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In February 2013, Bio Soil Enhancers Inc. had the opportunity to initiate a trial on Loblolly Pine (*Pinus taeda*) in Hancock County, Mississippi.

This 30 acre trial site consists of a gently rolling lowland coastal plain of average composition and has an estimated site index of  $70_{25}$  (70 feet tall at a base age of 25 years old). ArborGen second generation improved Loblolly Pine seedlings were mechanically planted at a density of 550 trees per acre with a Fesco 3-point hitch mounted tree planter.

The seedlings were treated with a root dip containing only water and products containing SumaGrow prior to planting. The treatment rates ranged from 2.0 oz. per gallon on to 14.0 oz. per gallon, omitting odd numbers. The total treatment area was around 14.0 acres with the remainder being held constant (grower standard) as a control. Only one application of products containing SumaGrow was utilized with the root dip.

Remarkable growth has been realized with the use of products containing SumaGrow to the tune of roughly one additional foot per year. Accelerated growth is especially useful in helping newly established trees avoid unnecessary stress from herbaceous and woody competition. Trees treated with products containing SumaGrow were also observed to exhibit higher needle densities and darker green color which is an indicator for overall health.

At the most recent sampling date of June 16<sup>th</sup>, 2016, there was a 3.59 foot or 24.78% height advantage for the 12.0 oz. per gallon treatment group versus the control. Keep in mind that this is from three years growth and there appears to be no reduction in continued growth potential compared to the control for the years to come.

Please see the following growth chart from 2013 to 2016 for a comparison of growth by year and concentration gradient.

