ROLE OF CERTAIN COMPOSTED PLANT OR ANIMAL RESIDUES IN THE CONTROL OF ROTYLENCHULUS RENIFORMIS ON COWPEA

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Abstract

Soil amendment with five organic composts of plant or animal residues viz., sawdust (SD), rice straw (RS), banana tree (BT), maize stalks (MS) and cattle dung (CD) @ 0.25, 0.5 and 1.0% w/w showed significant ($P \le 0.05$ and/or 0.01) reduction in numbers of *Rotylenchulus reniformis* larvae in soil, females and eggmasses on roots as well as the nematode build-up as compared to control. All dosages of BT compost were most effective in reducing numbers of the nematode stages, females, eggmasses and the nematode build-up followed by 1.0% of both MS and SD composts. All dosages of organic composts significantly ($P \le 0.05$ and 0.01) increased growth of cowpea cv. Balady. Generally, there were positive significant correlations between doses of composts and reduction in the nematode stages and increases in cowpea growth parameters. Most of the applied composts showed positive correlation between N,P and K uptake and the compost dosages.