

**EUROPEAN CHAFER LARVAE CONTROL, BELMONT, MI, 1990:** Curative treatments: A grid of 3' x 3' plots separated by 2' wide buffer strips was established at Blythefield Country Club in Belmont, Michigan. Six replications of 11 treatments were applied on 20 August, 1990 between 9:00 and 11:00 AM. Temperature at application was approximately 70°F with a slight rainfall (0.21") about 9:30 AM followed by sunny weather conditions. The plots were established on an irrigated rough with sandy soil. Irrigation was applied approximately every other day depending on rainfall. Insect parasitic nematodes were applied while the grass was wet with dew and then hand irrigated with 1/4" of water applied through a watering can immediately after application. Liquid products were applied with a single nozzle hand-held wand CO<sub>2</sub> sprayer from R&D Sprayers. The application was made at 50 psi through an 8003 nozzle. Insecticides were mixed with water and applied at a rate of 137 ml/9 ft<sup>2</sup> (175 gal/A). Granular insecticides were applied with modified "salt" shakers. Evaluations were made on 17 September, 1990 by removing 294 sq. inch (six 7" x 7" squares) sections of turf, roots, and soil per plot and counting larvae. Preventive treatments: A grid of 4' x 4' plots separated by 1' wide buffer strips was established in irrigated rough at Blythefield Country Club. Six replications of 4 insecticide treatments were applied on June 11, 1990. Granular insecticides were applied the same as described above. Evaluations were made on 17 September, 1990 using the same method described above. The preventive and curative plots were on different fairways.

NTN 33893 and MAT 7484 applied in June were effective in reducing European chafer grubs found in September. However, MAT 7484 was not as effective when applied on 20 August and evaluated on 17 September. None of the curative treatments applied on 20 August significantly reduced grub populations. Of the curative treatments, B-980 nematodes and MAT 7484 provided the best grub population reduction (54% and 58% reduction, respectively, Table 6).

Table 6.

EUROPEAN CHAFER TEST, 1990  
Blythe field Country Club

Treatment	Rate	Description	Larvae per plot
NTN 33893 .5G	0.38 lb AI/acre	preventive (June 11)	0 c*
NTN 33893 .5G	0.5 lb AI/acre	preventive	0 c
MAT 7484 .8G	0.75 lb AI/acre	preventive	5.2 b
MAT 7484 .8G	1.0 lb AI/acre	preventive	2.8 bc
Control 1	--		11.5 a
MAT 7484 .8G	0.25 lb AI/acre	curative (Aug. 20)	10.0
MAT 7484 .8G	0.5 lb AI/acre	curative	8.0
Crusade 5G	4 lb AI/acre	curative	14.2
Fonophos MS	4 lb AI/acre	curative	12.5
ICI 08882	1 lb AI/acre	curative	18.8
ICI 08882	2 lb AI/acre	curative	13.7
B-27 N nematodes	1 Billion/acre	curative	10.7
B-980 nematodes	1 Billion/acre	curative	7.5
Triumph 4E	0.5 lb AI/acre	curative	15.3
Control 2	--		13.8

\*Means followed by the same letter are not significantly different (P= .05, DMRT).