

## **WILL ADVANCED LOBLOLLY PINE GENETICS DELIVER ADDED VALUE TO LANDOWNERS IN THE SOUTHEASTERN UNITED STATES?**

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Advanced generation loblolly pine (*Pinus taeda L.*) genetic trials have produced substantial gains in growth, stem form, and fusiform rust resistance at early ages, but the demonstration of stand level gains has been elusive. As landowners consider the many genetic options for plantation establishment now available, demonstrated gains and increased financial value are critical for the adoption of elite genetics such as MCPA® and varieties. A trial of three open-pollinated and two full-sib families was established in 1998 in the lower coastal plain of South Carolina. Each family was planted in 100-tree block plots in each of four replicates at a single location. Mid-rotation data after twelve years of growth shows a value increase of over 100% in bare land value and a volume increase greater than 50% for the best full-sib family when compared to open-pollinated families. Financial analyses revealed that the increased cost of full-sib seedlings is justified with volume gains alone over open-pollinated seedlings but additional value is captured through stem quality which influences the potential number of sawtimber trees harvested. Volume growth and sawtimber potential will be reported before and after an operational thinning, and each family will be modeled to an age 24-year rotation. Revenue at rotation age, internal rates of return, bare land value, and marginal analysis for seedling price will be discussed.