

MANAGEMENT OF MICRONAIRE VALUES BY DEFOLIATION TIMING IN THREE MID-FULL SEASON CULTIVARS**Ross A. Rinderknecht****J. Tom Cothren****Texas A&M University****College Station, Texas****Abstract**

Fiber quality in today's U.S. market is becoming a more important issue each year. Micronaire is often one of the top fiber characteristics that can be discounted at the classing office. With higher yielding varieties coming on to the market, high micronaire values may become a bigger problem for producers. The objective of this study was to manage micronaire values through different defoliation timings in three mid-full season cotton varieties in the Brazos Valley region of Texas. The three varieties used were; Delta Pine 1050 B2RF, Phytogen 565 WRF, and Stoneville 5458 B2RF, by applying harvest aids at different open boll percentages micronaire values might decline with earlier defoliation. Since these varieties are known to receive higher micronaire values our purpose of this study was to find the optimum time to apply harvest aids in order to keep micronaire values in the premium range without sacrificing lint yield for each of the selected varieties. Four open boll percentages were set for the treatments, 20%, 40%, 60%, and 80%. Each variety matured slightly different than the other two; however they were all within a seven day span of reaching equal open boll percentages. All varieties had similar trends in yield when compared to treatment, the 20% treatment yielded the lowest numerically but only significant differences were observed in the Stoneville and Phytogen varieties. Micronaire trends for all varieties were also similar with the 80% treatment receiving the highest micronaire value in all varieties. Although these treatments had the highest mic values, these values were not above the discount range. For each variety, the optimum time for defoliation in this particular environment would be around 60 -70% open bolls. Even though these values did not reach the discount range, producers in the Brazos Valley region of Texas need to be aware of potential mic discounts when planting these varieties and also how to manage these varieties in the late season to optimize yield and fiber quality.