



Abelia Production Under High Lime and Elevated Magnesium Levels

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Nature of Work: Production of *Abelia* × *grandiflora* in North Georgia is troubled by mid summer foliage yellowing. Crops begin to decline with the high temperatures of summer and the root systems become stressed. Yellowing of the foliage follows and plants make little growth the remainder of summer. Crops are unsalable in fall and the following spring. Second year crops are more susceptible to this problem. 'Edward Goucher' is more susceptible than other abelia selections. The objective is to determine if higher calcium and magnesium levels in the potting substrate have an influence on this problem.

Cuttings of *Abelia* 'Edward Goucher' were stuck in late May 2004. The rooted liners were potted into one and three gallons on July 1, 2004. The pine bark:sand (6:1) potting substrate was amended with 1) 12 #/yd³ dolomitic lime, 2) 10 #/yd³ dolomitic lime, 3) 6 #/yd³ dolomitic lime, 4) 6 #/yd³ dolomitic lime plus 2 #/yd³ K-Mag and 5) 6 #/yd³ dolomitic lime plus 1 #/yd³ coated slow release iron. There were 20 replicates of each treatment. Plants were to be evaluated for summer yellowing, top growth and growth index.

Results and Discussion: Treatments were examined in July, August, September, October and November and no significant foliar yellowing was evident (Photo 1). There were no visual differences between treatments. The propagation and late planting into gallons and three gallons may have resulted in adequate major and minor nutrients for good root growth as well as adequate substrate for good growth.

Significance to the Industry: Repeating this work a second season with these same treatments may yield an insight into solving the abelia yellowing problem.



Photo 1. *Abelia* 'Edward Goucher' three gallon treatments on October 18, 2004