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EFFICACY OF NATIVE ISOLATES OF *SACCHAROMYCES CEREVISIAE, TRICHODERMA HARZIANUM* AND *T. RESSEI* IN THE BIOCONTROL OF *MELOIDOGYNE INCOGNITA* AND*ROTYLENCHULUS RENIFORMIS* ON JASMINE IN COMPARISON TO NEMATICIDE VYDATE UNDER FLOOD IRRIGATION REGIME IN EGYPT

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Abstract

Six Egyptian biological compounds viz., dry active yeast *Saccharomyces cerevisiae* FT 700,*Trichoderma harzianum* F 717, *S. cerevisiae* FT 700 + *T. harzianum* F 717, *T. harzianum* F 416, *S. cerevisiae* FT 700 and *T. ressei* F 418 as well as vydate (Oxamyl 24% L) a nematicide were tested at three different rates for the control of *Meloidogyne incognita* and *Rotylenchulus reniformis* infesting jasmine under field conditions. All the tested products significantly reduced ($p< 0.05$ and / or 0.01) *M. incognita* and *R. reniformis* populations in soil and roots as compared to untreated control. Statistical differences at 0.05 and / or 0.01 levels in *M. incognita* and *R. reniformis* populations were found within some treatments and also between the doses of the same treatment. Direct comparison between most successful treatments due to their effectiveness on percentage reduction in nematode populations showed that the intermediate dose (120g / tree) of *T. harzianum* F 717 isolate was superior in three periods (May-July) followed by 60 g / tree of dry active yeast *S. cerevisiae* FT 700 isolate when used twice and, 120 g / tree of *T. harzianum* F 416 when used once in reducing *M. incognita* populations either in soil or roots as compared to other treatments. Similarly, high dose of *T. ressei* F 418 isolate was superior in three treatments and intermediate dose of a mixture of dry active yeast *S. cerevisiae* + *T. harzianum* F 717 was superior when used singly. The Vydate treatment was superior when used twice in reducing *R. reniformis* populations either in soil or roots as compared to other treatments.