

# Bacterial Blight Damaging Cotton In Southeast Missouri



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**S**ymptoms of bacterial blight have been observed on cotton plants in some southeast Missouri fields during the last 14 days. The symptoms are black, angular-shaped spots visible on both sides of the leaves. These spots are slightly smaller than

a pencil eraser, and many spots may merge to kill large parts of leaves. The diseased tissue will remain black, and the infected leaves may begin to turn yellow and then defoliate if infection is severe. So far this disease is only on lower and middle plant leaves. It will probably not lower yield if only a few lower leaves are damaged, but it will lower yield if it spreads to upper plant leaves and especially if it spreads to bolls and causes boll rot.

Control of bacterial blight of cotton is difficult. I have seen no research results that show this disease can be managed by treatment of the plants with a bactericide or fungicide. However, farmers can take action to slow the spread of this disease to top leaves and bolls this year by restricting plant growth through aggressive use of growth regulators. This is because dew stays

on leaves of rank-growth cotton until late morning, and the bacteria that cause this disease spread more when cotton leaves are wet for long periods. Air circulates better through small cotton plants, 30 inches tall, than rank-growth plants and this helps dew dry more rapidly in the morning. Crop rotation will help control this disease, but fields must be left out of cotton for one or more years. The best method to avoid bacterial blight is to plant resistant cotton varieties.

Bacterial blight developed last year on cotton in some fields in southeast Missouri, north Mississippi, and east Arkansas, and this was the first time I have seen it since the late 1970's. It was a problem in many cotton fields in the USA until then when it almost disappeared because seed companies began acid delinting cotton seed. This delinting process killed the bacteria that survived on the seed. I have not seen any convincing evidence proving why this disease developed last year and this year. You may contact me at the University of Missouri Delta Center by phone, 573-379-0259, or E-mail, wratherj@missouri.edu, for more information about this or check the Delta Center Web Page ([aes.missouri.edu/delta](http://aes.missouri.edu/delta)). Δ

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