

The Phytotoxicity of Insecticides to Bent Grass

By Stan Rachesky, Extension Entomologist, University of Illinois

The chemicals tested were applied at 5 times the recommended rate to determine their degree of phytotoxicity to bent grass. The insecticides recommended by the University of Illinois for the control of sod webworms, armyworms, cutworms, chinch bugs,

millipedes, sowbugs and leafhoppers are diazinon, Dylox, and Sevin. Others have exhibited excellent results in sod webworm trials at the recommended rate, some have labels for turf insects while others do not.

| Active Ingredient per 10,000 Sq. Ft. | 3 x 8 Ft. Plots | Ingredient Active Per Acre | VARIETIES | | |
|--------------------------------------|---------------------------|----------------------------|-----------|---------|---------|
| | | | Penncross | Toronto | Seaside |
| 1 lb. | diazinon 2G | 4 lbs. | | | |
| 1 1/4 lbs. | trichlorfon (Dylox) 5G | 5 lbs. | | | |
| 1 1/4 lbs. | fenthion 5G (Baytex) | 5 lbs. | | | |
| 2 lbs. | carbaryl (Sevin) 5G | 8 lbs. | | | |
| 1 1/4 lbs. | Gardona 75 WP | 5 lbs. | | | X |
| 1 1/4 lbs. | trichlorfon (Dylox) 50 WP | 5 lbs. | | X | X |
| 2 lbs. | carbaryl (Sevin) 80 WP | 8 lbs. | X | | |
| 1 lb. | diazinon 25 EC | 4 lbs. | O | O | O |
| 5 oz. | Dursban 2 EC | 20 oz. | X | | |
| 1 1/4 lbs. | fenthion 4 EC (Baytex) | 5 lbs. | X | X | XX |
| 30 oz. | ethion 4 EC | 12 oz. | | | |

X - Slightly off color
 XX - Slight burn
 O - Severe burn

In summary:

1. No granular formulations tested were phytotoxic at 5 times the rate.
2. Emulsifiable formulations, diazinon in particular, were phytotoxic at five times the level. The carrier (oil) was probably the cause for burn.
3. Dylox and Gardona WP exhibited a slight off color result.
4. No phytotoxicity were present when any of the

insecticides tested, regardless of formulation, were used at the recommended rate.

Cooperating Golf Courses —

- Edgewood Valley Country Club — Harold Fredrickson
- Evanston Golf Course — Bruce Sering
- Elmhurst Country Club — Fred Opperman
- Thorngate Country Club — George Druzisky



Dr. Michael P. Britton

As many of you have probably heard, Dr. Michael P. Britton has returned to the University of Illinois as of September 1, 1967. He will be teaching Plant Pathology and be responsible for the agricultural extension work on the diseases of Agronomic crops and the diseases of turfgrasses. In his extension capacity he will be diagnosing diseases on specimens sent to him, and will make a limited number of field or golf course visits when necessary. He will be available as a speaker at educational program sponsored by the extension service for farmers, and by Golf Course Superintendents Associations, and other groups and organizations.

Research work will be largely of a practical nature involving fungicide testing programs, and investigations of the cause of disease conditions. He presently has two graduate students working toward the Ph.D. degree in plant pathology. One of them will be working on turf diseases, the other, an AID student from India will be working on the epidemiology of a disease of corn.