

The Scoop On Dirt

by Marsha Goldberg, Fairfax Master Gardener Intern

Expert gardeners agree: The first step toward assuring a great garden is creating a healthful soil. If your soil contains the right nutrients, your plants are more likely to resist disease and insects – and more likely to thrive.

Unfortunately, you can't tell how healthy soil is just by looking at it. The best and most efficient way to understand what is and isn't in your dirt is to test it using a soil kit.

Too often, gardeners apply fertilizer and other garden products blindly, without knowing whether they are even needed. But providing too many nutrients – or the wrong sorts – can hurt plants, as well as waste money and damage our environment.

The report generated from a lab-analyzed soil test will tell you specifically how to create the best soil for what you want to grow. The tests measure levels of certain macronutrients in the dirt, such as nitrogen, phosphorus, potassium, calcium, magnesium, and sulfur, as well as micronutrients, including iron, manganese, and zinc.

The report will also indicate the pH, or acid/alkaline balance of the soil, and whether it is appropriate for your garden plan. Some plants – such as azaleas, rhododendrons, and blueberries – prefer soil that is slightly acidic, while others, including grapes and beets, prefer alkaline soil.



Photo: Martha Brettschneider

Figure 1. Preparing to take a soil sample

Both private and state testing laboratories offer soil testing. In Virginia, the Cooperative Extension Service offers soil analysis for \$10 to \$20, depending on how many

tests you request. (Tests are processed at a lab at Virginia Polytechnic Institute and State University in Blacksburg, VA.) From May through September, look for the extension service test kits at Fairfax County Farmers Markets and at select libraries at booths staffed by Fairfax County Master Gardeners. You can also buy commercial kits at home or garden centers or order online.



Photo: Martha Brettschneider

Figure 2. A soil sample ready to be mailed

Taking a soil sample isn't hard. Using a cooperative extension kit, you collect small amounts of soil from 10 areas in a particular bed or type of garden, from a depth of about six inches. Mix the samples together in a bucket, creating a composite sample. Fill the small box provided in the soil kit with this composite soil, and mail the sealed box, the required form, and payment to Virginia Tech. Expect a detailed report back on your dirt in a few weeks.

Ideally, test the soil before starting any bed or garden, and then retest that space every three or four years. Keep in mind that different types of plantings demand different kinds of soil. Berry patches don't like the same nutrients that rose beds, vegetable gardens, or green lawns do, so do a soil test for each type of planting in your landscape. You'll be rewarded with happy greenery.