

eral chlorinated hydrocarbon insecticides, including heptachlor and chlordane, were least effective.

The materials which were most promising in the laboratory bioassay experiments were selected for field testing in 1969, along with Di-Syston®, which looked promising in 1968 field tests, and diazinon, an insecticide commonly used against soil dwelling insects. Diazinon was given more emphasis than the other materials because it had been used with apparent success on an operational scale by several golf course superintendents.

Nearly all the 1969 plots treated in both April and again in May were conspicuously healthier than their surrounding control plots. Dursban® applied at a rate of 2½ pounds active ingredient per acre in April and again in May gave the best control. Diazinon applied at a rate of five pounds active ingredient per acre in April and again in May consistently gave good control, while diazinon applied at a rate of two pounds active ingredient per acre in April and May gave only fair control. The diazinon plots treated only once in mid-April showed considerable weevil damage.

Applications were made with the intention of controlling the adults before they laid their eggs,

but it now appears that the small larvae can be controlled before they cause appreciable damage.

Results of the field plot tests and the operational field trials lead to the conclusion that the turfgrass weevil can be controlled by insecticides applied at the proper times. To control the turfgrass weevil, granular diazinon at a rate of from three to four pounds active ingredient per acre, or Dursban® emulsifiable concentrate at a rate of 1½ to two pounds active ingredient per acre, should be applied on suspected problem areas in mid-April and again in mid-May. Neither diazinon nor Dursban® are registered for use against the turfgrass weevil, but both are registered for use against other turf insects. More extensive field tests could prove that lower rates of application and one treatment per year would adequately control the turfgrass weevil.

In January, 1968, the New York State College of Agriculture at Cornell University received a grant from the Long Island-Metropolitan Golf Course Superintendents Research Foundation. The USGA Green Section was a major contributor. These funds have supported the research for the past two years.

How to Grow Grass Without Pain

by **FRANKLIN B. JARMON**, Superintendent, Facilities, The Du Pont Country Club,
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Superintendents who have spent sleepless nights worrying about disease, drought, and labor until their ulcers erupted or their heads seemed to split—will not find the answer to their problems here.

Let's face it, there is no panacea for growing grass. As always, nature will continue to challenge every successful superintendent to expect the unexpected. Just as soon as one adversity is overcome, another in the form of a more vigorous insect or a more virulent fungus is sure to appear. Certainly superintendents don't have to be convinced that growing grass can be quite a pain. This, however is the kind of pain that we all have to learn to accept and expect.

There is another and much more devastating kind of pain. It is the pain caused by accidents. Physical pain is all too often the result of some careless and/or unsafe act which exacts an intolerable toll of both physical and mental suffer-

ing. Fortunately, we can generally do something about it.

Of course, we don't run golfers down with a tractor, nor do we intentionally walk in front of their drives. These hazards to our safety are all too obvious. But what of the unnumbered subtle hazards we, our men and our members encounter on the golf course each day? Although safety is everyone's business, the fact remains we too are responsible for those using our facilities. In one way or another, whatever happens to an employee or a member also happens to us.

Accidents resulting from overlooked or inadequate safety practices are inexcusable, and pain cannot be removed by sharing it. The only thing we can and absolutely must do is to prevent accidents from happening in the first place. Those areas most vulnerable are the eyes, fingers, arms, feet and legs.



Mr. Charles Sylvester (left) and Mr. Carl Toth are both outfitted with safety clothing and are inspecting other items of safety equipment used in their work.

Let's consider these questions: Did you ever see a golf ball split a safety helmet on a man raking a sand bunker? Have you ever seen the toe of a safety shoe that had come too close to a rotary mower and realize what would have happened without the special shoe? Did you ever see safety glasses or goggles which had been struck by a flying object? Do your men wear respirators and rubber gloves when using harmful chemicals?

Consider the use of shin guards on rotary mower operators. Seeing a man suffer in a hospital operating room with a piece of rusty wire embedded in his instep is all the persuasion one would require.

Place guards over all open gears and drive belts. Many fingers, arms and legs have been lost because the continuous whirring of an engine hypnotized a person into a false feeling of security, which led to a careless act.

All of these and other safety features cost money. But it is money well spent if only one major injury is prevented. We cannot afford to ignore the potential loss of an eye or a limb on our golf courses. Think of all the suffering, and even loss of earning power, which can result from an accident, and take immediate steps to eliminate any obvious hazard under your command.

We are constantly on the lookout for disease or things which would cause us to lose turf. Shouldn't we be more alert to the potential hazards which could lead to the loss or harm of human life? Let's do something now to improve the safety conditions of our employees and members.

It would probably be impractical to buy or place in use all of the safety equipment available. Your men would feel and look like Sir Lancelot in armor and trot out the nearest gate. But giving them the necessary instruction in the use of safety equipment and orienting the crew to "think safety" can be done. Indeed it must be done—today, tomorrow, constantly. The most vivid demonstration of all is when a "direct hit" occurs on a newly installed piece of equipment. The gratification in knowing a major accident has been averted is beyond description.

Grass can be grown without pain—unnecessary pain to those who are on the "firing line." A good safety record on any crew is "no accident." After all, aren't your own crew members the ones most responsible for your success as a golf course superintendent? With the heavy maintenance season just ahead, isn't this spring THE time to stress to them the importance of their safety to you!