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Personal Details

Dr. Sudarshan Maurya
Senior Scientist

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Research Interest

Plant Pathology, Biological Control, Plant Bacteriology, Mushroom cultivation

Research Highlights

1. Biological conttrol of soilborne phytopathogens
2. Breeding for disease resistance
3. Mushroom cultivation

Memberships / Fellowships

Life Member,
1. Indian Science Congress Association, Kolkata
2. International College of Nutrition
3. Association of Allium Worker of India

Technology Developed

1. Grain based and Talc based Trichoderma formulation for the management of soilborne phytopathogens
2. Fungi based phophate solubilizers

Publication Details

1. S. Maurya, J. S. Srivastava, R. N. Jha, V. B. Pandey and U. P. Singh. 2001. Effect of Tetrahydropalmatine, an alkaloid on spore germination of some fungi. Mycobiology 29(3): 142-144.
2. S. Maurya, J. S. Srivastava, R. N. Jha, V. B. Pandey and U. P. Singh. 2002. Efficacy of alkaloid (-)- corypalmine against spore germination of some fungi. Folia Microbiol. 47(3): 287-290.
3. Mitul Goel, S. Maurya, V. B. Pandey, V. P. Singh, A. K. Singh and U. P. Singh. 2002. Effect of Ent-norsecurinine, alkaloids, on spore germination of some fungi. Mycobiology, 30(4): 225-227.
4. S. Maurya, J. S. Srivastava and U. P. Singh. 2002. Effect of Cyperus rotundus rhizome on growth and sporulation of some fungi. Bioved. 13(1,2):1-6.
5. U. P. Singh, D. P. Singh, M. Singh, S. Maurya, J. S. Srivastava, R. B. Singh and S. P. Singh 2004. Characterization of phenolic compounds in some Indian cultivars. International J. of Food Sciences & Nutrition, United Kingdom, 55(2): 163-169.
6. Sangita Sahni, S. Maurya, J. S. Srivastava and U. P. Singh. 2002. Methanolic extract of cashewnut shells as inhibitor of fungal spore germination. Indian J. Plant Pathol. 20: 34-37.
7. N. V. Singh, S. Azmi, S. Maurya, U. P. Singh, R. N. Jha, and V. B. Pandey. 2002. Two plant alkaloids isolated from Corydalis longipes as potential antifungal agents. Folia Microbiol. 48: 605-610.
8. U. P. Singh, S. Maurya, D. P. Singh 2003 Antifungal activity and Induced Resistance in pea and control of powdery mildew of pea and Balsam by aqueous extract of vermicompost. Zeitschrift fur Pflanzenkheiten and Pflanzenschutz /J. of Plant Disease and Protection. 110: 544-553.
9. Maurya, S., Singh, D. P., Srivastava, J. S. and U. P. Singh. 2004. Effect of some plant extract on pea powdery mildew (Erysiphe pisi). Ann. Pl. Protec. Sci. 12: 296-300.
10. Leena Gohain, S. Maurya, M. B. Pandey, V. B. Pandey and U. P. Singh. 2004. Effect of the Mixture of Two Plant Alkaloids Isolated from Corydalis longipes against balsam powdery mildew on detached Leaves and pea powdery mildew in field. Mycobiology 32(4) 155-159.
11. S. Maurya, J. S. Srivastava and U. P. Singh 2004. Soil mixed sclerotia of Sclerotium rolfsii induces sexual stage. Science and Culture 70: 345-346 (India)
12. U. P. Singh, B. K. Sarma, D.P. Singh, S. Maurya, P. K. Mishra, and H. B. Singh. 2004. Effects of exudate

depletion on sclerotial development of Sclerotinia sclerotiorum and oxalic acid on the synthesis of phenolic acids in brinjal (Solanum melongena L.) Zeitschrift fur Pflanzenkheiten and Pflanzenschutz/ J. Plant Disease and Protection 111: 337-379, (Germany).
13. Sangita Sahni, S. Maurya, R. N. Jha, V. B. Pandey and U. P. Singh.2002. Inhibitory effect of two alkaloids,(-)-Corydalmine and (-)- Isocorydalmine isolated from Corydalis chaerophylla on several phytopathogenic fungi. Mycobiology, 32 (4)160-163.
14. S. Maurya, U. P. Singh, J. S. Srivastava, D. P. Singh and K. P. Singh . 2005 Changes in secondary metabolites during pathogenesis in chickpea (Cicer arietinum) by Sclerotium rolfsii. Zeitschrift fur Pflanzenkheiten and Pflanzenschutz /J. Plant Disease and Protection, 112:120-123, Germany
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16. D. P. Singh, S. Maurya, Om Prakash, J. S. Srivastava and U. P. Singh. 2005. Phenolic composition and Antifungal activity of culture filtrate of Leptoxyphium axillatum. Indian Phytopathol.58:143-148(2005).
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19. Chowdury, D., S. Maurya, M. B. Pandey, V. B. Pandey, B. K. Sarma and U. P. Singh. 2005. Antifungal activity of Naiceine Methyl Ester and Narceine isolated from Corydalic longipes against some phytopathogenic fungi. Mycobiology, 33:(4):206-209 Korea.
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21. Maurya S, D. P. Singh, J. S. Srivastava, and U. P. Singh. 2009.Plant Growth Promotion and Management of Collar Rot of Chickpea (Cicer arietinum) by Mycelial protein of Sclerotium rolfsii. Archives of Phytopathology and Plant Protection,; 42(10): 967–978
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24. S. Maurya, D. P. Singh, H.B. Singh, U. P. Singh and J. S. Srivastava. 2007. Changes of phenolic acid in wheat plants (Triticum aestivum) during interaction of Sclerotium rolfsii. Indian J Plant Pathol., 25 (1-2): 33-38.
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26. U. P. Singh, L. Gohain, S. Maurya, Amitabh Singh, V. B. Pandey and A. K. Singh, 2010. Antifungal activity of two alkaloids of Zephyranthes citrina and their field efficacy against powdery mildew (Erysiphe cichoracearum) of balsam. Archives of Phytopathology and Plant Protection, 43 (3):302-311.
27. D. P. Singh, B. K. SARMA, U. P. Singh, S. Maurya and Mandavi Singh, 2006. Phenolic acid composition of Garlic (Allium sativum). Recent Advances in Allium Research, Proceedings of the first national conference on Alliums, pp.199-211.
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Internet Journal of Alternative Medicine.; 5, Number 2. 1-11.
33. S. Maurya, Rashmi Singh, D.P. Singh, H.B. Singh, U.P. Singh, J.S. Srivastava.2008. Management of collar rot of chickpea(Cicer arietinum) by Trichoderma harzianum and plant growth promoting rhizobacteria. Journal of Plant Protection Research 48, 347-354.
34. Maurya, S., Rashmi Singh, D. P. Singh, H. B. Singh. J. S. Srivastava and U. P. Singh, 2008. Identification of (poly) phenolic substances in Soughum (Sorghum vulgare) during interaction with Sclerotium rolfsii. Jornal of Plant Pathology, 90 (2) 81-S2-465.
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37. Shraddha, U. Nayak, Joshi, V. K., Maurya, S. and Singh U. P. 2009. Analysis of phenolic acids in different market samples of Vidanga (False black pepper). AYU. 30:181-187.
38. Maurya S., U.P. Singh, Rashmi Singh, A. Singh and H. B. Singh.2010. Role of air and light in sclerotial development and basidiospore formation in Sclerotium rolfsii. Journal of Plant Protection Research 50: 206-209.
39. Shraddha, B. S., Joshi, V. K., Maurya, S., Singh, U. P., Nath, G and A. Singh, 2007. Authentication of Kampillaka (Mallotus philipinensis):An important drug of Ayurveda (Indian Traditional Medicine). Internet Journal of Alternative Medicine, 5: 1-9.
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41. Sudarshan Maurya, Amitabh Singh, Abhishek Mishra and Udai P. Singh, 2011. Taphrina maculans reduces the therapeutic value of turmeric (Curcuma longa) Archives of Phytopathology and Plant Protection, Vol. 44, No. 12, 1142–1146.
42. Udai Pratap Singh, Sudarshan Maurya, Amitabh Singh and Mandavi Singh, 2011. Phenolic acids in some Indian cultivars of Momordica charantia and their therapeutic properties. Journal of Medicinal Plants Research Vol. 5(15),3558-3560.
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47. R. Kumar, Sudarshan Maurya, A. Kumari, Jaipal Chaudhary, Bikas Das, S. K. Naik and S. Kumar, 2012. Biocontrol potentials of Trichoderma harzianum against scelrotial fungi. The Bioscan, 7; 521-525.
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