

SELECTION EFFICIENCY IN THE LSU AGCENTER INTERNAL COTTON YIELD TRIALS**Jimmy X. Zumba****Gerald O. Myers****LSU AgCenter****Baton Rouge, LA****Abstract**

Progress in the development of improved cotton genotypes is a moving target. Each year the goal is to raise the performance benchmark from the year before. The cotton breeding program of the LSU AgCenter utilizes a multilocation internal yield testing program in which superior lines are selected and advanced from preliminary to advanced elite stages. Genotypes with superior performance and/or quality identified after moving through this program become candidates for release. A retrospective analysis of these internal yield trials and their entries, for the period 1999 – 2006, was done to assess the effectiveness of the program. This also allowed for the evaluation of consistency of performance of genotypes as they progressed through the program and the identification of superior cross combinations.