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Lawn Care

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NEW STEP TO GREENER LAWNS

Scientists have known for years that fungi and other soil-borne organisms take their toll of plant life. Some of this loss formerly blamed on winter-kill is now recognized as due to plant disease.

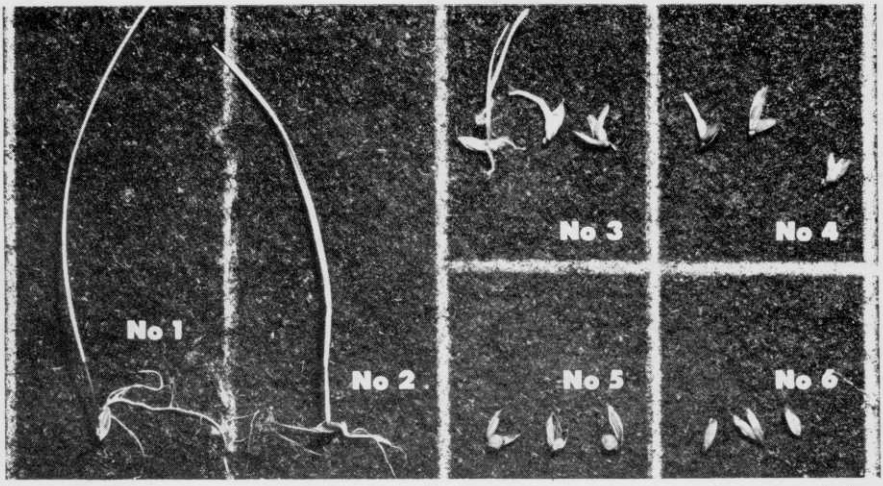
This applies to grasses in lawns as well as to clover, alfalfa, grains and other farm crops. The organisms causing trouble in grasses have not all been isolated but it is established that they do attack grass roots as well as crowns and stems. Spores of these fungi are present in most all soils but they are most likely to become active in the presence of abundant moisture.

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

In working with mercury compounds for Crabgrass control, it was noted that regular applications had an unexplained stimulating effect on desirable grasses. Even experienced turf scientists insisted that SCUTL must carry some feeding elements because the treated grasses were usually so much greener.

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

Five years ago these results were noted in mid-summer when Crabgrass



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.

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, it has been showing consistently beneficial results in reducing the visible injury from grass diseases and in lowering the weed population.

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.

Besides 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, it may be worthwhile 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 reduce new growth of these weeds, as well as Crabgrass through the anti-germinant properties.

Start applications in April or May 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 appears continue the two-week schedule through July and August.

This program will have a three-way value:

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

SCUTL is selective in its action on established grass. However it will have the same effect on sprouting grass seeds as on weed seeds that happen to be in the soil. If extensive spring seeding has been done, the program outlined here should not be started 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 lawn grasses 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 at least temporary discoloration of desirable grasses. Kentucky Bluegrass recovers well, Fescue and Bent are more susceptible to permanent injury.

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

When to Clip Close

It may come as a surprise to some folks that lawns occasionally grow so thick they need to be thinned out for their own good. Part of the treatment is to give the lawn a "crew cut" during the ideal spring weather.

At first blush this sounds contradictory to all that has been said and written concerning the virtues of high cutting. But high mowing is long term matter and close clipping in the spring is just a temporary step in the overall program intended to accomplish a specific purpose.

High cutting is likely to afford these benefits which are much to be desired: (1) encourages deeper rooting, (2) reduces surface evaporation and cuts down on the water bill, (3) absorbs the force of water drops from whirling sprinklers and minimizes erosion, (4) retards germination of weed seeds in the soil.

As with some other lawn maintenance practices however it is unwise to set hard and fast rules to apply at all times under all conditions to all lawns.

For example, some lawns over the course of time may develop a very dense topgrowth and the foliage may become crowded. Light is then excluded from the lower parts of the grass which begin to bleach. In an effort to reach above the mat, some plants get stringy. Just as with other types of garden plants overcrowding is undesirable and thinning out results in a more balanced growth of the individual plants.

In most such instances all that is needed is to give the lawn two or three close crew cuts. In some cases additional thinning by raking is required.

A good time to do this is in the spring of the year. At that time there is usually still a safe amount of moisture in the soil and evaporation is not rapid. Temperatures are not yet so high as to be withering.

For the first cutting, lower the mower just a quarter inch from its previous setting. Cut the lawn from two different angles such as lengthwise and then crosswise, or lengthwise and then diagonally. Catch the clippings or remove by raking.

About a week later, lower the mower another notch and cut again.

If there is an extremely heavy mat or some of the grass seems to be lying down instead of growing upright, precede each mowing with a raking. Use care to thin out the grass evenly without raking up hunks of turf which leave bare spots.

A little trial on a corner of the lawn will easily reveal whether the garden or leaf rake works best on your type of turf and how light or heavy the raking should be.

By combing from different angles, flat lying grass will be lifted so the mower blades can cut it.

This all fits well into the spring feeding program. An application of Turf Builder grass food after the second close cutting and then a thorough watering will help to green up the lawn and start it on a year of pleasure-giving beauty.

Fluorine in Sprinkling Water

It is reported that over 200 communities will soon be adding fluorine to their supply of drinking water for the claimed benefits in reducing tooth decay among children. Not all citizens agree this is a good thing as evidenced by the fight over whether fluorides should be added to the Seattle water supply. Those opposed have brought up many objections and have raised

the question of what this chemical could do to their lawns.

It seems the Puget Sound folks need not worry from that score. Many of our test lawns have been irrigated for years with city water having a natural fluorine content of the amount recommended by some dentists. These lawns thrive year after year so it seems there is no harmful accumulation of fluorine in the soil.

Folks also ask about chlorine-treated water. Here again experience shows that if water is safe for drinking and bathing purposes it certainly will be good for the grass.

It is often said that "sprinkling does no good, it's a waste of time and money, rainfall is the only watering that really counts." Usually such opinions develop because of differences in amounts of water applied. Most folks realize that a rainfall of an inch or more is considered necessary to have a "rain that counts." Few, however, ever apply that much water in sprinkling or take the few moments' time necessary to examine their soil to a depth of three or four inches to see if it's really moist.

Cold water is all right — hard water is all right — the important thing is to use enough to soak the soil. Heavy soils require more water at one time. Sandy soils are easily moistened but dry out quickly, too. The total moisture need is about the same but the amount and frequency of application vary as between heavy and light soils.

Short Tips

Spring is an awakening time for weeds, too. Many of the annuals will succumb to regular mowing or at least be weakened to such an extent that a healthy, well fed turf can keep them under control. Most broadleaved weeds can be easily killed with an application of 4-XD or Weed & Feed without harm to grass. Did you know hand digging Dandelions may actually increase them? If part of the root is left three or four new plants may sprout out from it.

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If lawn grass is still young and tender just keep the weeds mowed and remove the clippings. Wait a couple of weeks before the weed controls are used.

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SCUTL has been used successfully on many Dichondra lawns — mute evidence, incidentally, that this grass substitute does not keep out Crabgrass.

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Controls for broadleaved weeds can not be used on Dichondra lawns. Weeds other than Crabgrass have to be handpulled from these lawns.

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If you are going to plant new grass, get it in as early as possible.

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If you do decide to use weed control before seeding, wait at least a week or until several sprinklings have diluted the chemical in the soil. Then sow the seed.

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

Spring Program	*119PS*
Grass on Slopes	*118PS*
Weed Control	*116PS*
Feeding Lawns	*114PS*
Choice of Seed	*115PS*

Own a Complete Set of Lawn Care Bulletins

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. The digest and current issues in a heavy paper cover is twenty-five cents. See your local Scott dealer or mail coin, stamps or check to Scotts at Palo Alto, California.