

CRABGRASS CONTROLS

Crabgrass probably ranks first among all the weed pests that confront the turf grower. Broadleaved weeds are no longer considered to be a major problem, because they can be controlled by the use of 2,4-D.

There has been a frantic search in recent years for a material that can be sprayed or dusted on crabgrass to eliminate it from turf. Several materials are now available which will kill crabgrass. All of them, however, must be handled carefully to prevent damage to permanent lawn species. Characteristics of the various materials are given in the following paragraphs.

Sodium arsenite has been used for crabgrass control for many years. It must be handled carefully because it is extremely poisonous. No definite rates of application can be specified, because many factors modify the effectiveness of the material as well as its toxicity to permanent grasses. In spite of its drawbacks, sodium arsenite has been used successfully in many instances. It does require careful handling.

In recent years, materials containing *phenyl mercury* have appeared on the market. They are among the more promising new materials. These are also violent poisons. Usually several applications are needed. Good results have been obtained in many cases but in other cases failures have resulted even when the materials have been applied by experienced operators.

Potassium cyanate is perhaps the most recent material to make its appearance in the role of a crabgrass killer. This material is considered to be relatively non-poisonous. It appears to be quite effective in killing crabgrass, although it does produce some temporary discoloration on permanent turf grasses. The relatively non-poisonous nature of this material is a factor which will appeal to many users.

The names of most proprietary compounds give no clue as to the active ingredient or the percentage of the material present in the product. It is

therefore advisable to read the small print on the label. It is also wise to follow the manufacturer's directions in applying these materials. Most manufacturers have done a great deal of research in devising rates and methods of application of their materials.

All crabgrass killers have one feature in common. They are much more harmful to weak, thin turf than to healthy, vigorous turf. Unfortunately, most of the cool-season grasses (bluegrasses, fescues and bents) are weakest during the season when crabgrass is growing most vigorously. As a matter of fact if these grasses can be managed so that a dense turf is maintained throughout the summer months, crabgrass will not be a problem.

The warm-season grasses (zoysia and Bermuda) grow actively during the summer months and are therefore better able to withstand the effects of chemical treatments during the summer months when crabgrass must be treated. Grasses which grow actively during the summer rarely need to be treated for crabgrass, however, if they are well managed and vigorous.

It is the belief of the Green Section that crabgrass control is a long-range problem. It will be met by the development of grasses that are more resistant to crabgrass and by the development of better management practices. It is quite probable that some of the crabgrass killers now being developed and tested will become a part of the management program on many turf areas.

In conjunction with good management practices, crabgrass killers will be useful. Used without the accompaniment of good management, chemical crabgrass control will be practically hopeless.

SUGGESTED READING

"Efficient Use of Fertilizers," FAO Agricultural Studies No. 9, August 1949, \$2.00. Food and Agriculture Organizations, 1201 Connecticut Avenue, N. W., Washington 6, D. C.