

Bio Enriched Cocopeat

Introduction

Flue-cured Virginia (FCV) tobacco is a major crop with great export potential, grown in an area of 70000 hectares under rain-fed conditions in light soils of Karnataka. Root knot nematode, *Meloidogyne incognita* is the major limiting factor both in nursery and main field tobacco crop. Its infection in early stage of the crop has tremendous deleterious effect on the quantity and quality of the produce. Conventional nursery production often results in production root knot infected seedlings. Such infected seedlings fail to establish and result in uneven crop. Though root knot nematode menace can be to some extent managed by use of available few chemicals, their prohibitive cost and non-eco-friendly nature paves the way to search for cost effective and eco-friendly alternatives like bio-control agents. Nematode egg parasitic fungi, is an effective nematode antagonist, can be easily enriched in coco-peat media used for raising tray seedlings in Karnataka. Hence nematode antagonists enriched FCV tobacco seedlings were evaluated against root knot nematodes under sick field conditions. @ 50g /tray media significantly reduced the Root Knot Index by 51.5% and subsequently increased the FCV Tobacco cured leaf yield by 12.1% over check with ICBR of 1:5.9. This technology helps mainly in easy delivery of bio-agents into the field for nematode management.

Results / Gain

Treatment @ 50g / tray media significantly decreased RKI to 1.89 as compared to 3.90 in check. Subsequent increase in FCV tobacco cured leaf yield was to the tune of 12.1% compared to check. and 50.5% reduction in root knot nematode incidence in farmer's field.

This technology will help in easy delivery of bio-agent, into the main field, thereby helps in cost effective and eco-friendly management of root knot nematodes, to produce residue free FCV tobacco for exports from light soils of Karnataka.

This technology being eco-friendly by adding organics like bio-enriched coco-peat into the soil helps in enhancing the fertility and productivity of the soil.

