

**EVALUATION OF FINISH™ AS A HARVEST-AID
MATERIAL IN THE SOUTHEASTERN
COASTAL PLAIN**

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Abstract

The recent acreage expansion in the Southeastern U.S. has preceded the generation of necessary production information, such as harvest-aid responses, in this environment. The demand for such information has resulted in the development and marketing of harvest-aid products for the region. Finish, a pre-mix of ethephon and cyclanalide, is being marketed in the Southeast as a stand-alone product for defoliation, boll-opening, and terminal regrowth suppression. Reports from other regions of the belt indicate that Finish would have a good fit in the Southeast, but no reports have been generated from that region. Our treatments in 1994 through 1996 were: 1) untreated; 2) ethephon (Prep, SuperBoll, Ethephon), 1 lb/acre; 3) ethephon, 1.5 lb/acre; 4) Finish, 1 lb/acre; 5) Finish, 1.5 lb/acre; 6) ethephon, 1 lb/acre + tribufos (Def, Folex), 0.75 lb/acre; and 7) ethephon, 1 lb/acre + tribufos, 0.75 lb/acre + thidiazuron (Dropp), 0.05 lb/acre. Defoliation was rated visually at 3-4 days after treatment (DAT), 7-10 DAT, and 14 DAT. Percent open bolls were determined from 1-m boll counts at 7-10 DAT and 14 DAT. Terminal and basal regrowth were determined by calculating the percentage of ten consecutive plants per plot exhibiting regrowth greater than 1 cm in diameter. Lint yield and fiber properties were determined from machine-picked samples 14-18 DAT. In 1994, which was characterized by wet, cool conditions during the defoliation period, Finish was superior to the other treatments in terms of defoliation at 7 DAT. By 14 DAT, no differences were evident for defoliation among the chemical treatments. In 1995 and 1996, Finish was comparable to ethephon+tribufos and ethephon+tribufos+thidiazuron in defoliation activity throughout the defoliation period. No boll-opening response was detected in any year with any treatment. Finish was comparable to thidiazuron at inhibiting terminal regrowth. None of the treatments suppressed basal regrowth effectively. Treatment effects on fiber quality, particularly fiber yellowness, was variable from year to year. None of the other fiber properties were significantly influenced by harvest-aid treatment. Overall, these results indicate the performance of Finish as a harvest-aid for this region is comparable to our current standards.