glomus fasciculatum* under drought stress". *Archives of phytopathology and plant protection*. DOI: 10.1080/03235400902927261 **In press**
16. **Dudhane Mayura, Borde Mahesh and Jite P. K.** "Effect of additional Phosphate on growth performance of *Gmelina arborea* Roxb. inoculated with AM fungi". *Mycorrhiza News* 21(4): 5-8 2010.
17. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "AM fungi influences the photosynthetic activity, growth and antioxidant enzymes in *Allium sativum* under salinity condition." *Notulae Scientia Biologicae*, 2 (4) 2010 **In press**.
18. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "Effect of AM fungi on growth of *Pennisetum typhoides* under low and high Phosphate condition" **In press** *Mycorrhiza News*.

19. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "Growth, WUE and biochemical response of *Allium sativum* inoculated with AM fungi under drought stress." **Journal of Tropical Agriculture**. Manuscript ID: 836.
20. **Borde Mahesh, Dudhane Mayura and Jite P. K.** "Growth photosynthetic activity and antioxidant responses of mycorrhizal and non-mycorrhizal Bajra (*Pennisetum typhoides*) crop under salinity stress condition". **Crop Protection in press**.
21. **Borde Mahesh, Dudhane Mayura and Jite P. K.** (2010), AM Fungi Influences the Photosynthetic Activity, Growth and Antioxidant Enzymes in *Allium sativum* L. Under Salinity Condition. Not Sci Biol 2 (4) 61-67.
22. **Dudhane Mayura**, Borde Mahesh and Jite Paramjit Kaur. Effect of Aluminium and Manganese toxicity on heavy metal uptake and verbascoside content in *Gmelina arborea* inoculated with AM fungi. **Mycorrhiza**: manuscript ID - MCOR-D-10-00162.
23. **Dudhane Mayura**, Borde Mahesh and Jite Paramjit Kaur. Effect of Arbuscular Mycorrhizal (*Glomus intraradices*) Fungus on growth and antioxidant enzymes activity under manganese toxicity in *Gmelina arborea* Roxb. **Environmental and Experimental Botany**: manuscript ID- EEB-D-10-00672.
24. **Dudhane Mayura**, Borde Mahesh and Jite Paramjit Kaur. Diversity of arbuscular mycorrhizal (AM) fungal species in plants surrounding the Bauxite mines from Kolhapur District, Maharashtra, India. Proceedings of International Conference on Biodiversity and its Conservation Published in Journal of Biosciences of Indian Academy of Sciences **in press**.

**List of Projects:**

SI No.	Title of Project	Funding Agency	Amount	Date of sanction and Duration.
1.	Hormonal relations in plant infection	UGC	2,50,000/-	1987-1990
2.	Lichen forming fungi, potential source of novel metabolites and their culture	CSIR	2,75,000/-	1994-1997
3.	Biological control of root-Knot nematode by Arbuscular Mycorrhizal fungi in grapevine	BCUD	3,00,000/-	2006 -2008
4.	Prospective plants from Western Maharashtra: their ecological, biochemical and molecular characterization and development of conservation strategies.	UGC, New Delhi	50,00,000/-	2004-2009
5.	Assessment of variability, conservation and utilization of medicinal plants and fungi from Maharashtra	UGC, New Delhi	50,00,000/-	2004-2009
6.	Studies on <i>Alternaria solani</i> (Ellis and Martin) Jones and Grout causing early blight of tomato with reference to its molecular diversity and management using different fungicides	UGC, New Delhi	7,64,800/-	2008-2011
7.	Role of Brassinosteroids and Arbuscular Mycorrhizal Fungi in priming for improved tolerance to pathogen. (Co-Investigator)	DST, New Delhi	23,60,000/-	2010-2013

**Past student Placement:**

1. Manisha Kotwal: Lecturer Pune
2. Hemlata Patil: Lecturer Amboli
3. Swami Nagnath: Lecturer Usmanabad College
4. Anjali Tripathi: University of Toronto, Canada
5. Mahesh Borde: Post Doctoral Kothari fellowship, Department of Botany, University of Pune, Pune 411007.

**Students guided for Ph.D. degree: Completed: 05, Thesis submitted: 01, Ongoing:09**

**Students guided for M.Phil degree: Completed:05**

**Post- Doctoral Guided: 02**

