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Effect of different management practices for root rot disease of papaya caused by *Fusarium solani*

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ABSTRACT : In the present study the most effective fungicides, plant extract, organic cake and bio-agent were evaluated in different combinations under field conditions for the management of papaya root rot disease. It was observed that there was 81.5% disease incidence in control, while the lowest disease incidence (29.60%) was recorded in treatment (T_{13}) (Comprising disease free seedling + mustard cake (10%)+ wild garlic (10%) + dipping of seedlings in thiophanate methyl (0.1%) 30 min.+ soil drenching with thiophanate methyl (0.1%) solution three times (1st at time of transplanting, second at 3rd MAT and third at 5th month after transplanting)+ Soil application of *Trichoderma viride* @ 50g/plant three times (i.e. 1st at time of transplanting, second at 3rd MAT and third at 5th MAT)+ soil application of *Pseudomonas florescence* @ 50g/plant three times (i.e. 1st at time of transplanting, second at 3rd MAT and third at 5th MAT). This was followed by treatment T_6 (37.0%), T_9 (40.7%) and T_5 (44.4%). The effect of different treatments on yield was also studied and the highest fruit yield (1064.67 kg/plot) was obtained from the treatment T_{13}, followed by treatment T_9 (848.67 kg/plot) and T_5 (810.00 kg/plot) over the control T_1 (209.00 kg/plot).

Key Words: Papaya, Root rot, *Fusarium solani* and Integrated