

**CLOSING REMARKS AT THE SYMPOSIUM,
“THE NEW NORMAL – EMERGING AND RE-EMERGING DISEASES OF COTTON”**

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Target Spot caused by *Corynespora cassiicola*

Yield losses of 200-300 lbs. lint/acre have been documented. All varieties are susceptible, but certain varieties are more susceptible than others. Differences in variety susceptibility may be related to early canopy closure and density, or to other factors. Because Target Spot is associated with tall, rank cotton, the disease may be controlled in part by canopy management. Fungicide treatment generally retards defoliation, but may not reduce yield loss. Disease progress is accelerated by precipitation and high humidity. An advisory model that relates environmental factors to defoliation and yield loss may improve management.

Bacterial Blight caused by *Xanthomonas citri* pv. *malvacearum* (Xcm)

Acid delinting of planting seed has not alone eliminated field incidence of the disease. Commercial planting seed companies need to provide and growers need to plant Bacterial Blight resistant varieties to reduce inoculum in the environment. Collections in recent years from infected cotton in Georgia (GA), Mississippi, and Texas suggest that race 18 is still the predominant pathogen; however, in certain instances where the disease has been found on nominally resistant varieties, an as yet uncharacterized *Pseudomonas syringae* has been found with Xcm. Mississippi State University and Cotton Incorporated are developing a PCR-based test to detect Xcm in planting seed. It is currently being validated on field-infested material collected in 2017 and may be released in 2018.

***Fusarium oxysporum* f. sp. *vasinfectum* (FOV)**

All U. S. pathogenic races of FOV can attack cotton at any stage of growth; however in recent years stand losses from early attack seems to have been increasing in Alabama (AL) and (GA). To this point, all AL and GA isolates have been identified as genotypes of FOV race 1 (FOV1), and all have been of the vegetative compatibility group (VCG) 111. In contrast, certain FOVs in the U. S. do not need nematodes to attack cotton and are highly virulent. Upland cotton (*Gossypium hirsutum*) production has been devastated in the San Joaquin Valley (SJV) of California by FOV race 4 (FOV4). In July 2017 FOV4 was formally identified in the Upper Rio Grande Valley in El Paso and Hudspeth counties in Texas (TX). The SJV and Rio Grande Valley pathogens are VCG 114 and characteristically attack small cotton causing plant death and stand loss. FOVs are soil and seed borne. Certain Pima cotton (*G. barbadense*) varieties are highly tolerant, Acala cottons are intermediate in reaction, and the susceptibility of most Upland cottons are uncharacterized. FOV4 cannot be controlled in Upland cotton by any known means; as such it poses a serious threat to U. S. Upland cotton production.