

NEW AVAILABLE CHEMICALS

Percentage Leaf-Drop	Chemicals	Rate per Acre
70 a ^{1/}	Tumbleaf + SN 572	5 lbs. + 1 pt.
68 ab	DROPP + SN 572	.3 lb. + 1 pt.
68 ab	DROPP + Surf.*	.3 lb.
65 ab	Tumbleaf + Surf.*	5 lbs.
61 b	Harvade + Surf.*	8 oz.
61 b	Harvade + SN 572	8 oz. + 1 pt.

* Surfactant X-77 @ .5% v/v

C.V. Leaf-Drop: 5.9%

^{1/} Values followed by the same letter are not significantly different at the .05 level by the Student-Newman-Keul's Test.

SDF 2286 TEST

Percentage ^{1/} Leaf-Drop	Chemicals	Rate per Acre
81	SDF 2286 + DEF + Surf.*	1.8 lb. + 1 1/2 pts.
71	SDF 2286 + DEF + Surf.	.9 lb. + 1 1/2 pts.
69	SDF 2286 + DEF + Surf.	.45 lb + 1 1/2 pts.
69	SDF 2286 + Surf.	1.8 lb.
58	SDF 2286 + Surf.	.9 lb.
53	SDF 2286 + Surf.	.45 lb.
31	Check	-

* Surfactant X-77 @ .1% v/v on all treatments. ^{1/}Only 2 reps

ETHREL TEST

Percentage Leaf-Drop	Chemicals	Rate per Acre
64 a ^{1/}	DEF + Surf.*	1 1/2 pts.
59 a	ETHREL + Surf.	4 qts.
58 a	ETHREL + Surf.	2 qts.
31 b	Check	-

* Surfactant X-77 @ .1% v/v on all treatments.

C.V. Leaf-Drop: 21.6%

^{1/} Values followed by the same letter are not significantly different at the .05 level by the Student-Newman-Keul's Test

1982 Harvest-Aid Chemical Research at Yuma

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Commercially available harvest-aid chemicals often do not perform up to their expectations in defoliation of cotton fields. Second applications of harvest-aid chemicals are commonly necessary in cotton produced under irrigation in Arizona.

Research is being continued to study the response of chemical adjuvants for enhancing the performance of harvest-aid chemicals. In 1982, 14 experiments were conducted at the University of Arizona Yuma Valley Experiment Station. A total of 36 different chemical adjuvants were tested alone and in various combinations. Testing began on 10 Sept. 1982 with chemicals applied to the last experiment on 8 November 1982. The range of weather involved over this period resulted in a good set of conditions to retest promising chemicals or combinations.

Several chemicals have been very effective in enhancing defoliation. This research will be continued in 1983. Additional chemicals will be screened and compared with the best adjuvants or combinations tested in 1982.