

**COTTON HARVEST AIDS:
MID-SOUTH PERSPECTIVES**

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Abstract

The mid-South region is represented in the Beltwide Cotton Defoliation Project by research leaders at the following locations: Rohwer, Arkansas; St. Joseph, Louisiana; Portageville, Missouri; Stoneville, Mississippi; and Jackson, Tennessee. The objectives of this research are evaluations of efficacy, yield effects, and quality effects from beltwide and regional standard harvest aid treatments at each of these locations.

Cotton produced across the mid-South is nearly 100% picker-harvested, and a very high percentage is stored in modules following harvest. Weather risks at harvest are relatively high in all mid-South production areas. Virtually any portion of the region can be affected by persistent rains during the September-November harvest season, and every area is confronted with fewer days fit to harvest and a decline in productive hours per day as the season progresses. The upper mid-South, including northeast Arkansas, west Tennessee, and the bootheel of Missouri, is often confronted with insufficient heat to mature late-set bolls, and, in some years, freeze damage to unopened bolls. The lower mid-South is threatened with monsoon harvest seasons and tropical storms, in addition to the expected decline in days fit to harvest and hours per day as the season progresses.

Cotton harvest aids are used to remove mature and juvenile foliage, inhibit regrowth, open mature green bolls, and control weeds. Materials used include Def/Folex, Dropp, Harvade, sodium chlorate, Starfire, Prep (and other ethephon formulations), and Roundup. Combinations and sequences of various of these materials are often required to provide adequate harvest aid performance. Greatest emphasis is placed on harvest aids in areas of high productivity and areas of greatest perceived risk.