

## NEMATODE CONTROL FOR FIELD CORN

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The application of granular carbofuran (Furadan) has become an accepted practice for the control of corn rootworms and other insects in field corn. The same chemical, at higher dosages, will also kill soil nematodes and field plots have been designed to demonstrate whether or not this usage is of practical value in Massachusetts.

The demonstration plots contain populations of lesion nematodes (*Pratylenchus*) which would be considered damaging to corn in the midwest. In 1979, carbofuran treatments (20 and 30 lb Furadan 10G per acre) successfully reduced nematode populations but no significant difference was noted in corn growth (Table 1.) In 1980 treatments of 15 and 30 lb of Furadan have been applied.

Table 1. Silage and ear corn yields (ton per acre) and number of lesion nematodes per pint of soil. No counts were made of root populations.

Carbofuran (Furadan) lbs/acre	0	10	20	30
May 15 (preplant composite sample)	74			
July 25	200	160	20	30
October 9 (postharvest sample)	1300	2500	600	400
Silage yield (70% moisture)	26.8	25.9	26.0	24.6
Earcorn yield (25% moisture)	5.4	5.2	5.2	5.2

Similar tests in New York, Pennsylvania and New Jersey have shown that unless plants are under stress from poor growing conditions, they are able to tolerate large numbers of nematodes without showing any appreciable damage. Poor nutrition, drought, cold and other forms of stress will be increased by nematodes, but given optimum conditions actively growing plants can support a large number of nematodes without showing much injury. It is to be remembered nematodes cannot be seen in the field and their damage is non-specific. They occur in hot-spots throughout the field. Plants are stunted but otherwise look normal.

If fields are growing unevenly and a soil test shows large numbers of nematodes, it may be worthwhile to treat a test strip. The increase in uniformity and yield would more than offset the cost of an increased dose of a chemical already in use.