



COTTON HARVEST AID PERFORMANCE DEMONSTRATION

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Nueces County, 2011

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Summary

A total of twenty two different treatments were applied to the cotton variety FM 955 LLB2 to evaluate their leaf drop and harvest aid effectiveness in a strip test located on FM 2826, Southeast of Robstown. A six and eleven day after treatment rating were taken with treatment costs ranging from a low of \$1.76/acre to a high of \$16.47/acre.

Objective

To evaluate the effectiveness of selected harvest aid treatments in preparing cotton for harvest.

Materials and Methods

Treatments were established in a strip test of dryland cotton on 30-inch row spacing, with each plot 150 feet in length. Defoliation treatments were applied July 1, 2011 with a self-propelled sprayer delivering 11 gallons per acre. Treatments were applied from 9:00 A.M. to 10:00 A.M. The broadcast application was made with Turbo TeeJet 11002 nozzle tips on 20-inch spacing. The cotton variety was FM 955 LLB2, and had about 50% open bolls at time of initial treatment. Average plant height was 28 inches. Defoliation ratings were taken six and eleven DAT. A small rain event occurred on 7/10/11 with 0.16 inch.

Results and Discussion

Crop growing conditions throughout the season were good however rainfall during the season was below normal. Results are recorded in Table 1 and Table 2.

Table 1. Comparison of percent defoliation, desiccation, green leaf and price between treatments, July 7, 2011 (6 DAT), Otahal Farm, Nueces County.

Trt. No.	Treatment Name	Product Rate	Estimated Cost *	Defoliation (%)	Desiccation (%)	GrnLeaf (%)
1	Liquid Dropp	1.6 oz/A	\$1.81	60	0	40
2	Liquid Dropp	2.4oz/A	\$2.71	75	0	25
3	Liquid Dropp	3.2 oz/A	\$3.20	85	0	15
4	Ginstar	1.0 oz/A	\$1.76	50	1	49
5	Ginstar	2.0 oz/A	\$3.53	85	1	14
6	Ginstar	3.0 oz/A	\$5.29	70	2	28
7	Ginstar	4.0 oz/A	\$7.06	78	2	20
8	Untreated			15	0	85
9	Liquid Dropp Def/Folex	1.6 oz/A 4.0 oz/A	\$3.81	90	1	9
10	Liquid Dropp Aim NIS	1.6 oz/A oz/A 0.25 % v/v	\$4.13	70	10	20
11	Liquid Dropp ET Crop Oil Concentrate	1.6 oz/A 1.5 oz/A 1.0 % v/v	\$7.04	60	15	25
12	Liquid Dropp Ethephon/Prep	1.6 oz/A 16.0 oz/A	\$5.31	88	5	7
13	Liquid Dropp Ethephon/Prep	1.6 oz/A 21.0 oz/A	\$6.40	85	3	12
14	Liquid Dropp Finish 6 Pro NIS	1.6 oz/A 16.0 oz/A 0.25 % v/v	\$10.49	93	5	2
15	Liquid Dropp Finish 6 Pro NIS	1.6 oz/A 21.0 oz/A 0.25 % v/v	\$12.99	88	8	4
16	Ginstar Finish 6 Pro NIS	3.0 oz/A 16.0 oz/A 0.25 % v/v	\$13.97	77	20	3
17	Ginstar Finish 6 Pro NIS	3.0 oz/A 21.0 oz/A 0.25 % v/v	\$16.47	73	25	2
18	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A oz/A 16.0 oz/A 0.25 % v/v	\$12.35	66	30	4
19	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A 2.00 oz/A 16.0 oz/A 0.25 % v/v	\$14.02	68	30	2
20	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A 3.0 oz/A 16.0 oz/A 0.25 % v/v	\$15.78	83	15	2
21	Liquid Dropp Def/Folex Ethephon /Prep	1.60 oz/A 4.0 oz/A 16.0 oz/A	\$7.31	90	5	5
22	Liquid Dropp Def/Folex Finish 6 Pro NIS	1.6 oz/A 4.0 oz/A 16.0 oz/A 0.25 % v/v	\$12.49	94	4	2

Table 2. Comparison of percent defoliation, desiccation, green leaf and price between treatments, July 12, 2011 (11 DAT), Otahal Farm, Nueces County.

Trt. No.	Treatment Name	Product Rate	Estimated Cost *	Defoliation (%)	Desiccation (%)	GrnLeaf (%)
1	Liquid Dropp	1.6 oz/A	\$1.81	89	1	10
2	Liquid Dropp	2.4oz/A	\$2.71	94	1	5
3	Liquid Dropp	3.2 oz/A	\$3.20	94	1	5
4	Ginstar	1.0 oz/A	\$1.76	79	1	20
5	Ginstar	2.0 oz/A	\$3.53	85	1	14
6	Ginstar	3.0 oz/A	\$5.29	87	1	12
7	Ginstar	4.0 oz/A	\$7.06	91	1	8
8	Untreated			15	0	85
9	Liquid Dropp Def/Folex	1.6 oz/A 4.0 oz/A	\$3.81	95	1	4
10	Liquid Dropp Aim NIS	1.6 oz/A 1.0 oz/A 0.25 % v/v	\$4.13	86	2	12
11	Liquid Dropp ET Crop Oil Concentrate	1.6 oz/A 1.5 oz/A 1.0 % v/v	\$7.04	86	2	12
12	Liquid Dropp Ethepon/Prep	1.6 oz/A 16.0 oz/A	\$5.31	88	3	9
13	Liquid Dropp Ethepon/Prep	1.6 oz/A 21.0 oz/A	\$6.40	87	1	12
14	Liquid Dropp Finish 6 Pro NIS	1.6 oz/A 16.0 oz/A 0.25 % v/v	\$10.49	96	1	3
15	Liquid Dropp Finish 6 Pro NIS	1.6 oz/A 21.0 oz/A 0.25 % v/v	\$12.99	95	1	4
16	Ginstar Finish 6 Pro NIS	3.0 oz/A 16.0 oz/A 0.25 % v/v	\$13.97	88	10	2
17	Ginstar Finish 6 Pro NIS	3.0 oz/A 21.0 oz/A 0.25 % v/v	\$16.47	91	6	3
18	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A 1.0 oz/A 16.0 oz/A 0.25 % v/v	\$12.35	92	6	2
19	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A 2.00 oz/A 16.0 oz/A 0.25 % v/v	\$14.02	91	8	1
20	Liquid Dropp Ginstar Finish 6 Pro NIS	1.6 oz/A 3.0 oz/A 16.0 oz/A 0.25 % v/v	\$15.78	95	4	1
21	Liquid Dropp Def/Folex Ethepon /Prep	1.60 oz/A 4.0 oz/A 16.0 oz/A	\$7.31	94	1	5
22	Liquid Dropp Def/Folex Finish 6 Pro NIS	1.6 oz/A 4.0 oz/A 16.0 oz/A 0.25 % v/v	\$12.49	96	2	2

*Estimated cost is for educational purposes only and prices listed are not actual “carry out” prices. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied

Conclusions

In this dry year, most all treatments worked well and very inexpensive treatments worked just as well as the more expensive treatments. Each year the cotton crop responds differently to harvest aids, as environmental conditions are always different, thus the need to evaluate these products on an annual basis.

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