

Table 1. Visual estimates of percent defoliation of DPL 55 cotton treated with four defoliation conditioning treatments (2-5) applied on September 30, 1981 and two defoliation treatments applied on October 1, 1981 followed by farm defoliation with 2 gallons of sodium chlorate plus 1 pint of accelerate applied on October 10, 1981 at the Marana Experimental Farm, Marana, Arizona.

Treatment	Application rate, lbs./acre	Percent defoliated				
		10/9	10/12	10/13	10/19	Mean 10/12, 13, 19
		-----Days from farm defoliation-----				
		<u>- 1</u>	<u>2</u>	<u>3</u>	<u>9</u>	
1. Untreated check		2d*	17c	20c	70c	40b
2. Roundup	0.5	7d	18c	28c	75bc	45b
3. Ethrel	1.0	11d	40b	36bc	78b	54b
4. Harvade+UBI-]262	0.25 + 3 oz.	37b	71a	64a	90a	75a
5. Dropp	0.05	27c	72a	62a	90a	75a
6. Paraquat+Intensify+ X-77	0.125+2.0+.05%	41b	63a	53ab	89a	70a
7. Paraquat+Intensify+ X-77	0.25+2.0+.05%	51a	78a	71a	92a	81a

*Means within a column are not different at the 5% confidence level if followed by the same letter.

Use Of Ethrel As Harvest Aid

C. R. Farr

Summary

Recently the growth regulator Ethrel has been used to aid defoliation and has been reported to open bolls more rapidly. Ethrel was applied at one - pint and one-quart rates in a 20-gallon mix by ground applicator on October 24 and followed with defoliation five days later. First harvest at the one-pint rate yielded over 300 pounds more lint than the control or the one-quart rate.

Hayden Farms-Buckeye							
Treatment		1	Seed Cotton Per Plot			Ave	Lbs. Lint Per Acre
			2	3	4		
1 pt. Ethrel	-1st	1960	2090	1760	2080	1973	1967
	-2nd	205	140	155	125	156	<u>133</u>
						Total	2100
Check	-1st	1820	1670	1670	1760	1730	1677
	-2nd	135	155	130	120	135	<u>114</u>
						Total	1791
1 qt. Ethrel	-1st	1870	1540	1780	1560	1688	1670
	-2nd	135	135	125	140	134	<u>114</u>
						Total	1784