viving the construction process. Professionals with experience in tree care can advise builders on how the selected trees should be chosen, thinned, and protected. County extension agents and state foresters are sources for documents describing tree protection practices and considerations that should be taken when choosing trees on construction sites.

Finally, it is important to note that in Amherst, where reported costs were high for the type of tree preservation done there, and in Athens, where reported costs were lower for different types of construction in different kinds of woods, builders reported that they recovered their tree-protection expenses in selling their finished products. The public demand is for houses landscaped with trees; environmental quality is protected when trees are preserved; builders will recover their costs for protecting trees; and as in Athens, builders may find that construction costs are lower when only the minimum number of trees are removed.

Department of Quantitative Business Methods
College of Business
University of Georgia
Athens, GA

ABSTRACTS

Chapman, Douglas J. 1981. **Late flowering trees provide mid-summer color, interest.** Weeds, Trees & Turf 20(9): 26-27.

Trees which flower early to mid-summer can be particularly important in the landscape. When looking for diversity with excitement, yet low maintenance, yellowwood, goldenrain tree, Kousa dogwood, and goldenchain tree should be high on the list. These trees integrate well into mass plantings. They all seem relatively drought tolerant, having few or no insect and disease problems. Although their fall color varies, the uniqueness of early to mid-sumer blooms makes these truly exciting additions to the landscape. Although borderline hardy in central and northern Michigan, they should be considered somewhat commonplace from Detroit all the way south to the Washington, D.C. area.

Lambe, Robert C. and G.H. Lacy. 1982. **Crown gall.** Am. Nurseryman 155(3): 113-114.

Crown gall is a serious disease that can severely affect ornamentals. Numerous woody ornamentals are affected, including cypress, euonymus, forsythia, hibiscus, lilac, flowering peach, privet, roses, viburnum, and willow. Galls range from a fraction of an inch to several inches in diameter. Crown gall was first associated with the bacterium *Agrobacterium tumefaciens* in 1907. Only in the past decade was it discovered that the gall or tumor-inducing principle is part of a separate genetic entity, a plasmid, that is itself parasitic within the bacterium. The "pathogenic" bacterium, then, is just a vehicle for transmitting the disease-causing organism to the plants. After the bacterium attaches to plant wounds and multiplies briefly among parenchymatous cells, the tumor-inducing principle moves into the plant and is maintained with the host's genetic material. Because the bacterium is not necessary for tumor development, many galls become "aseptic" or free of *A. tumefaciens*. Strict sanitation is necessary to prevent spreading pathogenic bacteria.