

**Research Article****Evaluation of *Trichoderma* Augmented Neem Cake and Farm Yard Manure for the Management of Root Rot of Safed Musli Caused by *Rhizoctonia solani* Kuhn****Pinki Sharma<sup>1</sup>, P Rawal<sup>1</sup>, JP Tetarwal<sup>1</sup>, RP Jetawat<sup>1</sup> and A Joshi<sup>2</sup>**

<sup>1</sup>Department of Plant Pathology, <sup>2</sup>Molecular Biology and Biotechnology, Rajasthan College of Agriculture, MPUAT, Udaipur Rajasthan 313 001 Email.dr.p.rawal@gmail.com; pinkipatho2@gmail.com

**Abstract**

The modules consist of *Trichoderma viride* augmented neem cake mixture and farm yard manure was evaluated for the management of root rot (*Rhizoctonia solani* Kuhn) of safed musli under sick plot condition. The module comprising soil application of *T. viride* augmented neem cake mixture @ 100g/m<sup>2</sup> was found most effective in management of root rot and resulted in minimum (8.5%) disease incidence and maximum fasciculated root yield (45.8 q ha<sup>-1</sup>) of improved quality (viz., length 15.3 cm with 30.5 mm diam., 12.8 per cent saponin content). This module was followed by seed roots dip treatment with *T. viride* talc-based formulation @ 20 per cent plus soil application of neem cake mixture @100g/m<sup>2</sup> resulted in 11.1 per cent root rot incidence and 80.99 per cent disease control with higher yields of fasciculated roots (44.6 q ha<sup>-1</sup>) of improved quality (viz., length 14.8 cm with 30.3 mm diam, 11.8 per cent saponin content) compared to rest of treatments and inoculated untreated control. Although, modules comprising soil application of neem cake mixture alone @100g/m<sup>2</sup> resulted in 17.7 per cent root rot, 73.7 per cent disease control and 41.5 q ha<sup>-1</sup> fasciculated root yield. However, module consist of soil application of *T. viride* augmented farm yard manure @100g/m<sup>2</sup> resulted in 20.8 per cent root rot, 60.1 per cent disease control and 39.9 q ha<sup>-1</sup> fasciculated root yield. The inoculated untreated control resulted in maximum root rot (67.34%), minimum fasciculated root yield (17.3 q ha<sup>-1</sup>), reduced root length (3.6 cm with 7.8 mm diam) and saponin content (9.4%).

**Key words:** Farm yard manure, neem cake mixture, *Rhizoctonia solani*, safed musli *Trichoderma viride*

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