CGA-248757 (*FLUTHIACET-METHYL*) - INFLUENCE OF ADJUVANTS ON COTTON DEFOLIATION

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Abstract

Cotton (*Gossypium hirsutum L.*) defoliation is a very challenging process which requires proper application, timing and coverage of the crop. Defoliants are used alone, sequentially, and in combination, with products having different modes of action, (hormonal/herbicidal) to accomplish effective defoliation. Generally, most herbicidal-type defoliants require some type of adjuvants or spreader-sticker to enhance their activity. CGA-248757 (*Fluthiacet-methyl*), a herbicidal-type product, has demonstrated effective defoliation when used alone, sequentially or in combination, with hormone-type defoliants. CGA-248757 is a PPO inhibitor which disrupts cell function and causes irreversible damage to cell membranes. The activity is visible within hours after application and leaf removal occurs 7-10 days following the initial treatment. Agridex (COC) has been used to enhance the activity of CGA-248757. In 1998, field studies were conducted in GA, TN, MS, TX and CA to determine the effect of different adjuvants on the performance of CGA-248757. Agridex, Scoil, Kinetic, X-77, Eth-N-Gard, and Dyne-Amic were evaluated at recommended rates using CGA-248757 at 5 g ai/ha. The data indicate that all adjuvants increased the performance of CGA-248757 with no significant difference between adjuvants.

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