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GREEN SECTION
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POISON IVY

This is the time of year when poison ivy is thriving. Hundreds of persons will suffer from having contacted this pest before the summer is over. There really is no need for their suffering because poison ivy can be positively controlled. There is no excuse for it.

In line with this attitude the Massachusetts legislature has recently passed a law banning poison ivy as a public nuisance. Landowners are responsible for keeping their premises free of the pest. If they fail to control it, the state comes in, carries out necessary control measures, and assesses the landowner for the cost of such control.

Fortunately poison ivy control is not very expensive nor difficult. It can be killed by spraying with 2,4,5-T or with ammonium sulfamate (best known as, the trade product, Ammate). Either material should be sprayed at rates recommended by the manufacturer. A wetting agent increases the effectiveness of ammonium sulfamate by providing more thorough wetting of the glossy foliage. Thorough wetting is necessary for satisfactory control. Spraying should be done now while poison ivy is in full growth. All top growth can be killed now but one should expect to follow up on re-growth next season.

Don't delay. One case of poison ivy can be more costly than the control, not to speak of the misery it can cause.

NEW CRABGRASS MATERIALS - HAVE YOU TRIED THEM?

Crabgrass has been considered the major weed in turfgrass ever since 2,4-D appeared and provided effective broadleaf weed control. Countless man hours have been expended by scientists and technicians in industry and in public institutions searching for new crabgrass control materials and testing them in the laboratory and in the field.

Such efforts appear to be ready to pay off. Phenyl mercury compounds, potassium cyanate, and sodium arsenite have been used successfully in many cases. Turf growers have depended heavily upon them.

Newer materials now hold promise of being capable of doing the job, and sometimes with a greater degree of selectivity. Disodium methyl arsonate has been used in a great many tests and has performed exceptionally well. It appears capable of killing crabgrass in both the young and the mature stages. When used on crabgrass in the young stage repeat applications may be necessary because of germination of new seedlings. Many of the tests in which disodium methyl arsonate has been included have been applied on cool season grasses. Little injury has been noted. Its effect on warm season grasses needs further study.

Another group of compounds show much promise. They behave as pre-emergence herbicides. Several compounds (some of them related to 2,4-D) have demonstrated an ability to prevent germination of seeds when the materials are sprayed on the soil. They do not work on growing plants.

For many years turf authorities have been pointing out that good management is the key to weed-free turf. That observation is just as true today as it has been in the past but we now have new methods and materials which may be incorporated into the management procedure. When new herbicides are treated as added tools to be used in weed control and are not considered complete controls within themselves, they can contribute much toward better and more efficient turf management.

LOCAL MEETINGS

Much of the progress in golf course maintenance has come as a result of the exchange of ideas and opinions among superintendents. Local group meetings provide excellent opportunities for such information exchange. While most meetings of golf course superintendents are centered around a prearranged program with one or more speakers, it is believed that ideas gained from the informal discussions are frequently as beneficial as those presented in formal talks.

It is encouraging to note that more local meetings are being held this year than in the past. Some of the groups in the Southwest have met only once or twice a year because of the necessity for traveling long distances. In 1955, the seven regions represented in the Texas Turf Association have held regional meetings. While these are relatively small groups, attendance has been good and local problems have been discussed. Quite a few people who had not previously attended a turf meeting have been present. Invariably these local groups are so enthusiastic that they plan future meetings of a similar nature.

To participate in and to foster such local meetings is one of the aims of the Green Section's Regional Turf Service program. Your Southwestern Director is happy to have had a part in a great many of these meetings.

Among those held in the Southwestern Region during 1955 have been meetings at St. Louis, Wichita, Enid, Norman, Roswell, Albuquerque, Amarillo, Odessa, San Antonio, Houston, Dallas, Ft. Worth, Commerce, and Tyler. In some instances, but not in all, these meetings have been part of a regularly scheduled series. It is to be hoped that there will be more. The good they do is immeasurable.

ANSWERS TO YOUR QUESTIONS

Question: Why can't we grow bent greens in Houston? Our weather is not as hot as that of West Texas and our relative humidity is not as high as that found in many areas where bent is grown successfully.

Answer: There is not a simple answer to this question. Certainly the failure of bent in warm humid areas is somehow related to temperature and humidity.

Soil temperature probably is the fundamental reason for poor growth of bentgrass in this region. While we have little information on the temperature tolerances of bentgrass roots, we know that Kentucky bluegrass roots make their optimal growth at a soil temperature of approximately 60° F. Bluegrass roots are severely injured at soil temperatures which are favorable to Bermudagrass. Inasmuch as bentgrass is adapted to the same general region as bluegrass we would expect the roots of bentgrass to have similar temperature requirements.

The question stated that quite often West Texas temperatures, where bentgrass thrives, are higher than Gulf Coast temperatures. Certainly this is true of air temperature but it does not necessarily mean that soil temperatures under turf follow a similar pattern. Transpiring grass leaves are rather efficient "evaporative coolers." Evaporation is accompanied by cooling. Evaporation is more rapid where humidity is low than where it is high. Thus rapid evaporation of water from grass leaves under West Texas conditions provides more "refrigeration" for the turf and the soil under it than does the slow evaporation occurring in more humid areas. You can demonstrate this by noting the greater efficiency of mechanical "evaporative coolers" in dry climates compared to humid climates. As a matter of fact "relative humidity" is frequently measured by determining temperature decreases resulting from the evaporation of water from around a wet-bulb thermometer.

High soil temperatures may further add to the difficulty by slowing down root activity because of a lack of aeration. Oxygen requirements in the soil increase as temperature increases. Without sufficient aeration, absorption of both nutrients and water is retarded. Thus there may not be sufficient water intake to replace that "evaporated" or transpired.

How about regions that have even higher relative humidities where bent is grown successfully? Remember that "relative humidity" refers to moisture in the air in relation to temperature and does not mean absolute moisture content. These regions generally have lower temperatures and soils do not become as warm as those in the Gulf Coast Region.

Syringing of greens can help in the matter of cooling the turf and the soil, but disease is an ever-present danger. Too much water on the surface contributes to disease activity.

This discussion should not be construed to mean that bent cannot be grown on the Gulf Coast. Advances in knowledge and techniques may someday allow the realization of this objective. It does attempt to explain, however, some of the fundamental difficulties to be overcome.

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