



Fig. 1. The effect of pH on the percentage of new growth of *Acer rubrum* 'Armstrong' and 'Red Sunset' after 12 weeks.

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ABSTRACT

GREEN, J.L. 1982. **Tailor-made trees through programmed plant development.** Am. Nurseryman 156(7): 29-30.

Suppose a deciduous tree is removed in leaf and bare root from the field prior to vegetative maturity. It is placed in a controlled environment that is sequentially programmed to induce vegetative maturity and leaf abscission to bring about cold acclimation and dormancy. The storage environment is thus programmed to end dormancy and acclimate the plant to the climate of the area in which the plant will be marketed. In the end, a grower would have a tree that is tailored to its new environment. The post-harvest environment can be controlled in many ways. For example, plant moisture loss can be regulated by adjusting relative humidity and plant temperature. The air composition of the environment and light (photoperiod, intensity, and quality) can also be controlled. Determining the environmental requirements of specific woody plants after removal from the field is an area of research that needs special emphasis and attention. Although extensive research has been done on the post-harvest physiology and handling of cut flowers, surprisingly little work has been done on the requirements of woody plants.