

COTTON SEEDLING DISEASES

Cliff Coker, Terry Kirkpatrick and Craig Rothrock

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. If an in-furrow fungicide cannot be used under these conditions, a planter-box seed treatment can be used (treated seed + planter-box treatment). Thorough coverage is essential for planter-box treatments to be effective; however, planter-box treatments are considered less effective than granules or in-furrow sprays overall.
4. The following products are commonly used in Arkansas cotton production to control seedling diseases.

Commercial Seed Treatment	Product	Active Ingredient	FRAC Code*	Rate/cwt ¹
Pythium and Rhizoctonia diseases; fungal seed rots	Vortex +	ipconazole +	3	0.08 fl oz +
	Baytan +	triadimenol +	3	0.5 fl oz +
	Allegiance FL (formerly Apron)	metalaxyl	4	0.75 fl oz
	Systhane 40WP +	myclobutanil +	3	1.25 oz +
	Maxim 4FS +	fludioxonil +	12	0.08 fl oz +
	Apron XL LS	mefenoxam	4	0.32 fl oz
	Dynasty CST	azoxystrobin + fludioxonil + mefenoxam	11 + 12 + 4	0.03 mg ai/seed
Seed Shield	azoxystrobin + fludioxonil + mefenoxam	11 + 12 + 4	4 oz/cwt	
Trilex Advanced	trifloxystrobin + metalaxyl + triadimenol	11 + 4 + 3	1.6 fl oz	
Planter-Box or Distributor-Applied Seed Treatment				
Pythium and Rhizoctonia diseases; fungal seed rots	Trilex Advanced	trifloxystrobin + metalaxyl + triadimenol	11 + 4 + 3	1.6 fl oz
In-Furrow Application				Rate
Pythium and Rhizoctonia diseases; fungal seed rots	Reason 500SC	fenamidone	11	0.45 fl oz per 1,000 row ft
	Uniform ²	azoxystrobin + mefenoxam	11 + 4	0.32 - 0.48 fl oz per 1,000 row ft
	Headline ²	pyraclostrobin	11	0.3 - 0.8 fl oz per 1,000 row ft

***FRAC Code** – Fungicides with the same FRAC Code have the same mode of action. See <http://www.frac.info/frac/index.htm> for an explanation of the FRAC Codes. Rotation of fungicides with different FRAC Codes could minimize the development of fungicide-resistant strains.

¹The high rate should be used in fields with severe disease history.

²Please refer to label for specific restrictions and application instruction.