

COTTON – FOLIAR DISEASES

Travis Faske

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
Target Spot (<i>Corynespora cassicola</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	
	Miravis Top 1.67 SC	difenoconazole + pydiflumetofen	3 + 7	13.6	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	
	Amistar Top 1.67 SC	azoxystrobin + difenconazole	11 + 3	8 - 11.6 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 FS ¹	Seed treatment	clothianidin + <i>Bacillus firmus</i> I-1582	0.424 mg ai/seed	Commercial seed treatment equipment only.
	BioST Nematicide 100 ¹	Seed treatment	<i>Burkholderia</i> spp. A396	7 fl oz/cwt	
	Copeo 600 FS ¹	Seed treatment	fluopyram	0.2 - 0.3 mg ai/seed	Available through commercial seed company (BASF). 5.07 to 7.61 fl oz/cwt.
	Velum 4.16 SC ¹	Liquid	fluopyram	5 to 6.8 fl oz/A	Apply as in-furrow spray with 5 - 6 gal/ac waster 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 + fludioxonil + mefenoxam	3	1.25 oz +
	Maxim 4 FS + Apron XL 3 SC		12	0.08 fl oz +
			4	0.32 fl oz
	Vibrance CST 1.65 FC	azoxystrobin + fludioxonil + mefenoxam + sedaxane	11 + 12 + 4 + 7	3.06 - 4.08 fl oz/cwt 0.040 - 0.053 mg ai/seed based on 45000 seed/lb
	Avicta Elite Cotton Plus Vibrance CST	azoxystrobin + fludioxonil + mefenoxam + sedaxane + thiamethoxam + imidacloprid + abamectin	11 + 12 + 4 + 7	0.03 + 0.0096 + 0.34 + 0.375 + 0.15 mg ai/seed
	Seed Shield Cotton 0.5 FS	azoxystrobin + fludioxonil + mefenoxam + difenoconazole	11 + 12 + 4 + 3	4 oz/cwt based on 5000 seeds/lb
In-Furrow Applications				
	Vibrance 4.3 FS Vibrance CST 1.65 FC	sedaxane	7	0.3 fl oz
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
Fusarium diseases	Velum 4.16 SC	fluopyram	7	5.0 – 6.84 fl oz per acre