

COTTON – FOLIAR DISEASES

Travis Faske

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
Target Spot (<i>Corynespora cassiicola</i>)	Chemical Control of Leaf Spot Diseases: Research results from other states suggest fungicides need to be applied as early as the 1st week after bloom or by the 3rd week after bloom. Two applications appear to be the most effective. Yield responses more often occur with fields with a history of severe target spot, disease severity is great enough to result in defoliation levels of 30% to 50% by the 2nd or 3rd week of August, and irrigation or rainfall suggest continued increase in severity of disease. Until we know more about the disease and performance of these products in the mid-South, it is recommended to include a non-sprayed check.					
	Headline 2.09 SC	pyraclostrobin	11	6 - 12 fl oz	30	
	Quadris 2.08 SC	azoxystrobin	11	6 - 9 fl oz	45	
	Topguard EQ 4.29 SC	azoxystrobin + flutriafol	11 + 3	5 - 7 fl oz	45	
	Priaxor 4.17 SC	pyraclostrobin + fluxapyroxad	11 + 7	4 - 8 fl oz	30	
	Elatus 45 WG	azoxystrobin + benzovindiflupyr	11 + 7	6 - 7.3 fl oz	45	

COTTON – NEMATODES

Travis Faske

Nematode	Nematicide	Formulation	Active Ingredient	Rate/Acre	Comments
Root-knot and Reniform	Avicta 500 FS ¹	Seed treatment	abamectin	0.15 mg ai/seed	Available through commercial seed companies and dealer distributors.
	Avicta Elite Cotton ¹ + Vibrance	Seed treatment	azoxystrobin + fludioxonil + mefenoxam thiamethoxam + abamectin imidacloprid sedaxane	0.03 mg ai/seed 0.53 mg ai/seed 0.375 mg ai/seed 0.0096 mg ai/seed	Available through commercial seed companies and dealer distributors. Rate based on 5,500 seed/lb.
	Aeris 5 FS ¹	Seed treatment	thiodicarb + imidacloprid	0.75 mg ai/seed	Available through commercial seed companies and dealer distributors.
	Poncho/Votivo 5.01 FS ¹	Seed treatment	clothianidin + <i>Bacillus firmus</i> I-1582	0.424 mg ai/seed	Commercial seed treatment equipment only.
	COPeO Prime ¹	Seed treatment	fluopyram	0.2 mg ai/seed	Available through commercial seed companies and dealer distributors.
	Velum Total 3.67 L ¹	Liquid	fluopyram + imidacloprid	14 - 18 fl oz	Apply as in-furrow spray with 5 - 6 gal/ac water at planting.
	Telone II 9.85 L ²	Liquid	1,3-dichloropropene	3 - 6 gal	Inject 12 inches below planting depth and seal immediately with appropriate bedding equipment. Wait 7 - 14 days before planting.
	AgLogic 15GG ¹	Granule	aldicarb	3.5 - 7 lb/A	Apply granules in the seed furrow and immediately cover seed and granules with 1 inch or more of soil.

¹Use where nematode pressure is low to moderate. ²Use where nematode pressure is severe.

RESTRICTED USE PESTICIDES – For sale and use only by licensed/certified applicators or persons under their direct supervision. **These are dangerous pesticides – use caution in handling and read and follow current label directions.** If nematodes are suspected to be causing problems, a diagnostic soil sample should be taken to your county agent for submission to the Cooperative Extension Service Nematode Diagnostic Laboratory. **A small fee is required.**

COTTON – SEEDLING DISEASES

Terry Spurlock

Chemical Control of Seedling Diseases of Cotton in Arkansas:

1. All cotton seed planted in Arkansas should be treated commercially.
2. Under conditions that favor seedling diseases, additional stand protection may be received from the use of in-furrow fungicides when planting treated seed (treated seed + in-furrow combination).
3. The following products are commonly used in Arkansas cotton production to control seedling diseases.

Disease	Product	Active Ingredient	FRAC Code	Rate/cwt	
Commercial Seed Treatments or Distributor-Applied Seed Treatments					
Pythium and Rhizoctonia diseases; fungal seed rots	Vortex 3.77 FS +	ipconazole +	3	0.08 fl oz +	
	Spera 240 FS +	myclobutanil +	3	1.8 fl oz +	
	Allegiance 2.6 FL	metalaxyl	4	0.75 fl oz	
	Systhane 40 WSP +	myclobutanil +	3	1.25 oz +	
	Maxim 4 FS +	fludioxonil +	12	0.08 fl oz +	
	Apron XL 3 SC	mefenoxam	4	0.32 fl oz	
	Dynasty CST 1.04 FS	azoxystrobin + fludioxonil + mefenoxam	11 + 12 + 4	0.03 mg ai/seed	
	Avicta Complete Cotton		azoxystrobin + fludioxonil + mefenoxam	11 + 12 + 4	0.03 mg ai/seed
			thiamethoxam +	---	0.34 mg ai/seed
			abamectin	---	0.15 mg ai/seed
	Seed Shield Cotton 0.5 FS	azoxystrobin + fludioxonil + mefenoxam	11 + 12 + 4	4 oz/cwt	
	Trilex Advanced 2.5 F	trifloxystrobin + metalaxyl + triadimenol	11 + 4 + 3	1.6 fl oz	
	EverGol Prime 2 FS	penflufen	7	0.64 fl oz	
Vibrance 4.3 FS	sedaxane	7	0.3 fl oz		
In-Furrow Applications					
Pythium and Rhizoctonia diseases; fungal seed rots	Reason 500 SC	fenamidone	11	0.45 fl oz per 1,000 row ft	
	Uniform 3.72 SC	azoxystrobin + mefenoxam	11 + 4	0.32 - 0.48 fl oz per 1,000 row ft	
	Headline 2.09 SC	pyraclostrobin	11	0.3 - 0.8 fl oz per 1,000 row ft	
	Quadris 2.08 SC	azoxystrobin	11	0.4 - 0.7 fl oz per 1,000 row ft	
	Priaxor 4.17 SC	pyraclostrobin + fluxapyroxad	11 + 7	0.1 - 0.6 fl oz per 1,000 row ft	