

Why did my Plant Stop Growing?

**by Kim Gabel, Environmental Horticulture Agent
UF/IFAS/Monroe County Extension Services**

I often talk with people who are frustrated that they have planted some plant a year or so in the past and it has never grown. They want to know, “Why is my plant not growing?” If the plant isn’t growing, one can rule out a disease problem and focus on the plant’s root system before planting and how it was planted.

- When you first take the pot off the plant, check the root system. If roots are circling inside the pot or crossing over one another (girdling), you need to prune at the kink or the crossover so that the roots will grow outward from the plant.
- Pay attention to how close the top of the root system is to the soil surface. If soil is placed over top of the roots, it has a tendency to compact the soil making less air available to the root system and causing root death. So you need to remove the excess soil covering the top of root system.
- The planting hole needs to be two to three times wider than the size of the pot diameter and at a shallow depth so that the root ball is a few inches above the surrounding soil with the surface gently sloping away from the hole. The larger hole will ensure that the plant’s root system will initially grow into loosen soil instead of the rock hard Florida Keys soil and the shallow depth will prevent the roots from suffocating.
- The best planting soil is combining the current soil (native or fill) and amended with moistened peat moss and well-rotted compost (or composted cow manure), at a 60% native to 40% ratio, then mix well. Stay away from creating a flower pot effect in the ground by removing all the original soil and replacing it with just the poorly aerated heavy black muck soils. The heavy soil prevents the plant’s

roots from growing out of the mixture into the surrounding soil. If you already have some mucky soils amend it with moistened peat moss at a one to one ratio.

- Do not overwater after planting. Frequently we find people watering every day for many weeks after planting. Since the plant is freshly set, its root system is still quite small. Plants need both water and air around their roots, so you don't want to keep the soil too wet. The results of too much water are that the plant will lose any new roots it forms and since there is a balance between roots and the amount of top growth, the plant ceases to grow.
- Do not apply fertilizers in the planting hole or too early after planting. If you use some composted manure in the planting hole, you will not likely run into problems as this is a non-burning type fertilizer (as long as it is mixed well and not piled in the hole). One of the things you can afford to wait on in most cases is fertilizer. Assuming that nothing has been growing in the hole before and you are amending it with various materials such as peat moss, or composted manure, there is initially enough nutrition for the plant to use in getting established. It is best to not fertilize until the plant begins to grow. When the top of the plant starts growing, this indicates the roots have grown.

In summary, if your plant doesn't begin to really take off and grow within six weeks after planting, you ought to review your method of planting since something is likely wrong there.