

***BIOLOGICAL CONTROL OF PLANT PARASITIC NEMATODES INFECTED  
CUCUMBER PLANTS UNDER SHIELD PLANTATION CONDITIONS***

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***ABSTRACT:***

The main purpose of the experiments was to study the abundance of nematode genera in the soil of the commercial plastic houses cultivated with cucumber crop, under controlled conditions and to study the effect of 17 bioagents in the control of plant parasitic nematodes infecting cucumber plants variety (Medina) under plastic house conditions. Results indicated that the highest grand mean reduction percentages of nematodes were recorded with the treatments of Carbufuran (93.3 %); followed by powder of fish bones (92.1 %); and Poultry manure (91.0 %) without significant differences, while the treatments of Compost, 1 part farmyard manure + 2 part poultry manure; Potassium; Saccharomyces; and Streptomyces gave moderate reduction percentages without significant differences, as (85.4 %), (82.5 %), (80.3 %), (80.3 %), (80.1 %), respectively. The lowest grand mean reduction percentages of nematodes were recorded with the treatments of Sulfur, Bacillus thuringiensis, (Zn, Mn, Fe), Demssisa, Neem, resulting (44.6 %), (51.4 %), (51.4 %), (54.4 %), (54.5%), respectively. The highest weights in the cucumber fruit crops were recorded with the treatments of Farmyard manure (130.7 %) (17.3 kg), followed by the treatment of Poultry manure giving (113.3 %) (16.0 kg), Compost (105.3 %) (15.4 kg), powder of fish bones (100.0 %) (15.0 kg), while the least weights in the cucumber fruit crops were recorded with the treatments of Saccharomyces (32.5 %) (9.9 kg), followed by the treatment of Zn, Fe, Mn giving (58.7 %) (11.9 kg), Potassium, (69.3 %) (12.7 kg), Sulfur (70.7 %) (12.8 kg), Streptomyces (72.0 %), (12.9 kg), and finally Beauveria bassiana (78.7 %), (13.4 kg / 10 plants), in comparison with the control which harvested only (7.5 kg).

***Key words:*** Biological control, bioagents, cucumber, organic manures, parasitic nematodes