

FOLIAR DISEASES OF COTTON**Gabriel L. Sciumbato****Delta Research and Extension Center, MAFES, Mississippi State University
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This talk is to review foliar diseases of cotton. Symptoms and methods to control or manage them will be discussed. Bacterial blight (*Xanthomonas axonopodis* pv. *malvacearum*) causes an angular leaf spot which can defoliate cotton. Control methods include acid delinting of seed, resistant varieties and crop residue destruction. *Cercospora* leaf spot (*Cercospora gossypina*) causes a leaf spot which is characterized by small red lesions which enlarge and have white to brown center. Control methods include the avoidance of all stresses to the cotton plant, correction of mineral deficiencies especially potassium and the destruction of crop residues. *Ascochyta* blight (*Ascochyta gossypii*) symptoms include light brown lesions which coalesce on the leaves. Lesions have dark brown borders. Control measures are the same as for *Cercospora* leaf spot. *Stemphylium* leaf spot (*Stemphylium solani*) symptoms include small circular brown lesions with concentric rings. Older lesions have a white center which can drop out. Control measures include stress avoidance, control insects, destroy crop residue and the use of foliar fungicides. *Alternaria* leaf spot (*Alternaria macrospora* and *A. alternata*) leaf spot is characterized by lesions with brown or purple margins. Older lesions can have concentric rings and the center of the lesion can fall out. Control measures are the same as for *Stemphylium* leaf spot. Southwestern cotton rust (*Puccinia cacabata*) produces pale green lesions which develop into raised, bright yellow to orange pustules. Spermogonia occur in groups. Various gamma grasses are alternate hosts for this fungus. Control measures include host resistance and foliar fungicide applications. Other minor leaf spots include Areolate Mildew, Mosaic virus, *Helminthosporium* leaf spot, *Rhizoctonia* leaf spot, *Phomopsis* leaf spot, *Myrothecium* leaf spot, Powdery Mildew, and Anthracnose.

Reference

Kirkpatrick, T. L. and C. Rothrock. 2001. Compendium of Cotton Diseases, Second Edition. American Phytopathological Society, 3340 Pilot Knob Road. St. Paul, Minnesota. 75pp.