Assessment of Bacterial Blight of Cotton in Georgia, 2015

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Bacterial blight of cotton caused by *Xanthomonas citri* pv *malvacearum* rarely has been observed in Georgia over the past 15 years and has generally not been associated with yield loss. When bacterial blight has been identified it has been limited in distribution and low in severity. This changed in 2015. Plant-parasitic nematodes, especially the southern root-knot nematode (*Meloidogyne incognita*), are major constraints to production and cost growers millions of dollars each year in lost yield and cost of management. Recent introductions of root-knot nematode resistant varieties have been rapidly adopted by growers to manage this important pest. In 2015, one of the most popular root-knot nematode resistant cotton varieties was DP 1454NR B2RF and it was widely planted in southwestern Georgia where losses to the *M. incognita* are generally most severe. In approximately July 2015, concern about a foliar disease affecting cotton, primarily DP 1454NR B2RF, began to be reported by consultants and Extension agents. Although bacterial blight was observed on other varieties, e.g. DP 1558NR B2RF, it was never severe (~5% leaf area affected). Significant foliar symptoms were observed in DP 1454NR B2RF to include multiple leaf spots, systemic vein infections and significant premature defoliation. Boll rot with diagnostic water-soaked lesions was also observed in DP 1454. Symptoms in other varieties were limited to leaf spotting and negligible pre-mature defoliation. Extension agents estimate that yield losses in DP 1454NR B2RF were as high as 200 lb lint/acre. Because of the severity of bacterial blight in DP 1454NR B2RF, this variety is unlikely to be planted in Georgia in the future. It remains to be seen if bacterial blight will be a problem again in 2016.