

# Clemson Horticulture *Student Essay*

## Scholarly Paragraph: Tree Planting Lessons

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photos of Madison MacInnis



A well-designed landscape is an expensive investment for businesses and individuals, who pay top dollar for the right plant for their site expecting a healthy plant to live for many years. Unfortunately though, there is a high rate of plant failure that stems directly to how the plant was grown and installed. What has been found is the plants that come from nurseries are often too deeply planted. A tree is deep planted when the root flare is submerged under several inches of soil. This causes serious problems and sometimes death. Paul Minerva, Clemson University's arborist, showed my Horticulture class a tree that is

photo by Madison MacInnis of Clemson – deep planted tree



going to have to be cut down because mushrooms and decay are growing at the root collar due to it being planted too deeply (P. Minerva, Tree health assessment demonstration, November 10, 2015).

In addition, the deeply planted tree headache can be shown by the Bartlett Tree Research Laboratory, where they said, "we established a trial in Charlotte, NC, using 68 newly transplanted bare-root whips. We used willow oak (*Quercus phellos*) for its availability and durability and planted half the trees with the roots at grade and the other half with the root collars buried 6 inches. In the Piedmont region of the Carolinas, the transplant survival rate of this species is typically very high. After four years, 26 percent of the deeply planted trees had died compared with only six percent of those planted at grade. Furthermore, the surviving deeply planted trees had 17 percent less caliper growth than the other half" (Smiley & Booth, 2000).

Another problem occurs when mate-

rials used to wrap the tree trunks and root-ball during transport are not removed by installation professionals. Harmful materials left on the tree typically include synthetic burlap, wire baskets, or suffocating metal plant tags attached to the tree's stem. During the tree planting exercise by Mr. Minerva, he showed my Horticulture class the wire basket which, in some cases, if not removed can lead to serious girdling problems (P. Minerva and D. Ham, Tree planting demonstration, November 12, 2015). The Bartlett Tree Research Laboratory also said, "In our 1991 study of newly transplanted trees on three sites, at least 16 percent of 417 trees were found with materials left over from production or planting and had the potential to girdle the tree" (Smiley & Booth, 2000). In conclusion, professionals need to ensure plant life by not deeply planting and by removing hazardous material from the trunk and rootball in order to ask top dollar, make the customer happy, and warrant a long healthy life for the plant.

### Literature Cited

Smiley, E & Booth, D. C. (2000). Grown to die?. *American Nurseryman*, 191(6), 48. Retrieved from Business Source Premier database.