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EFFECT OF SOME PLANTS ON ROOTKNOT NEMATODE INFESTATION ON BHINDI

Root excretions or diffusates of certain plants are known to affect the behaviour of plants parasitic nematodes in various ways. The root diffusates of plants like *Brassica hirta* and *B. nigra* (Ellenby 1951), *Tagetes erecta* (Suatmadji 1969) and *Asparagus officinalis* (Rhode & Jenkins 1958) mask or neutralise the effects of the diffusates of other plants thereby checking the infestation of plants parasitic nematodes on suitable host plants.

A trial was conducted to assess the effect of African marigold (*Tagetes patula*, Bandhi) (*T. erecta*) and sesamum (*Sesamum indicum*) when grown along with bhindi in controlling root gall nematode infestation on bhindi. For these studies bhindi seeds were sown in the centre of posts and seeds of bandhi, sesamum and african marigold sown around the bhindi seeds in separate pots; bhindi seeds in the centre and all around served as control. Each treatment was replicated thrice. Two weeks after germination of seeds, the excess number of plants were removed leaving one bhindi plant in the centre of the pot and four plants of the species under test at the four corners of the pot. After three weeks of sowing each pot was inoculated with 500 larvae of the root-knot nematode, *Meloidogyne incognita*. Care was taken to inoculate the nematode culture in between the bhindi plants in the centre and the test plants growing all around. The trial was repeated in two seasons.

Table 1

Effect of different plants on root-knot infestation on bhindi

Plant	Weight of fruits (gm)	Weight of root galls (gm)	Hight of Plants (cm)
African marigold	730.50	0.15	112.3
Bandhi	701.35	0.23	110.0
Sesamum	648.24	1.20	104.1
Bhindi(control)	411.82	3.50	94.6

Results were assessed in terms of the yield of fruits, height of plants and weight of rootgalls formed. The data are presented in Table I.

It is seen that the nematode infestation was very low in bhindi plants grown along with bandhi and african marigold as compared to the plants grown with sesamum and bhindi.

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