

**HIGH TANNIN COTTON LINES AS A SOURCE OF RESISTANCE TO BACTERIAL BLIGHT,  
XANTHOMONAS CAMPESTRIS PV. MALVACEARUM**

**Raymond M. Kennett**

**C. W. Smith**

**Texas A&M University**

**College Station, TX**

**P. M. Thaxton**

**Mississippi State University**

**Stoneville, MS**

**S. Hague**

**Texas A&M University**

**Department of Soil and Crop Sciences**

**College Station, TX**

**Abstract**

Thirty-seven germplasm lines with elevated levels of condensed tannins released by the Texas Agricultural Experiment Station in 1989 were evaluated for resistance to bacterial blight, *Xanthomonas campestris* pv. *malvacearum*. These lines were developed by crossing a number of races stocks (tx 789, tx 790, tx 791, tx 1041, tx 1055, tx 1119, tx 1123 and tx 1124) with breeding lines and or cultivars, with screening for condensed tannin content in mature leaves. Two lines (TAM 87 N 4 and TAM 86 E 14) were identified as being completely resistant to bacterial blight and another three (TAM 86 E 8, TAM 86 DD 16, and TAM 86 DD 18) were identified as being highly resistant, with infections occurring in less than 10% of inoculated plants. These five High Tannin lines were screened with known RFLP markers for bacterial blight resistance to determine if the resistance in the HT lines is allelic with that reported Bird, et al. at Texas A&M University. Tannin measurements were taken in the cotyledons of resistant and susceptible lines to determine if resistance in these lines was correlated with tannin concentration.