## **COTTON – FOLIAR DISEASES**

Travis Faske

Disease		Fungicide		Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments			
Target Spot (Corynespora cassiicola)		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 fl oz	45				
		Revylok 3.33 SC		mefentrifluconazole + fluxapyroxad	3 + 7	4.5 - 6.5 fl oz	: 14				
		Topguard EC	2 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 W		azoxystrobin + benzovindiflupyr	11 + 7	6 - 7.3 fl oz	45				
		Amistar Top	1.67 SC	azoxystrobin + difenoconazole	11 + 3	8 - 11.6 fl oz	45				
		Revytek 3.33	B SC	mefentrifluconazole + fluxapyroxad + pyraclostrobin	3 + 7 + 1	1 8 – 15 fl oz	21				
COTTON – NEMATODES Travis Faske											
Nematode	Nematicide	e	Formulation	Active Ingredient		Rate/Acre	C	omments			
Root-knot and Reniform	Avicta 500 FS <sup>1</sup>		Seed treatment	abamectin		0.15 mg ai/seed	Available through com dealer distributors.	mercial seed companies and			
	Avicta Elite Cotton <sup>1</sup> + Vibrance		Seed treatment	azoxystrobin + fludioxonil + me thiamethoxam + abamectin imidacloprid sedaxane	efenoxam	0.03 mg ai/seed 0.53 mg ai/seed 0.375 mg ai/seed 0.0096 mg ai/seed	Available through com dealer distributors. Ra	mercial seed companies and te based on 5,500 seed/lb.			
	Aeris 5 FS <sup>1</sup>		Seed treatment	thiodicarb + imidacloprid		0.75 mg ai/seed	Available through com dealer distributors.	mercial seed companies and			
	Poncho/Votivo 5 FS <sup>1</sup>		Seed treatment	clothianidin + Bacillus firmus I-	1582	0.424 mg ai/seed	Commercial seed trea	tment equipment only.			
	BioST Nematicide 100 <sup>1</sup>		Seed treatment	Burkholderia spp. A396		7 fl oz/cwt					
	Trunemco		Seed treatment	Bacillus amyloliquefaciens stra MBI 600 + cis-Jasmone	ain	0.06 – 0.31 fl oz/cwt	0.31 fl oz/cwt has bee	n used in university trials.			
	Copeo 600 FS <sup>1</sup>		Seed treatment	fluopyram		0.2 - 0.3 mg ai/seed	Available through com (BASF). 5.07 to 7.61 f	imercial seed company l oz/cwt.			
	Velum 4.16 SC <sup>1</sup>		Liquid	fluopyram		5 - 6.8 fl oz/A	Apply as in-furrow spra planting	y with 5 - 6 gal/ac water at			
	Telone II 9.85 L <sup>2</sup>		Liquid	1,3-dichloropropene		3 - 6 gal	Inject 12 inches below immediately with appr Wait 7 - 14 days befor	planting depth and seal opriate bedding equipment. e planting.			
	AgLogic 15GG <sup>1</sup>		Granule	aldicarb		3.5 - 7 lb/A	Apply granules in the cover seed and granu	seed furrow and immediately les with 1 inch or more of soil.			

<sup>1</sup>Use where nematode pressure is low to moderate. <sup>2</sup>Use where nematode pressure is severe.

**<u>RESTRICTED USE PESTICIDES</u>** – 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

13

## **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 + Spera 240 FS + Allegiance 2.6 FL	ipconazole + myclobutanil + metalaxyl	3 3 4	0.08 fl oz + 1.8 fl oz + 0.75 fl oz					
	Systhane 40 WSP + Maxim 4 FS + Apron XL 3 SC	myclobutanil + fludioxonil + mefenoxam	3 12 4	1.25 oz + 0.08 fl oz + 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					
Pythium diseases only	Vayantis 3.3 FC	picarbutrazox	U17	0.0384 – 0.384 fl. oz/cwt					
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 Uniform 3.72 SC	fenamidone azoxystrobin + mefenoxam	11 11 + 4	0.45 fl oz per 1,000 row ft 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					