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USE OF *PAECILOMYCES LILACINUS* IN THE CONTROL OF ROOT ROT AND ROOT KNOT DISEASE COMPLEX OF OKRA AND MUNG BEAN

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Abstract

Paecilomyces lilacinus, a soilborne fungus and a parasite of *Meloidogyne* eggs was found to inhibit growth of*Macrophomina phaseolina* and *Rhizoctonia solani in vitro*. A 3 week old culture of *P. lilacinus* multiplied on rice grains when applied to soil @ 40g/m showed significant reduction in *Meloidogyne incognita* root knot index on kara (RKI 1.1) and mung (RKI 1.1) as compared to control okra, RKI 4.8 and mung bean, RKI 4.7. *P. lilacinus* reduced *M. phaseolina* colonization of roots by 33% on mung bean and 45% on okra, whereas *R. solani* infection was reduced by 67 and 73% on mung and okra, respectively. Furadan used alone or in combination with *P. lilacinus* was less effective than *P. lilacinus*. Residual effect of *P. lilacinus* was more than Furadan. A rice grain inoculum of *P. lilacinus* showed better results as compared to its use on wheat straw, rice straw, sorghum grains or as seed dressing.