

Lawn Care

T.M. REG
PUBLISHED FIVE TIMES YEARLY FOR LAWNTHUSIASTS

NEW AID TO LAWNS

Scientists have known for years that fungi and other soil-borne organisms take quite a toll of plant life in the early part of the growing season. Much loss formerly blamed on winter-kill is now recognized as due to plant diseases.

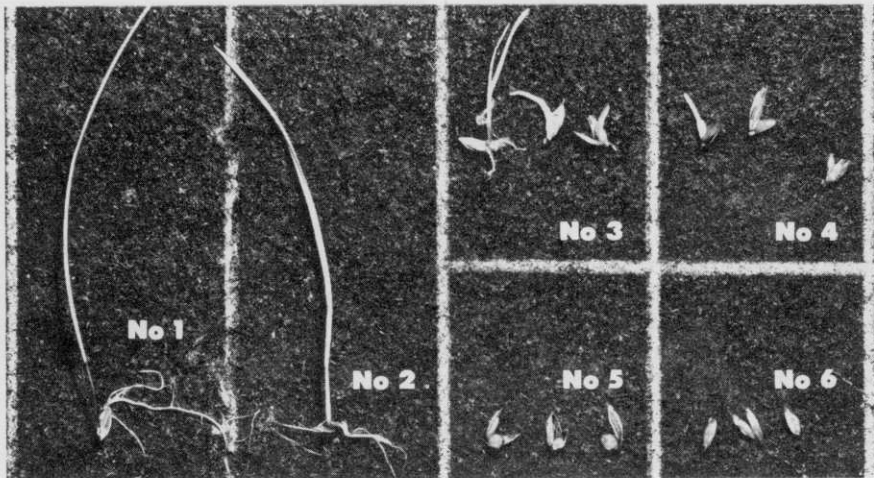
This applies to grasses in lawns as well as to clover, alfalfa, grains and other farm crops. The organisms causing trouble in grasses have not all been isolated but it is known that pathogens such as the genus *Pythium*, *Helminthosporium* and *Rhizoctonia* do attack grass roots as well as crowns and stem. Fungi become active as the soil warms when there is abundant moisture, and generally good grass growing weather.

Through the years Scotts Research has tried to find a chemical that would control the recognized fungi. As usual, the first tests were made in the green-

house and although these offered little encouragement, outdoor tests were inaugurated.

Scotts research, in working with mercury compounds for Crabgrass control, noted that their regular applications had an unexplained stimulating effect on desirable grasses. This was so striking that turf scientists outside the Scott organization insisted that SCUTL apparently contained fertilizer because the treated grasses were usually so much greener. The grass was greener but not as a result of feeding.

During the course of Crabgrass trials, greenhouse and out-of-doors, it became evident to Scotts investigators that the mercury in Scutl must be inhibiting the fungi, thus controlling diseases and producing a stronger, healthier growth of grass.



Scotts Lawn Research Photo

Effect of SCUTL on weed seed germination

No 1 — No treatment, normal seedling. No 2, 3, 4 — Effect of very light applications.

No 5, 6 — Sprout killed before emergence by normal rate application.

As long as five years ago these results were noted in mid-summer when Crabgrass treatments were in progress. The results looked so good that treatments were moved forward into the early part of the growing season. There was much skepticism as to the possible value of applying SCUTL in April and May. Nevertheless, several years of experimentation has consistently shown beneficial results in reducing injury from grass diseases with the simultaneous effect of reducing weed growth.

It is not surprising that mercury inhibits plant diseases. In dilute forms, various mercury compounds are still among the more important antiseptics. Besides its use in internal medicine, mercury is employed as a germicide in skin ointments, antiseptic soaps and eye washes. Many fungicides used in flower and vegetable crop cultivation embody some form of mercury as the active ingredient.

In addition to inhibiting fungus growth, some of the mercury compounds definitely inhibit growth of weed and grass seedlings. This happens when the seedling sprout absorbs mercury from the soil or possibly as it is picked up by the emerging leaves.

Not all lawns suffer from disease injury in the spring. However, in cases where lawns have tended to lose color or thin out in May or June, it may be worth while to try a disease prevention program with SCUTL. Or, if Goose Grass, Foxtail and similar weed grasses are a summer problem, the late spring SCUTL applications may control these weeds, as well as Crabgrass through its anti-germinant properties.

Start applications about the time Dandelion blooms turn white. Apply SCUTL at normal rate with the Scotts Spreader, when the grass is damp, as from dew. Leave a small area untreated to check results.

Repeat at two week intervals for a total of four treatments for disease and early summer weed control. Watch for late germinating Crabgrass. If it ap-

pears, continue the two-week schedule through July.

This program will have a three-way value:

1. *Control Crabgrass before it can harm the grass and discolor the lawn.*
2. *It will benefit the turf by control of diseases.*
3. *Control growth of other weed seedlings—also reduce growth of moss and algae.*

SCUTL is selective in its action on established grass. However, it will have the same effect on sprouting seeds that were planted as on weed seeds that happen to be in the soil. If extensive spring seeding has been done, the program outlined here should be delayed until the new grass has a good start.

Chemicals in the News

Chemicals by the score are publicized for turf use. Most are made available for controlled tests a year or two before public announcement. They are immediately placed into the screening program of Scotts testing. Few get any further than preliminary experiments because of toxicity to plants or harm to the soil.

Those recently in the news included:

Krilium—Soil amendment. Not commercially available. See Lawn Care 119.

Maleic Hydrazide—claimed to stop growth so mowing is not necessary. May have limited use in rough grass areas—but lawn grasses have been severely injured at concentrations that inhibit growth.

Dichloral Urea—Proposed for Crabgrass control but as yet we have been unable to develop a technique to eliminate Crabgrass with this compound without injury to desirable grasses.

Potassium Cyanate applied as a spray is a good control for Crabgrass at certain stages of growth. Difficult to use without temporary discoloration of desirable grasses. Kentucky Bluegrass recovers well, Fescue and Bent are more susceptible to permanent injury.

Seed disinfectants, hormones, growth regulators—are of doubtful value on lawn seed of well-cured, good growing quality.

How to Know Good Seed

In the horse and buggy days it was practically impossible to get good seed to plant on the lawn. Most of it was of mighty poor quality, often so weedy as to be positively disgraceful. Actually, most lawn seed was scooped from the floor of a haystack. It didn't cost much but there wasn't much value either.



Even farm seeds were typically of poor quality in those days. In contrast to the present, there was no inclination to supply the buyer with analysis information, such as the proportion of different varieties and the growing ability of the seed, the content of chaff or waste matter or the amount of weed seeds.

The least desirable seed was sold from farmer to farmer without being near a cleaning mill. "I know this is good seed", one farmer would say to another, "because I saved it myself", or "because it was produced on a farm next to mine". They never stopped to think of the thistle, buckhorn, dodder, sorrel and other troublesome weeds that were prevalent in the area and which the harvested crop most certainly would contain.

An interesting test was used in those days to judge seed quality. The prospective buyer would put his finger (the cleanest one we hope) in his mouth, stick it into the open bag of seed, then carefully inspect whatever stuck to his digit. Even in this generation, we have seen the same method employed hundreds of times, knowing full well that it was worthless as an accurate determination of quality. Weed seeds are difficult to identify. Some of the most troublesome ones have a very innocent look.

The late O M Scott was one of the pioneers in selection and cleaning of farm seed, starting in a modest way back in 1870. Perhaps we shouldn't say it was a sign of virtue—maybe just a stubborn desire to supply something better. This much we know—"O M" also had an *abhorrence* of weeds. He thoroughly detested them, being aware as a farmer that they cut deeply into the value of a crop. His zeal to produce a better and cleaner seed has carried over through the years and continues the basic aim of the Scott organization.

Actually, there is much more to the value of lawn seed than purity, germination and weed content. There is a vast difference in turf-producing ability of various grass varieties. Hundreds of test plots are under year-around observation at Scotts Lawn Research to guide in variety selection. Constant evaluation of countrywide performance is another reason why Scotts is the most respected lawn seed in America.



Black Dirt Bandits Again

Sirs:

A man came to my door yesterday with a load of dirt and I asked him how much it would cost to topdress my lawn and he said it wouldn't be too much; as I have had my lawn topdressed before, I figured on seven to ten dollars, delivered. He put twenty bushels of this stuff on my lawn and then told me I owed him fifty dollars. I refused to pay that price. Naturally quite an argument followed, but he finally left, promising he would be back. I am not the only one taken in by him. There are a few other families in my block he did the same thing to and you can well imagine the tempers that are flying. I would appreciate it very much if you would help me by analyzing the material for me.

ETHEL EVOY

Chicago 34, Ill

¶ This attempted hold-up did not turn out as badly as most. See *Lawn Care* 113.—ED.

Spring Program

Continued from Lawn Care 119

Mowing is best started as soon as there is anything to cut. Wet grounds may make this impractical, but start as soon as possible.

The earlier cuttings may well be rather short, at an inch or so. If the clippings are heavy, remove them. Shorter grass and absence of clippings give the young grass a better chance. Then too, some varieties spread better laterally underground if the topgrowth is not too heavy. In contrast, short cutting in cool weather gets rid of the matted growth of grass that sometimes occurs. The stimulating effect of a crew cut, so to speak.

Hit Weeds as They Appear Spring is an awakening time for weeds, too. Wild Onion is an early one as is Chickweed. These two are semi-resistant to action of chemical weed controls but repeat treatments will often do the job. In contrast, Dandelions go out after one easy spreader application of Weed & Feed or 4-XD. The time for weed control applications is when their growth is active. Most weeds are particularly vulnerable at blossoming time.

Late Seeding Advice for established lawns is to roughen or scarify the soil so the seed will be buried. Otherwise much of the seed may be lost because of lack of protection. If a new lawn is to be seeded, prepare the soil as early as it is workable. Rake the seed lightly so it has a shallow covering. If possible, keep the surface constantly moist until the grass is well rooted.

It's all right to apply Turf Builder and sow seed the same day. It is a little better to put Turf Builder on first. Nothing is gained by mixing seed and Turf Builder together before seeding.

Don't Buy

It Loose

Too often lawn enthusiasts are duped by black dirt bandits. Many too, make the mistake of buying bulk seed sold with the claim that it's Scotts. It's better to refuse bulk offerings because Scotts is shipped only in sealed packages.

Do not use weed controls immediately after seeding. Wait until the grass is well started and has been cut a time or two.

There is no easy or quick way to destroy weed seeds in a new lawn soil. Instead, it's better to feed liberally and seed as early as possible to get the grass started before hot weather. Weed control can follow later.

If you decide to use weed control before seeding, wait at least one week or until after a heavy rain has diluted the chemical in the soil. Then sow the seed.

LAWN CARE bulletins of special interest, available for the asking, include:

Spring Program	119
Grass on Slopes	118
Weed Control	116
Soil Testing	115
New Lawns	LCD 1-4
Grass in Shade	LCD 13
Proper Mowing	LCD 5



All digest chapters and the more important recent issues are available in convenient permanent form. The set in a loose-leaf ring binder with room for many additional issues is one dollar postpaid. The digest and current issues in a heavy paper cover is twenty-five cents, postpaid.

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