

SOIL pH: Since 1989, I have had thousands of client consultations about sick transplants. All too often, the predetermination of the soil pH of the installation site was simply ignored. Soil pH is a factor that defines the “fertility” status of the soil and is the foundation of everything that plants will ever amount to. Correcting soil pH levels is truly one of the most inexpensive and easiest things to do for your client or landscape project. Bottom line... be a true professional, take time to ascertain soil pH levels at the new installation planting site - **nothing but good can come from it.**

Plant Polarity Orientation: Much more importance has been discovered of N-E-S-W orientation polarity that specimen trees have pre-harvest verses once installed. There is a significantly slower stabilization period and more visible stress symptoms occur when specimen trees are NOT transplanted with the same N-E-S-W polarity they were grown under. Whenever possible, try to find out from the grower, with something as simple as a piece of surveyor tape what the true “N” orientation polarity of the tree was pre-harvest - **nothing but good can come from it.**

Root Collar Disorders: Needless problems with mature, established trees can be avoided by proper installation. All too often, I see established trees that are experiencing stress symptoms without apparent or practical pathogenic reasons. Usually, the soil and mulch are at levels where root collar burial is obvious. The root collar is the flare at the base of the stem or trunk leading to the major root structures. The root collar section is NOT resistant to constant soil moisture. The phloem (inner bark) that exchange gasses will in time die under conditions of excess moisture. This condition reduces the downward movement of (photosynthate) food to the roots, eventually leading to die-back and reduced water uptake. Bottom-line...when diagnosing established trees for problems, or installing smaller trees and shrubs, pay special attention to avoid “root collar burial” - **nothing but good can come from it.**

Spray ‘Tips’: There are two very important details of normal spraying precautions one should consider, that if ignored, could prove problematic.

1. Cell fracture identifies the cellular damage that takes place when super-chilled well or spring water is tank-mixed and immediately applied to super-heated plant foliage without providing the opportunity to equalize to current mean temperatures. Although it is usually temporary, total plant mortality can also result due to this oversight in spraying protocols.

2. Many professionals **neglect to add a non-ionic surfactant to their spray tank-mix** when targeting plant types with a waxy type cuticle such as Holly, Rhododendrons, etc. The waxy cuticle causes the tank-mix spray water droplets to roll off or dissipate before the plant has the opportunity to absorb the water. To affect positive plant response, the water droplets must first be modified via a quality, non-phytotoxic surfactant.

Summer-Digging: Due to the need for plant materials for unexpected projects or inventory needs, it may be necessary to harvest plants at times of year when heat, drought, cultivar growth characteristics, and other conditions might inhibit successful plant harvest & transplantation. **‘Successful’ Summer-Digging** is directly related to thorough plant preparation. This unique plant harvest (field digging) protocol includes using **BioPlex ‘Original Digging’ Transplant Concentrate & Plant Enhancer** as a root drench 7-14 days prior to harvest. Pretreatment with this powerful bio-stimulant complex, reduces stress symptoms - leading to greater tissue hydration and more rapid plant stabilization once transplanted. **“Summer Digging”** makes “good dollars & cents” when considering labor and material savings by not having to maintain (water, fertilize, mulching, disease management, etc.) harvested plant inventories and currently enjoys a 70-98% success rate.

I hope these reminders will affirm once again - **nothing but good will come from the continued attention to detail.**