Eco-Friendly Management of Root-knot Nematode *Meloidogyne incognita* (Kofid and White) Chitwood Using Different Green Leaf Manures on Tomato under Field Conditions

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Abstract

A field study was conducted to test the effect of different green leaf manures elucidate as eco-friendly management of *M.incognita* on tomato. Recommended dosage of green leaf manures, such as *Gliricidia maculata*, *Thespesia populnea*, *Calotropis gigantia, Azadiracta indica* and *Glycosmis pentaphylla* were compared with control as treatments. The results revealed that extent of galling (35.87), gall index (0.327), yield (17.87 Mt/ha), Reproductive factor (0.411) and plant growth includes height and dry matter, respectively (22.47 cm and 45.08 g) were significantly best in *Gliricidia maculata* compared to other treatments. While other green leaf manures, *T. populnea* and *A. indica* ranked second and third, respectively in managing *M. incognita*. This study also revealed that green leaf manures improve the plant growth and reduced the nematode infestation in tomato fields. Moreover, *G. maculata* can be used as an alternative in eco-friendly manage root-knot nematode.