

Home/Garden



Recorder/O. Kent Nygren

Coming soon

'Yellow Sun' daffodils that were on display at Smith College.

Soil testing for a good garden

Before we think about our garden and how deliciously it will feed us, we need to think about our soil and how much we need to feed it.

When we feed ourselves we tend to choose those things that we like and find tasty. If we're smart we'll make those choices from the range of foods that is good for us and supply the nutritional needs of our bodies. To find out with some accuracy what our soil needs, we should begin with a soil test.

Some tests are very simple and will measure only the acidity or pH of the soil. In New England our soils tend to be acid. Acid soil with a pH that measures between 4 and 5.5 is perfect for some plants like blueberries and rhododendrons, but most vegetables prefer a soil that is slightly acid (pH from 6 to 6.5).

The three major soil nutrients, nitrogen, phosphorus and potassium, are each important for a different reason. Nitrogen is necessary for the healthy growth of plant foliage. If the leaves of your plant are yellow it could indicate lack of nitrogen. If there is too much nitrogen you will get lush foliage, but no vegetables or flowers. Animal manure is a commonly known source of nitrogen although it is not particularly rich in this nutrient. Rabbit droppings are the best source at 2 or 2-1/2 per cent and hog and cow manures are least rich. Cottonseed meal is one of the best sources, but it is comparatively expensive.

Phosphorous is important because it enables a plant to have strong roots, mature properly and develop fruit. Rock phosphate is a good source that becomes available to plants over a long period of time. It does not leach out of the soil.

Potassium or potash also encourages strong root development and disease resistance. Granite dust and greensand are the best sources of potash. It is important to test your soil so that you can assess the pH and deficiencies. A good liming and fertilization program will help you correct your soil's nutrient imbalances most efficiently.

Whether you buy a soil testing kit

Pat
Leuchtman

Between
The Rows



and perform your own tests, or send a soil sample off to the local Cooperative Extension office, it's wise to take a good soil sample. To get a good sample of your vegetable or flower garden soil, take a clean shovel and dig up a spadeful of soil in several locations including the corners and the middle of your plot. From each spadeful take a core, that is a strip of soil from the surface to six or more inches deep. Put it into a clean plastic bucket. Mix these different samples together and send a portion of this mixture off to be tested.

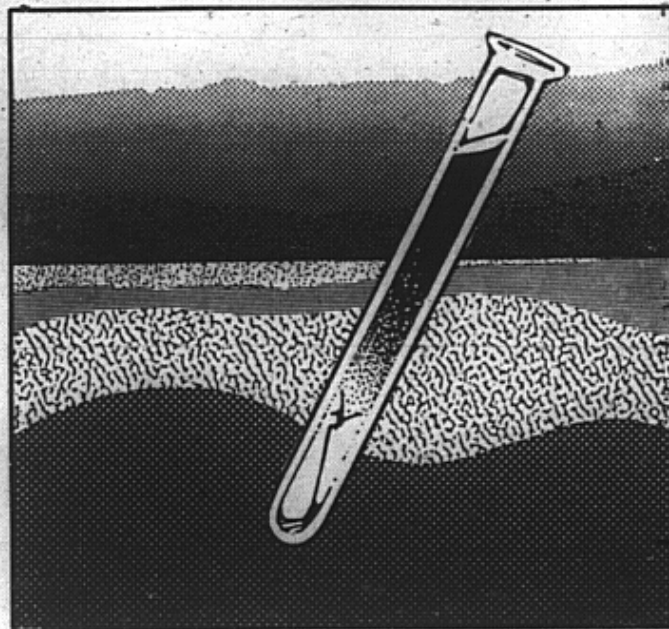
If you are testing your lawn soil, mix a core of soil from your front, back and side yards and send a portion of this off to be tested.

The Cooperative Extension service will also give you specific recommendations on liming and fertilizing based on your soil and what you plan to use it for.

Commercial chemical fertilizers are identified by three numbers, referring to the relative percentages of nitrogen (N), phosphorus (P) and potassium (K) they contain. A commonly used fertilizer is 5-10-5 which means that it contains more phosphorus than nitrogen or potassium.

You might think that it would be very easy to test your soil and then just add the commercial fertilizer with nutrients in the appropriate amounts. Unfortunately, this is only a short term solution. Adding chemical fertilizers year after year will supply the soil with the basic nutrients, but not the trace elements that are also vital to healthy growth and in the end you will kill all the microbial life in your soil.

Next week I'll talk about natural fertilizers. These are available from a wide variety of sources and supply major and minor nutrients to your



Recorder/Lucia Russon

plants and to the microbes in the soil.

Your garden will only be as healthy as its soil and a healthy garden will contribute to your own health.

Soil testing kits are available from: LaMotte Chemical Products

Company, P.O. Box 329, Chestertown, MD 21620; Luster Leaf Products, Inc., P.O. Box 1067, Crystal Lake, IL 60014; Sudbury Lawn and Garden Products, 302 West Osborn Phoenix, AZ 85013. Kits cost between \$15 and \$25 depending on what kinds of tests you want to do.

Super Tough Diesel

If lawn care is your business, Cub Cadet's new big-frame diesel is your tractor. An efficient 15 H.P., three-cylinder, liquid-cooled engine gives you power that's smoother, cooler and longer lasting. A big 78.5" twin-channel steel frame provides solid support for a wide range of optional attachments. And for convenience, there's standard power steering, hydrostatic drive and hydraulic lift with dual front outlets.

Model 1572
\$6,100



Cub Cadet. One super tough diesel tractor.



Optional Deck—50" deck \$720, 60" deck, \$1,153

How to use fewer pesticides in the garden