

**EVALUATION OF CGA-248757
AS A COTTON DEFOLIANT/DESICCANT**

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Abstract

The cancellation of arsenic acid has renewed interest in the evaluation of new products as cotton (*Gossypium hirsutum*) defoliant and desiccants. CGA-248757 (*Fluthiacet-methyl*) a low rate contact herbicide with no soil activity was evaluated on cotton as a defoliant for three years at Texas A&M University and one year at other locations across the Cotton Belt. CGA-248757 induces accumulations of protoporphyrins in the cotton leaves which leads to irreversible damage to cell membranes and cell function. Desiccation generally occur within one hour. However, studies show that application of CGA-248757 induces ethylene production and promotes leaf drop in 7-10 days. In 1995 field trials, CGA-248757 at 1.3 to 9.6 g ai/A provided leaf drop equal to or better than Def/Folex. CGA-248757 was also slightly superior to Cyclone for desiccation and leaf drop.