

Bluestem Breezes
Karaline Mayer
October 17, 2016

Garden Soil

Before the weather turns cold, let's consider wrapping up the gardening season with maintenance and improvement of our garden soil.

This week, K-State Specialist Ward Upham provides tips for amending your soil, followed by information on soil testing. Have you ever soil tested your garden? How about within the last 3 years? Read on! It's a very do-able process!

Fall is the preferred time to prepare garden soil for next spring's vegetable garden. Spring is often wet making it difficult to work soil without forming clods that remain the rest of the season. Fall usually is drier allowing more time to work the soil when it is at the correct soil moisture content. Even if you work soil wet in the fall and form clods, the freezing and thawing that takes place in the winter will break them down, leaving a mellow soil the following spring.

Insects often hide in garden debris. If that debris is worked into the soil, insects will be less likely to survive the winter. Diseases are also less likely to overwinter if old plants are worked under. Also, the garden debris will increase the organic matter content of the soil. Working the debris into the soil is often easier if you mow the old vegetable plants several times to reduce the size of the debris.

Fall is an excellent time to add organic matter. Not only are organic materials usually more available in the fall (leaves, rotten hay or silage, grass clippings) but fresher materials can be added in the fall than in the spring because there is more time for them to break down before planting. As a general rule, add 2 inches of organic material to the surface of the soil and till it in. Be careful not to overtill. You should end up with particles like grape nuts or larger. If you work your garden into the consistency of dust, you have destroyed the soil structure.

Now, before you start amending your soil with organic matter, let's soil test first! It's simple and rather easy to complete this time of year.

Though we often think of soil testing as a spring chore, fall can actually be a better time. Soil-testing laboratories are often very busy during the spring resulting in a longer turnaround from submission to recommendations. Also, soils in the spring are often waterlogged, making taking samples difficult. If your soil test suggests more organic matter, fall is a much better season because materials are more available than in the spring, and fresher materials can be used without harming young tender spring-planted plants.

Begin by taking a representative sample from several locations in the garden or lawn. Each sample should contain soil from the surface to about 6 inches deep. This is most easily done with a soil sampler (soil probe). You may check one out from our office for FREE. We'll provide easy-to-follow directions and a soil sample bag to return with the probe.

Take the soil to your county extension office to have tests done for a small charge at the K-State soil-testing laboratory. A soil test determines fertility problems, not other conditions that may exist such as poor drainage, poor soil structure, soil borne diseases or insects, chemical contaminants or damage, or shade with root competition from other plants. All of these conditions may reduce plant performance but cannot be evaluated by a soil test.

In Wabaunsee County, the Conservation District will cover the cost of your soil test (up to \$6, this does cover most tests we receive) for the first 10 tests. You will agree to follow the recommendations provided from the test, but this is definitely an excellent way to help maintain a healthy garden soil!

I frequently tell folks that soil testing is a cheap insurance plan. In fact, it's the best priced insurance plan I have! There is no need to spend extra money over-fertilizing when you can spend only a few dollars for guidance on the best methods to appropriately fertilize your garden (or lawn, or field, or).

For more information, visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.