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Attack Of The Killer Worms!!!

Turf grasses of Northeastern Colorado are commonly infected with root eating grubs. These grubs are typically treated with, sometimes harmful to the surrounding environment, pesticides. This research was focused on determining how seasonal soil temperatures (EPNs) as a bio-control for turf grass grubs. It was hypothesized that the nematode's effectiveness would increase at the fall soil temperature (21 °C), that the species, *S. feltiae*, would be most effective at the spring soil temperature (13°C), *S. carpocapsae* would be most effective at the summer (29°C) and fall soil temperatures, and *H. bacteriophora* would be most effective at summer soil temperature. *G. mellonella* larvae were infected with the tree nematode species and incubated at 13°C, 21°C, and 29°C for 120 hours. Number of dead *G. mellonella* larvae were counted every 12 hours. It was found that *S. feltiae* was most effective at the spring and fall temperature and *S. carpocapsae* was most effective at the summer temperature. Also, the fall temperature supported the fastest kill rate. The researcher concluded that turf grass infested with grubs in northeastern Colorado should be treated with *S. feltiae* in the spring and fall and with *S. carpocapsae* in the summer. Fall appears to be the best season to treat turf grass with EPN's for grubs.