

EVALUTATION OF EFFECTIVENESS AND ECONOMIC RETURNS ASSOCIATED WITH FUNGICIDE APPLICATIONS FOR CONTROL OF AREOLATE MILDEW**S. Hollifield****UGA****Quitman, Georgia****J. Whitaker****R. Kemerait****UGA****Tifton, Georgia****Abstract**

Areolate Mildew (*Ramularia areola* syn. *Ramularia gossypii*) is typically a late season cotton disease that appears in the lower canopy, on the underside of bottom leaves. Although this disease appears late in the growing season, it can be of particular concern if it progresses into the mid and upper canopy of the cotton crop. Cotton producers question the potential yield loss from the disease and if fungicide application(s) are warranted. During the 2018 production season, we conducted an areolate mildew trial with the objectives of determining if fungicide applications demonstrated acceptable control of areolate mildew and if there was an economic return associated with fungicide applications and increased lint yield. The Brooks County areolate mildew trial evaluated applications of azoxystrobin (Abound), a Group 11 fungicide, applied at rates of 6oz. and 8oz. Plot treatments included both one and two Abound applications with 15 day spray interval. Single application plots treated at 6oz rate and plots treated twice sprayed with 6 oz. and 8 oz. application rates, respectively. All treatments were replicated three times on rows running entire length of field, approximately 1400ft. The treatments were applied in 12 gallons of water at 60 psi with 003 Greenleaf spray tips. The plots were evaluated twice for efficacy of spray treatments and taken to harvest for lint yield. Trial results demonstrated effective 2 week areolate mildew control provided by Abound applications, as well lint yield increases associated with each Abound application.