

Developing Production Protocols for the Razzle DazzleTM Crapemyrtle Series

James T. Midcap Department of Horticulture - Athens The University of Georgia

Nature of Work: New introductions often are produced under limited production conditions. They are distributed to growers with a wide range of production practices and conditions that can affect their quality and reputation. A system of evaluating new CANR introductions under a range of production conditions could identify potential problems. A suggested production protocol when developed could be distributed with the introduction to new growers.

The Dazzle series of *Lagerstroemia*; Cherry DazzleTM, Dazzle Me PinkTM, Raspberry DazzleTM, Ruby DazzleTM and Snow DazzleTM; were propagated from cuttings stuck on June 27, 2005. These soft wood cuttings were treated with 500 ppm Dip-N Grow as a quick dip. The rooted liners were stepped up into one, two and three gallon containers on August 17. These plants will be grown on to observe growth differences based on pot size. Top growth and root development will be evaluated.

The Dazzle series were produced under different fertilizers, fertilizer rates and pruning practices to evaluate their effects on the five cultivars. Well rooted liners were potted into trade gallons on June 27, 2005. The potting mix of bark:sand (6:1) was amended with 6#/yd³ of dolomitic lime. The two fertilizer treatments included (1) Harrell's 16-5-10 with micro nutrients, an 8-9 month product, and (2) Nutricote 18-6-8 with micro nutrients, a 270 day product. Two fertilizer rates were incorporated into the substrate including a medium rate of 2.6#/yd³ actual nitrogen and a high rate of 3.3#/yd³ actual nitrogen. The plants were allowed to become established and begin growth before the pruning treatments were applied. Plants were (1) not pruned or (2) pruned back by ½ of the stem length on July 12. Ten replicates of each treatment were randomized within each cultivar. Top growth, root growth and plant quality will be evaluated at the end of the study.

Results and Discussion: Soft wood cutting stuck into flats rooted fairly well (Table 1). Ruby DazzleTM rooted only at 62% while all others rooted nearly 100%. The cutting wood on Ruby DazzleTM included some hard wood because of the lack of soft wood due to the slow growth caused by the cool spring temperatures. Ruby DazzleTM was slower than the other cultivars in producing cutting wood.

Cherry DazzleTM and Raspberry DazzleTM produced excellent growth. The high rate and Harrell's 16-5-10 produced more dry weight than the medium rate or the Nutricote 18-6-8 fertilizer. The unpruned Raspberry DazzleTM treatment produced more dry weight than the pruned treatment. Cherry DazzleTM showed no differences between the pruning treatments. Little flowering occurred on all treatments. Strong root systems developed on both of these cultivars.

Ruby DazzleTM produced reduced growth which was very attractive, but produced no flowers. The high rates and Harrell's 16-5-9 produced more dry weight than the medium rate or the Nutricote 18-6-8 fertilizer. There was no difference between the pruning treatments. Moderate root systems developed on Ruby DazzleTM.

Dazzle Me PinkTM and Snow DazzleTM produced poor growth. Both flowered heavily and set heavy seed crops. Dazzle Me PinkTM produced no treatment effects. Snow DazzleTM produced more dry weight at the high fertilizer rate. No pruning or fertilizer treatment effects were produced. Root systems on Dazzle Me PinkTM were weak, while Snow DazzleTM roots were moderate.

Generally, early pruning of the planted liners had little effect. Raspberry Dazzle™ produced more growth when not pruned. The high rate of fertilizer was effective in producing greater growth. Harrell's 16-5-10 produced more growth than Nutricote 18-6-8 when used at the same nitrogen rate.

Included is a preliminary production protocol for the Dazzle Crapemyrtle Series.

Significance to the Industry: These results should help with the development of production practices for the Dazzle series of dwarf crapemyrtle.

Table 1. Percent Rooting of Dazzle Crapemyrtle Series					
Rooting Flat	Cherry Dazzle TM	Dazzle Me Pink TM	Raspberry Dazzle TM	Ruby Dazzle TM	Snow Dazzle TM
# 1	100	97	100	46	100
# 2	100	97	97	78	100
Average	100	97	98.5	62	100