

Manuscript Number: 2038 NAAS Rating: 4.47

Integrated Management of *Meloidogyne incognita* in Wilt Disease Complex of Muskmelon

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Abstract: Studies were conducted under pot conditions to determine the comparative efficacy of carbofuran @ 2kg a.i./ha, thiram @ 3g/kg of seed, *Trichoderma harzianum* @ 15g/kg of soil and *Tagetes patula* (green manuring @ 10% w/w) alone and in combination against root-knot nematode *Meloidogyne incognita* and wilt fungus *Fusarium oxysporum* in muskmelon wilt disease complex. Significant increase in growth parameters was observed in all treatments as compared to untreated uninoculated plants. Individual applications of carbofuran @ 2kg a.i./ha and green manuring with *T. patula* significantly decreased root knot nematode population. Application of thiram alone did not reduce nematode population. Comparatively, higher increase in growth parameters and greater decrease in RKN population in soil and roots was observed in integrated treatments. Integration of *T. patula*, thiram and carbofuran or integration with *T. harzianum* was found to be most effective in management of root-knot disease disease and wilt complex.

Key Words: Fusarium oxysporum, Integration, Meloidogyne incognita, Tagetes patula, Wilt complex