

Dirt on Dirt!

Ok, let's talk dirt. Oops, don't get too excited... this isn't going to be the Hollywood variety, but rather a discussion of the stuff in which plants grow.

Believe it or not, our local soil is pretty good. It's the other stuff either mixed in with it or that we may have done to it that gives us gardeners problems.

Soil is composed of sand, silt, clay, air, water and organic material in various proportions. Desert soil is, as you would expect, rather low in organic components, and native & imported low-water-use plants have adapted to this condition. So here is the first tip of the day; it is not necessary to add mulch to your planting holes for most trees and shrubs. In fact, many horticulturists in this area advise against adding organics. There are exceptions. Vegetable and flower beds will need amendments and, if you are unlucky to be planting in caliche, well, more on that later.

The air component of soil is very important, as any golf course superintendent will tell you. Golf cart and foot traffic tends to squish the soil particles together, squeezing the air out and suffocating the roots. Over watering tends to have the same affect (yes, Virginia, plants can drown). Sand, on the other hand, helps soil to drain and its irregular shape provides tiny air pockets for the roots of a plant to infiltrate.

The function of clay in the soil is to provide a site for nutrients and minerals to lodge until the plant's roots can absorb them. Without getting too technical, let me just say that all plant nutrients have a charge, either positive or negative, and are attracted and held to sites located on the clay particles.

Ok, now the "other stuff." I live pretty close to the Superstitions and up here we do not dig holes for plants or anything else. Instead, we locate a rock which conveniently may be near where we want the hole dug, unbury the rock (which often is 4 times the size of our original need,) and plant the plant. One benefit of this method, one uncovers a number of large boulders which, in turn, are useful as decoration, wall building, etc. Folks in the lower reaches of Gold Canyon, such as Peralta, have a somewhat easier time. The soil in those areas is more of a deposited alluvial that has been washed down from the higher elevations. If they run into caliche, that's another story.

Caliche is Spanish for "what in the name of Sam ****%##! is this ##\$**!" Or perhaps a closer translation is, "Oh my aching back!" Caliche is really a hard, compacted soil cemented together by calcium carbonate (lime). Cemented is the defining word here. If you run into caliche, you will need at least one of the following: dynamite – jackhammer – someone else to dig the hole. (Or, my personal favorite, a different location for the hole.)

If you do decide to plant in Caliche, this will be the time to amend the soil. One can use compost, humus, or any product with a high organic content. The hole will have to be larger than normal, 3 to 4 times the size of the root ball, and you will need to see that there is proper drainage. A planting hole cut out of caliche can become an impervious bowl with no way for water to flow through the soil (see above: plants can drown.) In addition, drainage ditches sometimes become necessary to provide for adequate drainage. If proper drainage is not established, that specimen tree that you just had to have in that spot may soon become your latest landscape casualty.

That's the down and dirty for now. I know you are all enjoying the beautiful fall weather, as am I. 'Til next month, happy gardening!

~ Tom