

Mulch and Compost

Distribute 09-26-2019

It has been a challenging summer for landscape and garden plants because of low soil moisture and record high temperatures. Mulch and compost figure in the effort to address the challenges. Here are a few questions that readers have raised.

Q. The heat and dry weather motivated us to enrich our raised bed garden soil with commercial compost. We added a 3-inch layer. The texture is wonderful, but it doesn't handle water well! It seems to run right off. What is the problem and how do we correct it?

A. Unfortunately this is a common problem. The commercial "compost" you purchased is organic material, but not really compost. Someday it will be compost when the organic material decomposes to a greater degree. It will then have the water holding characteristics that we expect.

The normal definition of compost is "organic material in the state of decomposition to the degree that its smell and appearance does not reveal its source material".

The organic material sold as compost described in the question above has not reached that point of decomposition. It was sold prematurely.

To continue the story, the organic material repelling the water could be mostly chopped brush or even sawdust that has barely begun to decompose. For those materials to decompose to "real compost" they must have access to nitrogen. In addition to the water holding problems, seeds or transplants planted in such material will not grow well unless they are heavily fertilized with a nitrogen source.

To prevent the problem described in the Question above, before you buy compost, examine the material that you are considering purchasing to ensure that the product has decomposed enough to have a clean soil smell and that its source material is not distinguishable.

If it is too late to reconsider the material described in the Question above because it is already delivered, address the problems by:

- 1) thoroughly mixing the material with the soil in the raised bed rather than layering it;
- 2) incorporating 10 cups of slow release lawn fertilizer such as 19-5-9 into every 100 sq. ft of bed;
- 3) If it does not rain adequately, soaking the mixed soil with a sprinkler to release the nutrients from the fertilizer and moisten the bed before planting transplants or seeds;
- 4) side dressing the garden plants in this bed every month with one half cup of the slow-release lawn fertilizer to maintain the nitrogen available to the plants during the nitrogen hungry decomposition process.

Q. We mulch the plants in our shrub border, the perennial bed and even our flower garden but now I wonder if that is the best thing to do? When we had the half inch of rain the other day, it did not even penetrate the mulch. Is mulch still considered an asset?

A. If you view mulch in terms of one-half inch rain after a long period of dry weather being blocked before it reaches the plant roots, it does raise questions, but in the long term it is still an important part

of gardening in our climate. Most importantly, mulch reduces evaporation of water from the soil, but it also reduces weed growth and reduces soil temperatures. Reducing surface soil temps expands the useful soil depth.

A mulch layer may sometimes reduce water penetration from light rains, but it does not block irrigation or more generous rains. Once water reaches the soil it also penetrates a mulched soil more easily than a bare sunbaked soil.

Q. What is the best material to use as a mulch? Some is so expensive. And some is more attractive.

A. Among the organic mulches bark, shredded brush, shredded cedar, pecan shells, and leaves work well. Use a decorative mulch with a desirable color or attractive texture in special situations but for large areas use the material that is most readily available. Leaves and shredded cedar or brush all work well.