

BACTERIAL BLIGHT: RE-EMERGENCE OF A DISEASE OF HISTORICAL IMPORTANCE**T. Allen****Delta Research and Extension Center, Mississippi State University
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Since 2011, numerous cotton producing states have reported an increased incidence of bacterial blight of cotton. Bacterial blight of cotton, caused by *Xanthomonas citri* pv. *malvacearum*, was one of the most important foliar diseases of the early 1970s. Following major outbreaks of the disease in the early 1970s, acid-delinting of cottonseed resulted in a decreased incidence of the disease throughout the cotton producing states. The important foliar disease produces symptoms on all cotton plant parts and can infect and result in disease at any developmental stage from seedling to reproductive plants. Following outbreaks of the disease in 2011 and 2012 in Arkansas and Mississippi, additional states from South Carolina (1 county in 2017) in the east to Texas in the west have made reports of either limited disease incidence or substantial outbreaks as have been common during 2016 and 2017 in southern Georgia. In all, since 2011, 11 states (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, and Texas) have reported observing bacterial blight from a combined 186 counties/parishes (Alabama = 18, Arkansas = 7, Florida = 2, Georgia = 49, Louisiana = 19, Mississippi = 37, Missouri = 2, Oklahoma = 2, South Carolina = 1, Tennessee = 3, and Texas = 44) on predominantly bacterial blight-susceptible varieties. In some of the states where bacterial blight was observed, the last instance of the disease was approximately 20 years ago (see: Rothrock et al., 2012). Bacterial blight continues to be important since the disease is predominantly seedborne and when present in bacterial blight-susceptible varieties during periods of a continued conducive environment can result in yield losses between 10 and greater than 20% (Golden et al., 2012; Wheeler et al., 2016). A newly developed molecular method to determine the presence of the bacterial blight bacterium in planting seed (see: Allen and Lu, 2016) will become available in the next year.

References

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