# PEANUT SEEDLING DISEASES

### **Travis Faske**

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/cwt Seed	Comments
Seed Treatments					
<i>Rhizoctonia solani</i> and <i>Pythium</i> spp.	Dynasty PD	azoxystrobin + mefenoxam + fludioxonil	11 + 4 + 12	3 - 4 oz	
	Maxim 4 FS	fludioxonil	12	0.08 oz	
	Rancona V PD	ipconazole + carboxin + metalaxyl	3 + 7 + 4	4 oz	
	Vibrance	sedaxane	7	0.013 - 0.053 mg ai/seed	For control of rhizoctionia seedling diseases.
Pythium	Apron XL	mefenoxam	4	0.32 oz	
In-Furrow or Band Applications					
Aspergillus crown rot <i>(Aspergillus</i> niger) Pythium spp. Rhizoctonia solani	Abound 2.08 SC (multiple generics)	azoxystrobin	11	0.4 - 0.8 fl oz/ 1,000 row ft or 5.5 - 11 fl oz/A on 38 in. row spacing	Apply in-furrow at planting.
<i>Rhizoctonia solani</i> and <i>Pythium</i> spp.	Uniform	azoxystrobin + mefenoxam	11 + 4	0.34 oz/row ft	At planting.
Southern Blight (Sclerotium rolfsii)	Proline	prothioconazole	3	5.7 oz/A	Apply 4- to 6-inch band over the row at or near emergence

## **PEANUT FOLIAR DISEASES**

#### **Travis Faske**

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
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### Leaf Spots

#### Chemical Control of Leaf Spot Diseases:

1. In any given field, circular-shaped spots can be found on peanut leaves; however, these spots may not be caused by the leaf spot pathogens. Sporulation (fuzzy tufts of fungal structures) can be seen with the aid of a hand lens on the upper leaf surfaces for ELS and lower leaf surface for LLS.

2. Fungicides on peanut are applied to prevent leaf spot disease development, which typically begins 60 days after planting, when conditions favor disease development. Fungicide programs consist of repeated applications at 14 - 21 day intervals depending on disease development and weather conditions.

3. Apply fungicides with sufficient water volume (15 to 20 GPA) to adequately cover foliage.

4. Do not make consecutive applications of the same mode of action (i.e., same FRAC code number) except for those applications that contain chlorothalonil in a cropping season. It is recommended to tank mix fungicides with a single mode of action with chlorothalonil.

Early leaf spot (Cercospora arachidicola)	Cercobin	thiophanate-methyl	1	10.9 fl oz	14	Very good activity on leaf spot diseases. ALWAYS mix with chlorothalonil.
and	Topsin, T-Methyl 70 W	thiophanate-methyl	1	8 oz	14	
Late leaf spot	Topsin, T-Methyl 4.5 F	thiophanate-methyl	1	10 fl oz	14	
(Cercosporidium personatum)	Thiophanate Methyl 85 WDG	thiophanate-methyl	1	6.4 oz	14	
. ,	Alto 100 SL	cyproconazole	3	5.5 fl oz	30	Good activity on leaf spots.
	Topguard 1.04 SC	flutriafol	3	7 - 14 fl oz	14	
	Provysol 3.34 SC	mefentrifluconazole	3	7 fl oz	14	
	Tebuconazole 3.6 F (multiple generics)	tebuconazole	3	7.2 fl oz	14	Good activity on leaf spots.
	Eminent 125 SL	tetraconazole	3	13 fl oz	14	Good activity on leaf spots.
	Fontelis 1.67 SC	penthiopyrad	7	12 - 24 fl oz	14	Good activity on leaf spots.
	Miravis 1.67 SC	pydiflumetofen	7	3.4 fl oz	14	Excellent activity against leaf spot diseases.
	Abound 2.08 SC (multiple generics)	azoxystrobin	11	6 - 18.5 fl oz	14	
	Evito 480 SC (multiple generics)	fluoxastrobin	11	5.7 fl oz	14	
(continued)	Headline 2.09 SC	pyraclostrobin	11	6 - 15 fl oz	14	Very good activity on leaf spots.

## **PEANUT FOLIAR DISEASES – continued**

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
Leaf Spots (cont.)						
Early leaf spot <i>(cont.)</i> <i>(Cercospora arachidicola)</i>	Bravo Weather Stik, Chlorothalonil, Echo 6 F	chlorothalonil	M5	1 - 1.5 pt	14	Very good activity on leaf spots when applied prior to disease development. Use high rate when applied alone or low rate in tank mix.
and	Bravo Ultrex, Chlorothalonil 82.5 DF	chlorothalonil	M5	0.9 - 1.36 lb	14	
Late leaf spot	Acropolis 2.38 F	thiophanate-methyl + tetraconazole	1 + 3	23 fl oz	14	
(Cercosporidium personatum)	Provost 433 SC	prothioconazole + tebuconazole	3 + 3	7 - 8 fl oz	14	Very good activity on leaf spot diseases.
personatum	Provost Silver 3.52 SC	prothioconazole + tebuconazole	3 + 3	11 - 13 fl oz	14	
	Lucento 4.17 SC	bixafen + flutriafol	7 + 3	3 - 5.5 fl oz	14	
	Topguard EQ 4.0 SC	azoxystrobin + flutriafol	11 + 3	5 - 8 fl oz	14	
	Dexter Max	azoxystrobin + mancozeb	11 + 3	2.1 lb	14	
	Evito T 4 F	fluoxastrobin + tebuconazole	11 + 3	6 - 9 fl oz	14	
	Absolute 500 SC	trifloxystrobin + tebuconazole	11 + 3	3.5 fl oz	14	
	Elatus 45 WG	azoxystrobin + benzovindiflupyr	11 + 7	7.3 - 9.5 fl oz	30	
	Priaxor 4.17 SC	pyraclostrobin + fluxapyroxad	11 + 7	4 - 8 fl oz	14	
	Revytek 3.33 SC	pyraclostrobin + fluxapyroxad + mefentrifluconazole	11 + 7 + 3	8 - 15 fl oz	14	
	Muscle ADV 3.84 SC	chlorothalonil + tebuconazole	M5 + 3	2 pt	14	
	Echo 6 F – Eminent 125 SL Co-Pack	chlorothalonil + tetraconazole	M5 + 3	1.45 pt	14	
	Mazinga ADV 3.23 SC	chlorothalonil + tetraconazole	M5 + 3	2 pt	14	
	Arius ADV 6.65 SC	chlorothalonil + azoxystrobin	M5 + 11	21 - 30 fl oz	14	

# PEANUT SOILBORNE DISEASES

Travis Faske

#### **Chemical Control of Soilborne Peanut Diseases:**

1. Southern blight is the most common soilborne disease of peanut in Arkansas, which is most active when weather conditions are hot and humid.

2. Fungicides on peanut are applied to prevent soilborne disease development, which typically begins 60 days after planting, when conditions favor disease development. Fungicide programs consist of repeated applications at 14 - 21 day intervals depending on disease development and weather conditions.

3. Apply fungicides with sufficient water volume (15 to 20 GPA) to penetrate canopy or before rainfall. Applications at night when leaves are folded have been shown to improve fungicide penetration into the lower canopy.

4. Do not make consecutive applications of the same mode of action (i.e., FRAC group number) except for those applications that contain chlorothalonil.

Southern blight (Sclerotium rolfsii)	tebuconazole 3.6 F (multiple generics)	tebuconazole	3	7.2 fl oz	14	Very good activity on southern blight.
	Convoy 3.8 F	flutolanil	7	16 - 32 fl oz	40	Excellent activity on southern blight.
(continued)	Fontelis 1.67 SC	penthiopyrad	7	12 - 24 fl oz	14	Excellent activity on southern blight.

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## **PEANUT SOILBORNE DISEASES – continued**

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
Peanut Soilborne Dise	eases (cont.)					
	Abound 2.08 SC (multiple generics)	azoxystrobin	11	12 - 24.5 fl oz	14	Good activity on southern blight.
(Sclerotium rolfsii)	Headline 2.09 SC	pyraclostrobin	11	6 - 15 fl oz	14	Combine with triazole or flutolanil for effective southern blight control.
	Provost 433 SC	prothioconazole + tebuconazole	3 + 3	7 - 8 fl oz	14	Prothioconazole has very good activity on southern blight.
	Elatus 45 WG	azoxystrobin + benzovindiflupyr	11 + 7	7.3 - 9.5 fl oz	30	
	Evito T 4 F	fluoxastrobin + tebuconazole	11 + 3	9 - 11 fl oz	14	
	Priaxor 4.17 SC	pyraclostrobin + fluxapyroxad	11 + 7	8 fl oz	14	Good activity on southern blight.
	Revytek 3.33 SC	3.33 SCpyraclostrobin + fluxapyroxad + mefentrifluconazole		8 - 15 fl oz	14	
	Muscle ADV 3.84 SC	chlorothalonil + tebuconazole	M5 + 3	2 pt	14	Very good activity on southern blight.
	Arius ADV 6.65 SC	chlorothalonil + azoxystrobin	M5 + 11	30 fl oz	14	
Limb rot	tebuconazole 3.6 F (multiple generics)	tebuconazole	3	7.2 fl oz	14	Good activity on Rhizoctonia limb rot.
(Rhizoctonia solani)	Convoy 3.8 F	flutolanil	7	1 - 2 pt	40	Very good activity on Rhizoctonia limb rot.
	Fontelis 1.67 SC	penthiopyrad	7	12 - 24 fl oz	14	Very good activity on Rhizoctonia limb rot.
	Abound 2.08 SC (multiple generics)	azoxystrobin	11	12 - 24.5 fl oz	14	Excellent activity on Rhizoctonia limb rot.
	Headline 2.09 SC	pyraclostrobin	11	9 - 15 fl oz	14	Combine with triazole or flutolanil for effective Rhizoctonia limb rot control.
	Provost 433 SC	prothioconazole + tebuconazole	3 + 3	7 - 8 fl oz	14	
	Evito T 4 F	fluoxastrobin + tebuconazole	11 + 3	9 - 11 fl oz	14	
	Elatus 45 WG	azoxystrobin + benzovindiflupyr	11 + 7	7.3 - 9.5 fl oz	30	
	Muscle ADV 3.84 SC	chlorothalonil + tebuconazole	M5 + 3	2 pt	14	
	Arius ADV 6.65 SC	chlorothalonil + azoxystrobin	M5 + 11	30 fl oz	14	

## **PEANUT SOILBORNE DISEASES – continued**

Disease	Fungicide	Active Ingredient	FRAC Code	Rate/Acre	Days to Harvest	Comments
Peanut Soilborne Dis	seases (cont.)					
Sclerotinia blight	Rovral 4F	iprodione	2	2 pt	10	40 gal/ac minimum.
(Sclerotinia minor) (S. sclerotiorum)	Endura 70 WG	boscalid	7	8 - 10 oz	14	
()	Omega 500 F	fluazinam	29	1 - 1.5 pt	30	Fields with a history of Sclerotinia blight should be treated beginning 60 to 70 days after planting or when conditions favor disease.
Pod Rots						
Pytium spp. Rhizoctonia solani	Ridomil Gold SL	mefenoxam	4	4 - 8 fl oz	See label.	Pythium rot only. Apply at pegging or early pod set (45 to 60 DAP) followed by irrigation.
	Metastar 2 E	metalaxyl	4	2 - 4 pt		Pythium rot only.
	Ridomil Gold 2.5 G	mefenoxam	4	11.8 lb	See label.	Pythium rot only. Apply in 12-inch band at pegging or early pod set (45 to 60 DAP).
	Abound 2.08 SC (multiple generics)	azoxystrobin	11	18 - 24.5 fl oz	14	Suppress Rhizoctonia pod rots. Appl 60 to 70 DAP. Do not make more than 2 sequential applications of FRAC group 11 fungicides.

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Contamination	Biological Product	Active Ingredient	Rate/A	Comments
Aflatoxin Contamination by Aspergillus flavus	Afla-Guard	Atoxigenic strain of <i>A. flavus</i>	20 lb	Apply by ground 40 - 80 days after planting or canopy closure.

Note: Aflatoxin can be an issue in dry land production such as outside pivot irrigation.

# **PEANUT NEMATODES**

Travis Faske

Disease	Nematicide	Active Ingredient	Rate Per Acre	Comments
Nematodes	Velum Total	fluopyram	18 fl oz	Apply as in-furrow spray with 5 - 6 gal/ac water at planting.
	Telone II	1,3-dichloropropene	4 - 6 gal	Inject 12 inches below the soil surface. Allow 2 weeks before planting.

Nematodes are not currently a serious threat to peanut production in Arkansas; therefore, we do not routinely recommend nematicides, even though certain products are labeled for this use. The peanut root-knot nematode is extremely rare in the state and reniform nematode does not reproduce on peanut. It is possible, however, that other nematode species such as the lesion nematode or the ring nematode may reach economic levels in some fields. If nematodes are suspected, soil samples should be collected in the fall (September-October) and sent to the Nematode Diagnostic Laboratory for analysis before the next crop is planted.

