

CONTROL OF ROOT-KNOT NEMATODE (*MELOIDOGYNE INCOGNITA*) IN NURSERY BEDS OF TOMATO BY SOIL AMENDMENT WITH *BRASSICA RAPA*, *BRASSICA JUNCEA*, *BRASSICA NAPUS* AND *ERUCA SATIVA* PLANTS

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Abstract

Soil amended with four cruciferous plants viz., *Brassica rapa* (var. TL15), *Eruca sativa* (var. TMLC 2), *B. juncea* (var. PBR 97) and *B. napus* (var. GSL 1) was evaluated for the control of root-knot nematode in tomato nursery beds along with check (no amendment). The plants were sown in second half of September and incorporated into beds after forty days of sowing. Soil in beds was turned over on for 10 days alternatively. Seeds of tomato var. Punjab Upma were sown in the amended and unamended beds after 10 days of incorporation. All the treatments were replicated thrice in 0.5 x 0.5 m beds. Pooled data of two years on number of galls / seedling, seedling height and weight after 40 days revealed that maximum reduction in number of galls produced on roots by root-knot nematode was observed in *Brassica rapa* amended plots (52.17 % reduction over check) and was very closely followed by reduction in gall numbers in *Eruca sativa* amended plots. Maximum increase in seedling height (26.28 %) was observed in *Brassica rapa* amended soil followed by increase in *Eruca sativa* amended soil (22.63 %) which was at par in the two treatments and significantly better than unamended soil. Maximum increase (34.56 %) in seedling weight was recorded in *Brassica rapa* amended soil followed by increase in *Eruca sativa* amended soil (29.41 %) and the two treatments were at par and significantly better than all other treatments.