

## THE ROLE OF SOIL TESTING

Two major criteria indicate the value of a soil for turf purposes. One is physical, the other chemical.

The physical condition of a soil is the more important. This varies according to particle sizes (*texture*) and their arrangement (*structure*). Such characteristics in turn are modified by the content of decaying organic matter, called humus.

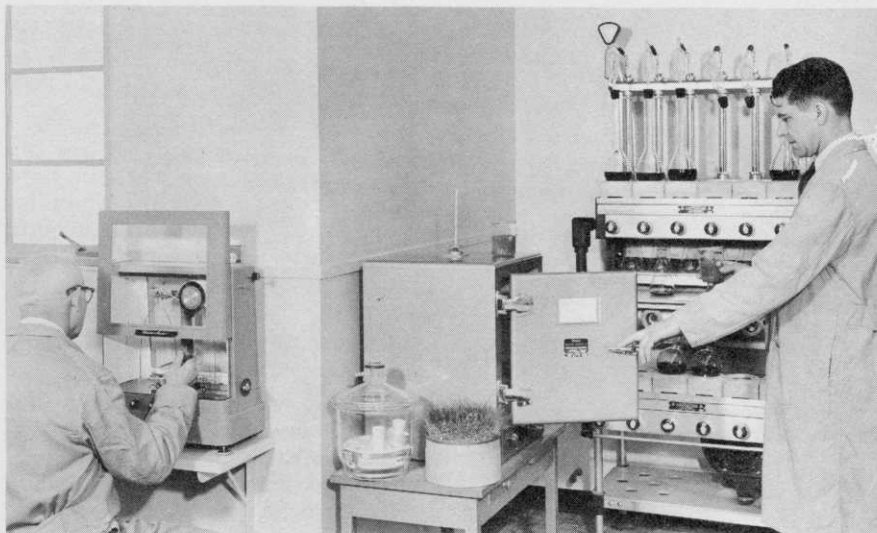
While the agronomist classifies soils into scores of narrow groups, a few broad classifications suffice in considering lawn soils. These range from the loose, coarse particles of a sand through the finer silt particles to the very fine particles of clay. In between is the happy medium of a loam; a mixture of sand, silt and clay with a generous content of humus.

Most any native topsoil provides a suitable base for turf growth unless it is so stony and coarse as to be gravel,

or the extreme opposite, namely, a tight compact clay into which no vegetation can force its roots. Of course, a good loam soil provides better growing conditions than either extreme.

The important factor in soils from a chemical standpoint is the pH value; that is, whether they are alkaline, acid or neutral. This indicates whether lime is needed to improve growing conditions. Other laboratory tests are made to measure the plant food content of a soil, such as amounts of nitrogen, phosphorus and potash. These tests, however, have little practical value since they do not show whether such elements are present in forms that can be utilized by plants.

**When Tests Important.** To have a soil test made involves some effort in preparing the sample, mailing it, and a nominal charge for the laboratory work. This is fully justified in many



circumstances of which the following examples are typical:

1. Soils of established lawns should be tested, if

A. *The lawn is not doing well in spite of careful attention.*

B. *There is quick and severe injury during short periods of extreme heat or drouth.*

C. *Applications of lawn food or weed control chemicals result in injury rather than benefit.*

2. Soil tests for new lawns are often made for these reasons,

A. *Plans can be made in advance for improvement such as modification of the physical soil condition or to offset extreme acidity.*

B. *Tests of several samples may be advisable before deciding upon the purchase of topsoil.*

C. *Some folks may wish to make decisions for or against home sites as a result of a laboratory appraisal of the topsoil.*

**Getting Soils Tested.** In some states the agricultural experiment station offers soil testing service at a small fee or on a complimentary basis. Soil test service is also offered by Scotts at a nominal charge of one dollar for the first sample, plus fifty cents for each additional sample submitted at the same time.

The Scotts soil test includes a report describing the physical condition and suggestions for its improvement as well as recommendations on possible use of lime. (See Column 2.)

SIRS:

I would appreciate very much if you would send me your free subscription to LAWN CARE as advertised in the January issue of American Home.

Also I would like to express my approval of two of your products—SCUTL and 4-X Weed Control. I just bought a new home this past year and the rear lawn was smothered with weeds and Crabgrass. After three applications of 4-X my lawn was completely free of weeds. As for SCUTL, I have never seen anything remove Crabgrass so completely as this product. Our lawn only needed two applications of this product of yours. Thanks for SCUTL and 4-X as they have saved me hours of hard work and precious time.

DONALD SCHOEDLER.

Overland, Mo.

## SCOTTS SOIL TESTING SERVICE

The lead story carries suggestions as to when soil tests may be advisable. This may be in connection with a new lawn or plans to improve an old one. Samples of available topsoil, topdressing, humus, "black dirt" or other materials may be checked before making a substantial investment.

Better criticism of soil from established lawns can be provided if a sample of sod is submitted. This should be representative of growing conditions in the lawn. If these vary greatly it would be better to send as many samples as required to illustrate the variations. Keep each sample separate, identified as to location.

### Proper Sampling

**Established Turf.** Cut actual plugs of sod from the lawn, using a trowel or flat spade. Have them at least 4 inches square and 5 or 6 inches deep. Wrap firmly in waxed paper so section reaches laboratory as it was taken from the ground.

**Loose Materials.** About a pint of soil is required. The sample should be representative of the whole. Take materials from various locations and mix together to make a composite sample. Do not mix soils that are conspicuously different. Instead wrap and label each type separately.

**Containers.** Coffee cans or any tin cans holding at least a pint with tight fitting lids make good containers for composite soil samples. Freezer canisters also make suitable shipping cartons but require outer wrapping for added protection.

The use of glass jars and bottles is discouraged because of breakage.

Sod and soil plugs require careful wrapping in substantial shipping cartons made to fit the sample. Loosely packed sod samples arrive badly scrambled making diagnosis of the sod and root condition difficult.



The darker, richer color resulted from a lawn feeding. Note the lighter off-color strips in right background where operator missed with the spreader.

## Mailing Samples

Advise by letter the number of samples being sent, stating the lawn problem or question. If soil is from an established lawn, describe past experience in as much detail as possible. Do not place letter inside package as that would subject the entire shipment to first class postage. Instead—

1. *Put letter in envelope properly addressed, carrying letter postage, and paste to outside of package.*
2. *Place sender's return address on package as well as the address of the laboratory. Affix stamps to package at parcel post rates.*

Those residing in the Allegheny Mountains or east of them or in any Jap Beetle quarantine zone should forward samples to:

O. M. SCOTT & SONS CO.  
RIDGEFIELD, N. J.

All others send to:

O. M. SCOTT & SONS CO.  
MARYSVILLE, OHIO

DO NOT SEND REMITTANCE with sample. A bill for the services will be sent with the report, on the basis of one dollar for the first sample, plus fifty cents for each additional submitted at the same time.

## SEED SITUATION

In times like these, there is much talk about scare buying. People try to anticipate their future needs and buy ahead. It is difficult for a seed business to do that because of the problem of perishability.

Seed scarcities usually result from drouth, crop injury at harvest time, late spring freezes, floods, plant diseases and, occasionally, to a short labor supply when the crop is ready for harvest. Because grass seed comes from such a large geographical area, almost the entire world, the same factors seldom affect all varieties at once.

Only a small percentage of any harvest will make Scott quality. In two seasons in the early forties, there were times in late spring when there was not enough Scott quality seed to take care of all the demand. Frankly, no such emergency is expected this spring although this is hardly the time for bold statements. Airfields, army camps, defense plants, and aid to Europe can make quite a drain on seed supplies.

In the early part of the year, Scott seed stocks are ample and the quality, thanks to constantly improved harvesting and processing techniques, was never so high.

## "Scotts" TRADE NAME

Federal Judge McCarthy of the Boston District Court permanently enjoined one Leslie N. Harvey of Leominster, Massachusetts, from illegal use of the trade name "Scotts" on grass seed and similar products.

This was the outcome of a court action arising from the sale of an inferior blend of seed purported to be the genuine "Scotts Seed" long advertised and sold as a specific brand in Massachusetts and other New England states.

The company is ever alert to prevent misuse of its trade-mark but it never learns about many such cases. Therefore, the buying public wishing Scotts Seed is urged to accept it in only the original sealed packages, and to make such purchases from known sources.

## WOE TO WEEDS!

Is there anything more attractive and pleasurable than a smooth green carpet of grass, free from weeds? Well, hardly anything, especially now that it is so easy to keep out weeds.

Last year Scotts introduced a new principle in a weed control product by chemically impregnating the active ingredient into fine particles of vermiculite, a clean, dustfree, mica-like material. The new product, called SCUTL, worked wonders in taking out Crabgrass in two or three easy applications.

Now this same principle is utilized in another product for control of broad-leaved weeds. The agronomist working with the chemist has succeeded in introducing the alkanolamine salts of 2,4-dichlorophenoxyacetic acid into the same type of carrier. The result is a dry applied control for the non-grass type of weeds. It is called 4-XD.

This is not the first broad-leaved weed control that could be used in the dry form. That precedent belongs to

the combination lawn food and weed control which has met with great success since its introduction by Scotts several years ago. This double purpose material is still very much on the market but is necessarily more costly in application than 4-XD. The latter is just as efficient for weed control but does not supply grass food.

## LAWN CARE BOOKS



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.

### SIRS:

I am very much interested in the LAWN CARE bulletins which I have been receiving.

In your issue No. 110, I take exception to the method of mowing the lawn outlined in your diagram. Early spring lawns are soft and the inside part of the uncut grass is naturally being bent during the operation of the mower. By mowing back and forth or reversing the cut, the mower has a tendency to pick up this bent-over grass. If the grass is heavy enough to need recutting, the clippings should probably be taken off. I am inclined to leave fine grass clippings on the lawn if I can.

D. H. CAMERON.

Salem, Oregon.

## POET'S CORNER

*I know a lawn that's like a gem,  
The whole town wants a copy.  
"Okey," the owner says to them,  
"Get Scotts to be its poppy."*

—A Lawnfellow.

O M SCOTT & SONS CO.



MARYSVILLE - - OHIO

EVERY PACKAGE OF SCOTTS LAWN CARE PRODUCTS BEARS THIS TRADE-MARK AND IS SEALED FOR YOUR PROTECTION