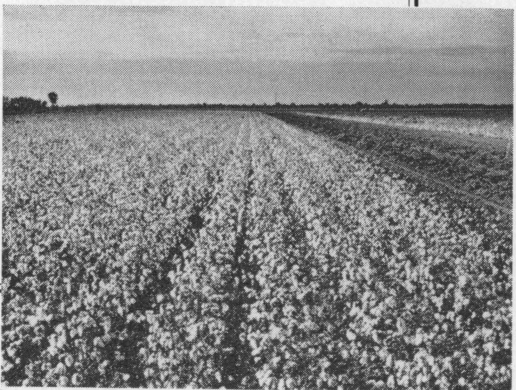


Cotton Defoliation Guide

FOR TEXAS



1956

GUIDE FOR 1956 USE OF DEFOLIANTS

Chemical name	Name of defoliant	Percent active ingredient(s)	Rate per acre	Dilution information
— DUSTS —				
Calcium cyanamide	AERO cyanamid Special grade	57%	30-40 lb.	None
— SPRAYS —				
Amino triazole	Amino Triazole Defoliant and Growth Inhibitor	90%	1½-2 lb. alone or ¾-1 lb. in mixture	Apply in 5-10 gal. water by air, 15 or more gal. water by ground sprayer. Mix with ½ the recommended rate of other water soluble defoliant and apply at above rate or follow instructions on label.
	Meeno	90%	1½-2 lb. alone or ¾-1 lb. in mixture	Same as above.
Endothal	Niagarathal D-F Spray	6.3%	4-5 qt.	5-10 gal. water per acre by air, 10-25 gal. by ground equipment. Use activator as directed.
	Penco Endothal Harvest Aid	6.3%	4-5 qt.	5-10 gal. water per acre by air, 10-25 gal. by ground applicator.
Magnesium chlorate (hexahydrate)	Magron	40%	2-3½ qt.	5-10 gal. water per acre by air, 20-30 gal. by ground applicator.
	General Chemical E-Z Off Liquid Defoliant	18.15%	1½-2 gal.	5-7 gal. water per acre by air, 15-20 by ground.
	Niagara M-C Defoliant	58%	7-10 lb.	5-10 gal. water per acre by air, 15-25 by ground.
	Penco De-fol-ate	60%	7-10 lb.	5-10 gal. water per acre by air, 10-30 gal. by ground.
	Ortho M-C	58%	7-10 lb.	10 gal. water per acre by air, 10-20 gal. by ground.
Sodium ethyl xanthate	S.E.X.	90%	4-8 lb.	Use enough water to wet plants, or follow instructions on label.
Sodium chlorate-Sodium pentaborate	Shed-A-Leaf 'L'	18%	6-8 qt.	7-10 gal. water per acre by air, 20-30 gal. by ground.
	Chlorate-Borate Liquid Defoliant	40-52%	1½-2 gal.	Same as above or follow label instructions.
Sodium chlorate-sodium pentaborate sodium tetraborate	Ortho C-1 Defoliant	40-45-11%	5-10 lb.	5-10 gal. water per acre by air, 10-15 gal. by ground.
Sodium chlorate (Sodium metaborate)	Fall	18.5%	1½-2 gal.	Mix with water to give good coverage or follow instructions on label.
	Drop-Leaf	18.5-12%	1½-2 gal.	Same as above.
— DESICCANTS FOR STRIPPER HARVEST —				
Pentachlorophenol*	Leaf-Kil	38-2.0-30-30%	2 qt.	Add to 4½ gal. diesel fuel or kerosene. Apply this 5 gal. with 3 nozzles per row at 40 p.s.i. at tractor speed of 4 mi. per hour.
	Golden Harvest Crop Dryer	44%	2-3 qt.	Dilute with enough colorless fuel oil No. 2 to give uniform coverage or follow label instructions.
	Permaguard Defoliant Concentrate	40%	2 qt.	3-6 gal. diluted solution per acre using distillate, fuel oil, diesel oil or kerosene.
	Stauffer Penta Concentrate	40%	3-6 qt.	Dilute 1-10 gal. with No. 2 diesel oil (rates are for diluted solution) or follow label instructions.

*Pentachlorophenol is primarily a desiccant rather than a true defoliant. Because of its severe action on plant tissues it should not be used on immature cotton. Use only when all bolls are fully mature and cotton is 90 percent open.

When to Apply: Defoliant, dusts or sprays should be applied at least 35 days after the period of maximum flower load. This permits maximum staple length development. Another way to time the application of defoliant would be 30 days after cotton quits making 'cut out' or when the youngest bolls expected to make cotton are 30 days old. Application should also be made 10 days or 2 weeks prior to intended picking date in Central and South Texas, and 2 to 3 weeks on the High Plains. When 50 percent or more of the bolls are open, it is safe for most defoliant to be applied. "Penta" applications should be made when about 90 percent of the bolls are open.

1. DUST DEFOLIANTS

Use Calcium Cyanamide when plants are wet with dew or adequate dew is forecast. Material must remain in moisture on the leaf for at least 2 hours; 4 or more hours of moist exposure are preferred.

2. SPRAY DEFOLIANTS

Spray defoliant may be used in the absence of dews and at low humidities. Thorough coverage is essential.

Airplane spraying: Apply at rates given below. Swath widths should be limited to the wing spread of the plane. For uniform applications, a flag man is essential.

Ground spraying: Use rates given below. Use in at least 25 gallons of water, depending on type of sprayer and extent of plant growth. Use fenders on tractor equipment in rank cotton.

More efficient defoliation is obtained when cotton is mature with leaves in a condition of activity, not wilted, and not toughened by drouth or starved by lack of fertility, and where plant moisture is adequate, weather warm and humid. Make full use of all weather information, such as dew and humidity forecasts, temperature, wind velocity, rainfall, etc., from radio stations.

Cautions: Defoliate only enough acreage to stay ahead of harvesting. A second application may be necessary in unusually rank cotton, or if plants are immature. This should be after leaves have fallen from the first application, usually 7-10 days. Read carefully and follow the precautions printed on the container labels. Do not use any defoliant that is not labeled as to exact chemical content. Unknown defoliants may injure open fiber, unopen bolls or cause fire hazards at the gin. Wait 2 weeks before operating stripper harvesters after applying "Penta" desiccants.

Care of Equipment: Before beginning application, it is suggested that spray tanks, pumps, lines and nozzles be thoroughly cleaned to remove sticky residues left by liquid insecticides. Flush spray machines with water after each day's operation.

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