

INTEGRATED ROOT-KNOT DISEASE MANAGEMENT IN TOMATO THROUGH NEMATOPHAGOUS FUNGI ALONG WITH ORGANIC AMENDMENT

Anamika, Sobita Simon and Saily Dass

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ABSTRACT : Tomato crop is extensively and severely attacked by various diseases. Among the known diseases, the root-knot disease is one of the most damaging ones caused by *Meloidogyne* spp. This disease can possibly be managed by integrated nematode management practices. In this practice, the nematophagous fungi play a significant role but it is quite difficult to increase the population by adding spores. In order to establish these nematophagous fungi for the purpose of biological control of root-knot nematode, organic matter are added in harmonious manner. *Arthrobotrys oligospora* is one of the most important nematophagous fungi occurring widely in different types of soil. Integrated root-knot disease management is inherent component of agro-ecosystem. Improvement in one limiting attribute or input would otherwise improve other inputs in the process of agriculture production. Plant disease management through exploiting soils is congenial to better crop production. Application of organic farm yard manures @5% along with mass culture of *Arthrobotrys oligospora* @1% in the sick soil infested with root knot nematode resulted drastic reduction (86%) in root knot in tomato crop.

Key Words: *Arthrobotrys oligospora*, tomato seedlings, farm yard manure.