

## **Ana Bonstedt**

Guest Columnist
USA TODAY NETWORK - FLORIDA

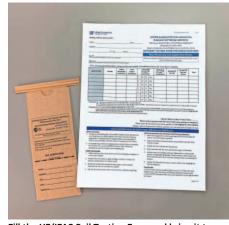
The soil we know today is the result of billions of years of rock disintegration caused by the exposure of the earth's surface to extreme weather conditions and decomposed biologically organic matter.

Soil is a mixture of solid, liquid, and air. The solid material consists of weathered bedrock, known as parental material, plus decomposed organic matter. Depending on the composition of the bedrock and weathering over the eons, three main types of soil textures are formed: sand, silt, and clay.

Lee County soils fall into the category of sandy soils, known to be low-quality soils, poor in nutrients, low water retention, high pH, low fertility, and low in organic matter. Adding organic matter in the form of compost and manure to these types of soils will help to increase their productivity. This in large part is because of the microbial activities of fungi and bacteria.

These microbes break down organic matter in the form of nutrients that is easily absorbed by plant roots and transported to the leaves for photosynthesis and plant growth. Organic matter also increases soil moisture retention and may help to change the soil pH over the long term.

If you are planning to start a garden this fall or winter, make sure your soil is in the best condition that it can be. One way to determine this is to have your soil



Fill the UF/IFAS Soil Testing Form and bring it to our office for a pH test or you can mail your samples to the soil testing laboratory for a soil fertility test.

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pH tested by the Lee County UF/IFAS Extension office. You will need to bring a soil sample from your garden to our office. A more extensive soil test can be done by the soil testing laboratory in Gainesville.

## Soil sample collection

Before collecting the soil samples, design a zig-zag pattern on the area you want to test, doing it will help to obtain one or more soil samples that are representative of the entire garden. Then, with the help of a garden trowel, dig a little deeper than six inches, bring the soil up, keep about two inches of soil from the middle of the trowel and discard the remaining soil. Deposit the soil into a bucket and repeat this process six to twelve times in the area to be planted. Once all the soil is in the bucket, thoroughly mix it, removing any debris before placing a cup of the mixture in a zip lock bag.

If you would like a second sample, repeat the process in another area of the garden. If you collect more than one sample for testing, be sure to label them to differentiate the areas tested.

Fill the UF/IFAS Soil Testing Form with your information and bring them to our office for a pH test or as mentioned you can mail your samples to the soil testing laboratory for a soil fertility test. You can also email us at ext-gardener@leegov.com for more information and to get the soil testing form by an email link or attachment.

Ana Bonstedt is the Master Gardener Coordinator for UF/IFAS Extension Lee County Extension Service. Contact her at abonstedt@ufl.edu. You can also contact Master Gardeners at extgardener@leegov.com, call (239) 533-7504 between 10 a.m. and 2 p.m. with your questions. The University of Florida is an Equal Opportunity Institution.