



# WHAT CAUSES STUNTED TREE GROWTH?

There are many things that can cause a tree to fail to reach its full growth potential; improper planting, insufficient irrigation, construction issues and competition with nearby plants could all be to blame. Some things to consider:

**Problem:** Have you recently moved into a home in a new development? If this is the case, there could be some soil deficiencies that are making it difficult for your tree(s) to grow. When new communities are being developed, the topsoil is moved back and forth to create grades and to accommodate the development. Some residential lots could possibly have nothing but nutrient-poor subsoil on them.

**Solution:** Most home improvement stores and nurseries sell soil test kits that can help you determine the levels of nitrogen, phosphorus and potassium in your soil. Once you've identified that this is the cause of the stunted growth, replacing your current soil with a more nutrient-rich substitute may be necessary.

**Problem:** Another potential cause could be that the original landscape installation contractor planted the trees deeper than they were in their holding containers. This often results in root and crown rot, which essentially suffocates the tree and keeps it from growing.

**Solution:** Removing soil from around the crown area of the trunk can help you determine the original soil level when the tree was in its holding container. As time goes on this becomes more difficult, so the sooner you catch it, the easier it will be. If you find the tree(s) were planted too deeply, you must remove some soil to keep the tree from suffocating.

For younger trees, it is possible to replant them so that the crown is approximately 2 inches above grade level. Soil should be added and the grade sloped away from the crown. The addition of soil will promote proper drainage, mitigating the threat of root and crown rot. Your tree(s) might settle after you have raised them, but will still be above grade level.

**Problem:** Too little or too much water can slow and even stop the growth of your tree(s). To determine whether your tree is getting enough water, dig in the root zone to verify that water is penetrating approximately 18 inches. This can also be accomplished with the use of a hand probe. Another way of identifying if the tree is getting too much water is simply to look for puddles of water around your tree(s).

**Solution:** Adjust your watering schedule accordingly until your tests indicate that the tree is getting the proper amount of water.

