# Sample nursery stock specification for shade trees 

Edward F. Gilman, Professor, Environmental Horticulture Department University of Florida Gainesville egilman@mail.ifas.ufl.edu



1) There shall be no roots greater than $1 / 10$ diameter of the trunk circling more than one-third the way around in the top half of the root ball. Roots larger than this may be cut provided they are smaller than one- third the trunk diameter. There shall be no kinked roots greater than $1 / 5$ the trunk diameter. Roots larger than this can be cut provided they are less than one-third the trunk diameter.

2) Trees should be rooted into the root ball so that soil or media remains intact and trunk and root ball move as one when lifted. The trunk should bend when gently pushed, not pivot at or below soil line.
3) The point where the top-most root in the root ball emerges from the trunk shall be visible at the soil surface.
4) The relationship between caliper, height and root ball size shall meet the ANSI Z60.1 standard.
5) There should be one dominant leader more-or-less straight to the top of the tree with the largest branches spaced at least 6 inches apart (see illustration top-left). There can be a double leader in the top $10 \%$ of the tree.

6) The tree canopy should be symmetrical, free of large voids, and typical of the species or cultivar. Live crown ratio (distance from bottom of canopy to tree top/tree height) should be at least 60\%.
7) Branches should be less than $2 / 3$ the trunk diameter, free of bark inclusions, and more-or-less radially distributed around the trunk.
8) Trees greater than 1.5 inches caliper should be able to stand erect without a supporting stake.
9) The trunk and main branches shall be free of wounds (except for properly-made pruning wounds), damaged areas, conks, bleeding, and signs of insects or disease.
10) If any of the above conditions are not met, trees may be rejected.
11) Optional (but very powerful) - Trees shall meet Florida \#1 or Florida Fancy grades. Click here for details.
