

SUMMARY

In greenhouse experiments some oroganophosphorous, carbamate and pyrethroides pesticides tested on five vegetable crops to evaluate their effect at different rates and time of application on the behaviour of the root-knot and reniform nematodes. Results showed that:-

A- Aldicarb, oxamyl and phenamiphos at rate of (6.25, 13.5, 20.25), (10, 20, 30) and 1.5, 3, and 4.5 litter/F respectively were effective in reducing nematode population in roots and soil.

B- Benomyl and mancozeb at rate of 300 and 350 gram per feddan were effective in reducing nematode population in root and soil. The infected plant (tomato and egg-plants) treated with both benomyl and mancozeb showed a correlation between the growth of plants and the reduction in nematode population in soil in root system and also root gall index.

C- Higher dose of each nematicides were more effective in reducing the population and suppressed the total population in both root and soil.

D- The reduction in nematode population differs according to the host plant used while, aldicarb was the best in tomato and pepper while phenamiphos was the best in controlling nematodes in egg-plant, but in cowpea and

potatoes oxamyl was the best.

E- Tested pesticides gave their highest effect when added to soil at planting.

F- Nematode infection caused a reduction in leaves contents of N, K, Mn, Zn, chlorophyll and carotene.

G- Infected plants treated with nematocides made almost normal growth and maintained mineral levels comparable to healthy plants. In this respect, aldicarb was better on tomato and pepper plants.