

**POTENTIAL FOR VARIETY MIXTURES WITHIN  
A FIELD TO REDUCE OVERALL MICRONAIRE**

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**Abstract**

High micronaire is a common problem in North Carolina, especially in years with limited rainfall. Unfortunately, some of the highest yielding varieties, such as Stoneville 474, tend to have high micronaire. Delta and Pineland 5409 (DPL5409) tends to have lower micronaire and longer staple length than STV 474, but does not yield as well as STV 474. This study was conducted to determine if mixing the two varieties would offer yield comparable to STV 474 while lowering micronaire and increasing staple length. The treatments included STV 474, DPL 5409, a 50:50 mixture of STV474 and DPL 5409, and alternating rows of STV 474 and DPL 5409. The experiment was conducted at one location in 1998 and at four locations in 1999. Both mixture treatments yielded similarly to STV 474 while DPL 5409 had significantly lower yield in both years. The mixtures produced a micronaire and staple length intermediate of the levels of the pure varieties. These data suggest that growers could use variety mixtures to reduce micronaire and increase staple length while maintaining high yield potential.