

How to Plant to Prevent “Root Rot”

Plants of Mediterranean origin (Rosemary, Lavender, Marjoram, Oregano, Culinary Thyme, Culinary Sage, and most Artemisias), and some others (French Tarragon and many other Sage species) originated in loose, well-drained soil. Most of the soil in our Sonoran Desert causes plants to have trouble with evapo-transpiration (the ability of the plant to pull water up through its roots and out through the leaves). Our intense summer heat also causes the plants to wilt, and the summer nights have no cool-off period. When the plants can't cool down at night to metabolize, they start to wilt even more, and most people see that as a sign to water the plant more. If the plant is wilting, stick your finger in the soil. If the soil is damp or moist, do not water! Even if you're watering *exactly right*, the plants listed above are still subject to Root Rot if they don't have adequate drainage. The best way to give these plants a better chance of surviving our low desert summers is to modify the way you plant. Here's how:



Dig a hole at least one foot deeper than the depth of the root ball of the plant you are planting, and three times as wide. For plants with a root ball smaller than four inches, make the hole at least one foot wide and one foot deep. Keep in mind that the mature plant will be much larger!

Line the bottom of the hole at least four inches deep with medium-sized rocks (golf balls make a good substitute!).

To help with soil drainage, combine your native soil with compost or mulch and pumice or perlite.

Use one-third native soil, one-third compost or mulch, and one-third pumice or perlite.

This is also a great mix for container gardening!



It's easiest to mix the soils together in a large bucket.

Make enough to re-fill your hole, plus enough to create a mound over the hole.

Make a mound at least 12 inches high and 18 inches in diameter. Press and firm the entire mound to help prevent erosion.

You can also incorporate large decorative rocks into the design of your mound. For plants that are frost-sensitive, this also provides extra warmth in winter. The large rocks absorb heat from the sun all day and give off warmth at night.



Remove the plant from its original pot by gently squeezing the sides of the pot to loosen the soil. Turn the pot upside down and encourage the plant to tumble into your hand.

Gently scrape the sides and bottom of the root ball with your fingernails or a garden tool if the plant is root-bound (the roots have circled the pot).

Place your plant in the center of the mound and gently press down the soil.

Be sure to place the plant in the mound at the same level that it was in its original pot.

If you have gravel available, it's a good idea to cover the new mound with gravel to help prevent soil erosion and to provide additional sun protection to the roots.



Water well with a liquid fertilizer or starter solution at half the recommended strength.

Make sure the soil is well-firmed around the plant. Check again after the water soaks in and add soil and gravel if necessary.

Enjoy your new plant! *Carolyn Hills, Master Gardener and member of the Arizona Herb Association*