

## **Efficacy of pesticides as seed treatment against root-knot nematode, *Meloidogyne incognita* on cluster bean (*Cyamopsis tetragonoloba* L.)**

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**ABSTRACT :** Vegetables are principle source of vitamins and minerals for human beings but, Their production is very low in India due to number of biotic and abiotic factors including losses caused by phyto-nematodes. Amongst nematodes, the root-knot nematode, *M. incognita* is one of the most prevalent species of nematode associated with vegetable crops including cluster bean in India and farmers experience chronic losses because of the high frequency of this nematode. Therefore, the present investigation was carried out to test the efficacy of acephate 75 SP, thiodicarb 75 WP and imidacloprid 70 WS at 1, 2, and 4 per cent w/w as seed treatment for the management of root-knot nematode, *M. incognita* on cluster bean. A standard chemical (Carbosulfan 25DS at 3% w/w) and untreated checks were also maintained for interpretation and compare of results. Experimental findings revealed that maximum increased in shoot length, root length, shoot weight, root weight and number of nodules was obtained with acephate at 2 per cent, followed by imidacloprid at 4 per cent and thiodicarb 75WP 4 per cent. Significant reduction in nematode population viz., galls/plant, egg masses/plant and final larval population/100cc was soil also observed with acephate at 2 per cent over untreated control.

**Key Words:** Seed treatment, cluster bean, *Meloidogyne incognita*, acephate, thiodicarb and imidacloprid.