How to Prepare a Planting Site to Ensure Success

By Joyce Bringhurst, Alameda County Master Gardener

o emphasize the importance of planting site preparation, Judy Thomas, retired horticulture instructor of Merritt College often told her students to "use a \$100 hole for a \$10 plant."

One of the important things to consider when picking a planting site is soil pH. Soil pH is an indication of the acidity and alkalinity of the soil, which affects the plant's ability to absorb soil nutrients. Plants have different pH requirements, but most do well within a pH range of 6.5 to 7.2, with 7 being neutral. You can find out your soil's pH by sending samples to a soil lab, but that is expensive and cumbersome. Most local garden centers and hardware stores carry do-it-yourself kits which provide fairly accurate readings. Keep in mind that most residential lots have imported soil that may have a pH different than the native soil. Areas with construction debris such as concrete will most likely have a higher pH. In general, however, the soil in Alameda County has a fairly neutral pH which is adequate for most plants. If you're using acid loving plants, such as azaleas, you may have to amend your soil to make it more acid.

Soil drainage is important as plant roots require both water and oxygen to ensure healthy growth. To test your planting site's drainage, dig a hole about 18 inches deep, fill it with water and let stand overnight. If water is not totally drained by the next morning, there is a drainage problem. Note: This test shouldn't be preformed during the rainy season when the ground is saturated. If your planting site has poor drainage, you

can try planting in a mound, a raised bed, or choose cultivars that can either tolerate poor drainage or have been grafted to root stocks that are tolerant of wet soil.



Once you have a site with proper pH, adequate drainage and light and climate requirements (which we talked about in the previous article), you can proceed to dig a hole no deeper than the height of the root ball, and at least two to three times as wide as the root system. In most cases, soil amendments are neither recommended nor necessary when planting woody plants such as trees and shrubs. Plants that require soils high in organic matter such as azaleas, rhododendrons, and camellias are exceptions.

It is very important to make sure that the root crown area of the plant stays dry. Excessive moisture or standing water around the root crown can cause root rot and weaken the plant, making it more susceptible to diseases. After you dig and prepare the hole, create a mound at the bottom so that when either a bare root or container plant is placed in the hole, it will be at least one to two inches

higher than the surrounding soil. This will prevent the collection of water at the base of the plant and keep it from sinking below grade after watering and when the soil settles.

Many container plants have girdling roots because they have been sitting in the container too long. When dealing with root bound plants, you can cut several one inch deep vertical slits down the sides of the root ball then gently loosen the roots with your fingers. This will help the roots to grow outward and downward into the native soil.

If your plant is staked in the pot such as small trees, remove the single stake before planting. If the plant is tall and spindly, support it with two stakes, one on each side of the trunk, pounded 18 inches below the bottom of the root ball and about 6-8 inches away from the trunk. The stakes should be placed facing the direction of the prevailing wind and ties should have a couple inches of slack so that the trunk can

sway with the wind. The stakes and ties should be removed after 1-2 years when the plant has properly developed. When placing larger plants or small trees into the planting hole, try to orient the branches away from the building, fence or traffic. You might want to orient a strong branch toward a focal point in your garden, or place the side with weaker branches toward the sun to encourage more vigorous growth.

Once the plant has been situated in the planting hole, backfill with native soil and gently step on the soil to get rid of air pockets. Next, create a berm with native soil outside the backfill area to help direct the water to the root zone. Water frequently during the first few weeks after planting so that the soil stays moist but not soggy. The soil berm will eventually disappear, but the plant should remain slightly above grade to ensure adequate drainage.

If you follow the above planting procedures, you will be rewarded by healthy plants that thrive in your garden.