## INTROGRESSION OF PIMA INTO UPLAND L.I. Decanini, C.W. Smith, A.H. Paterson and C.X. Jiang Texas A&M University College Station, TX

## <u>Abstract</u>

Fiber property and DNA marker data was collected on a mapping population of over 3,000 plants in twenty-four BC<sub>3</sub>F<sub>2</sub> families. Correlations using percent Gossypium barbadense (Pima) chromatin were made to seed cotton weight, seed weight, lint weight, micronaire, length, uniformity, strength, elongation, length by weight, length by number, short fiber content % by number, short fiber content by weight, upper quartile length by weight, longest 50% of the fiber lengths, longest 25% of the fiber lengths, fineness, immature fiber content, maturity ratio, neps/gm, uniformity ratio, and short fiber content. The resulting correlations were varied for every fiber property used in the analysis, except for the yield characteristics. Some families had a positive correlation while others had a negative correlation. It is our conclusion that these results show promise in the possibility of gene stacking for these characteristics, although yield components might be a problem that will have to be overcome.