

Practice patience when preparing garden soil

Story source:

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COLUMBIA, Mo.— Spring is almost here, but gardeners shouldn't be too quick to start working the soil, says a University of Missouri Extension horticulturist.

Spring soil is easily damaged and compacted if worked too soon after melting snow or spring rains. Avoid walking on garden spots or, worse yet, driving equipment on it, said David Trinklein.

When soil is wet and worked too soon, large, dense clumps form. The clumps are hard to break up and don't contain the needed air spaces between particles that allow the roots of plants to grow well. Trinklein recommends adding organic material to allow for good drainage.

The best test to determine if soil is ready to work is what Trinklein calls the "old baseball test." Pick up a handful of soil, form it into a lump the size of a baseball and put it in the palm of your hand. Then smash it with the heel of the other hand. If it leaves an imprint of your hand, it is too wet. If it flies apart, then it's ready to be worked.

Trinklein says garden soil often is compromised when the gardener gets a new tiller. "Don't beat the soil to death," he said. "Minimum tillage is highly recommended for gardens since excessive tillage tends to break down soil structure."

Trinklein offers some tips for pre-planting soil preparation:

1. Planting areas should be cleaned in late fall or winter. Discard dead plants from previous years reduce risk of disease and pests. Remove rocks, sticks and other debris.
2. Collect a soil sample and have it tested for pH, nutrient levels and organic matter. The MU Soil and Plant Testing Laboratory offers soil tests for a nominal fee. Your local MU Extension office can assist with submitting soil samples to the lab.
3. Add about four inches of well-decomposed organic matter to the garden area. Organic matter improves drainage and adds nutrients while preserving moisture retention. Composted grass clippings and leaves are good low-cost options, and well-rotted manure also provides good nutrients.
4. Add fertilizer as indicated by the soil test results. Don't add more than called for, which simply costs more money while contaminating runoff with excess nutrients.
5. Spade or lightly till the garden to loosen soil and incorporate the added organic matter and fertilizer. Level the soil and stake the garden areas in rows in preparation for planting. A

general-purpose starter fertilizer, such as 5-10-5, may be added to garden rows and lightly incorporated at planting time.

For more information from MU Extension on lawn and garden topics, including free publications, articles and online resources, go to www.extension.missouri.edu/LawnGarden.

For more information about the Soil and Plant Testing Laboratory, call 573-882-0623, e-mail soiltestingservices@missouri.edu, or go to soilplantlab.missouri.edu/soil.

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