

CHEMICAL TERMINATION -- 1

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Combination of thidiazuron plus chlorflurenol in small plot tests was equal to dicamba plus chlorflurenol in reducing the flowering rate and number of green bolls. Thidiazuron alone or with ethephon was not as effective. Dicamba caused leaves to dry on the plant and "freeze" (did not fall when defoliation treatment was applied). Chlorflurenol caused reddening of leaves. No phytotoxic effects due to thidiazuron or ethephon were observed.

CHEMICAL TERMINATION -- 2

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Chlorflurenol at 0.56 kg/ha, alone or in combination with ethephon at four concentrations from 0.14 to 1.12 kg/ha or thidiazuron at three concentrations from 0.0056 to 0.056 kg/ha and a combination of thidiazuron at 0.022 kg/ha plus ethephon at 0.56 kg/ha, drastically reduced late-season cotton fruiting without causing problems with harvest. The combination of chlorflurenol plus ethephon was the most effective in reducing the numbers of green bolls present on plants on October 13-15. Ethephon, thidiazuron, naptalam, dinoseb, and maleic hydrazide alone, either did not reduce green boll numbers or did not decrease them sufficiently to meet test objectives. Dicamba at 0.056 kg/ha, in combination with chlorflurenol, at 0.56 kg/ha, prevented normal drop of undeveloped bolls and prevented defoliation following the application of defoliants, as reported in 1981. Pink bollworm larvae diapaused in significant numbers from bolls sampled on September 22 or later. Average lint yield on October 26-28 was estimated at 1230 kg/ha (2.2 ba/acre) and was unaffected by treatment. Yield would have been significantly higher on the treatments that did not terminate fruiting if the green bolls had been permitted to open.