

grass at Hyland Lake Park were susceptible to damage by maintenance equipment. All trees were stressed from grass competition.

Table 2 summarizes the first and second years' growth and percentage survival for the linden-maple study. All grades of Norway maple had 100% survival with the two whip grades showing the greatest percentage increase in growth. The lindens had poor transplant survival and growth rates. On June 13, 1980, two trees of the 6'-branched grade, one of the 7' grade and one of the 1½" grade had no bud break. By fall, 1980, only one of the 1½" grade was alive.

Although limited in scope, this study can be used when choices must be made among different tree grades for planting in landscape situations. There is no standard best grade: rather, many factors must be considered. Often larger grades are used because they offer an "instant landscape" effect. Smaller grades, however, grow faster and may be able to "catch up" to the larger grades after a few years. Survival rates of

different grades within a species or cultivar must also be considered. Lindens under adverse growing conditions might have better survival rates if smaller trees are planted. Smaller trees on the other hand are more subject to vandalism or injury by maintenance equipment. All trees, regardless of size, suffer dramatic reductions in growth rates when grown where ground cover competes with the trees for water and nutrients (Table 1).

More research is needed to determine transplant success and growth rates not only for trees of different grades but also for different species. More research is also needed on survival of trees of these smaller grades in cities and other areas of high human pressures. These types of data will aid in determining practical and economical planting guidelines.

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ABSTRACT

Chapman, Douglas J. 1982. **Coffeetree works well as city tree.** *Weeds, Trees & Turf* 21(1): 66.

Kentucky coffeetree is an exciting tree that offers potential in parks, as a city street tree or in the individual landscape. It is tolerant of difficult soil conditions, is a good competitor, will thrive when grown in grassy areas, and has few or no insect problems. There are no catastrophic insect or disease problems to affect this plant. It joins a select list of trees well suited as city street trees — hackberry, scarlet oak, honeylocust, and common horsechestnut.