

## **POTENTIAL FOR AIM AS A HARVEST AID IN COTTON**

**Alexander M. Stewart, Donnie L. Miller and P. Roy Vidrine**

**Louisiana State University**

**Alexandria and St. Joseph, LA**

**A. Stanley Culpepper**

**University of Georgia**

**Tifton, GA**

**Keith L. Edmisten**

**North Carolina State University**

**Raleigh, NC**

### **Abstract**

Aim (carfentrazone-ethyl) recieved a label for use as a cotton defoliant in 2001. Trials were conducted to test the efficacy of Aim as a cotton defoliant and/or as a desiccant for morningglories (*Ipomoea spp.*) at Alexandria and St. Joseph, LA in 2000 and 2001, Rocky Mount, NC in 2000 and 2001, and Moultrie, GA in 2001. Treatments varied by location. In general, Aim was evaluated alone, in combination with other labeled defoliants, and as a sequential application applied 7 days after an Aim alone or an Aim tankmix application. Treatments were initiated when cotton was at the 60-70% open boll stage. Aim applied in combination with other defoliants provided significantly better defoliation 14 days after application compared to Aim applied alone at the Louisiana locations in 2000 and 2001. However, in North Carolina in 2001 Aim alone was similar for defoliation to Aim tankmixes 14 days after treatment. Aim applied sequentially 7 days after an initial application generally provided equal or greater defoliation 14 days after treatment compared with other treatments. Morningglory leaf and vine desiccation with Aim alone was greater at 3, 5, and 7 days after treatment than Harvade or Harvade plus Prep at Alexandria in 2001. The addition of Prep to Aim did not improve morningglory desiccation compared to Aim alone. The addition of Aim to a tankmix with either Finish or Harvade improved morningglory leaf and vine desiccation at 3, 5, and 7 days after treatment compared to Harvade plus Finish at Moultrie, GA in 2001. Aim appears to have potential as a defoliant applied sequentially. However, its overall contribution to defoliation in tankmixes is questionable and seemed to be dependent on the maturity of the cotton. Aim appears to have good potential as a morningglory desiccant in situations where it is needed. No antagonism was observed between Aim and other defoliants, therefore the addition of Aim to a defoliation program where morningglories can hinder harvest is warranted. Future research should focus on Aim tankmixes for morningglory desiccation as well as economical analyses of Aim as a sequential.