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## Visual Selection for Yield in Cotton Breeding Programs

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Pages: 62-68

*Breeding and Genetics*

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Cotton breeders routinely discard progeny rows that visually appear low yielding. Such a process is essential, because it would be highly inefficient to continue to work with progeny that have no commercial value. A dilemma for all breeders is whether they are inadvertently discarding promising lines. Cotton breeders from four states conducted a 2-year study to determine if visual selection was an effective method of selecting for yield. To accomplish this, progeny rows in replicated preliminary yield trials for seedcotton yield were visually rated. Correlations between visual ratings and actual yields ranged from -0.22 to 0.70, and there were differences among breeders in their ability to select superior-yielding genotypes. High-yielding genotypes that were visually rated low would have been discarded in every study. This is an inherent danger in visual selection, but recurring placement of high-yielding check cultivars and the use of a grid system should alleviate some of this problem. Generally, high-yielding genotypes were rated higher than low-yielding genotypes. Range of yields, mean yields, plant height, and soil type did not affect a breeder's ability to visually rate the plots for seedcotton yield.