## in the garden by Stephen and Kristin Pategas



Stephen & Kristin Pategas

## den when it comes to the root balls of plants is usually a dangerous thing – for the plant.

**Plant 'em High** 

Getting down too low in the gar-

We recently helped a neighbor plant some shrub and groundcover plants. They were shocked to see us dig holes seemingly too shallow for the whole root ball and leave the top inch exposed above the finished grade (the final soil level before the mulch is added). They always planted so the soil was at the same level or even above the stems. Heck, why would plants not like to have their roots buried well within the ground?

However research has shown that most plants suffer when they are planted too deep. In fact they are often planted too deep in their own nurs-

ery pots so planting them lower in the garden compounds the problem. If the hole is dug too deep and soil is placed back into the hole, make sure it is compacted so it and the plant don't settle later. Roots need to be in contact with soil but also need some air in the soil to thrive. Hence



This is a good planting height, now apply mulch.

they like to be closer to the surface. Many trees planted low will grow circling roots that grow upward and circle around the trunk. These are also called strangling roots for a good reason. Like a boa constrictor they cut off what the tree needs to grow. These trees struggle and may topple over since roots don't develop evenly around the tree.

Once our friends knew the danger of planting low, we all headed off to scout their landscape for previously- planted not-so-prime-looking plants that could be suffering from the "planted deep syndrome." The ones we found, we dug up and planted higher. So don't be afraid to get down low and check soil levels on underperforming plants.





Keep the top main root exposed.

A circling root to remove or don't buy it!

## Steps to take when planting:

- Check the soil level in the nursery pot and remove soil and some fine roots if needed to get to the top main root at the stem or trunk. Don't assume the nursery got it right.
- To determine the proper hole depth, measure the height of the root ball and subtract two inches for trees and one inch for smaller plants.
- Dig the hole only as deep as needed. Compact the bottom of the hole if soil is added back in.
- Install the plant and check the depth so the top sides of the root balls are exposed (two inches for trees and one inch for smaller plants).
- Add soil into the space around the root ball, watering it in as you go. This compaction by watering eliminates air pockets which dry out roots and cause stress or death.
- Install two to three inches of renewable organic (and not cypress) mulch so the root balls are lightly covered (one inch maximum) and the mulch is a few inches away from stems and trunks. Trunks and stems are more susceptible to disease if they are kept moist by soil or mulch.

Kristin and Stephen Pategas design landscapes and gardens at their home and business Hortus Oasis in Winter Park. Contact them at garden@hortusoasis.com or visit www.hortusoasis.com and www.pategaionplants.com.

All photography by Stephen G. Pategas/Hortus Oasis