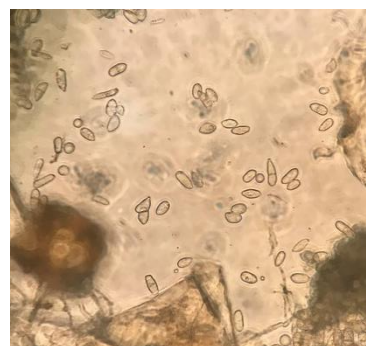


Texas Peanut Disease Control Products

2021



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DISCLAIMER

The recommendations provided are based primarily on fungicide labels researched by the Texas A&M AgriLife Extension Service. Information given is for educational purposes only.

The use of product names is not intended as an endorsement by the Texas A&M AgriLife Extension Service of the product or of a specific manufacturer, nor is there any implication that other formulations containing the same active ingredient are not equally effective. Product names are included solely to aid readers in locating and identifying the fungicides suggested. This information is intended for Texas only, other states might have different regulations.

This publication is not a substitute for fungicide product labels!

Always consult the product label for label rates, restrictions, and instructions. This is meant as a guide for controlling disease in peanut.

Always keep the Material Safety Data Sheets (MSDS) and product labels accessible when applying any product.

Use the Protective Personal Equipment (PPE) as detailed on the product label.

In the case of exposure to any product contact any of the **Texas Poison Center** at (800) 222-1222.

Fungicide resistance management recommendations

Microorganisms can develop resistance to pesticides when these are used in excess. Each fungicide has a Mode of Action (MOA) related to a FRAC code number. To reduce the ability of a fungus to develop resistance to a fungicide we make the following recommendations. Rotate the fungicides modes of action, this will hit the fungus from different biological pathways. Alternate MOA based on high and low risk to develop resistance. When missing products, mix different MOA and resistance risks. Limit the use of curative fungicides because it increases the selection pressure for resistant strains of the fungus. Finally, always follow the product label and do not change the suggested application rates.

Additional Resources: FRAC Code List © 2020

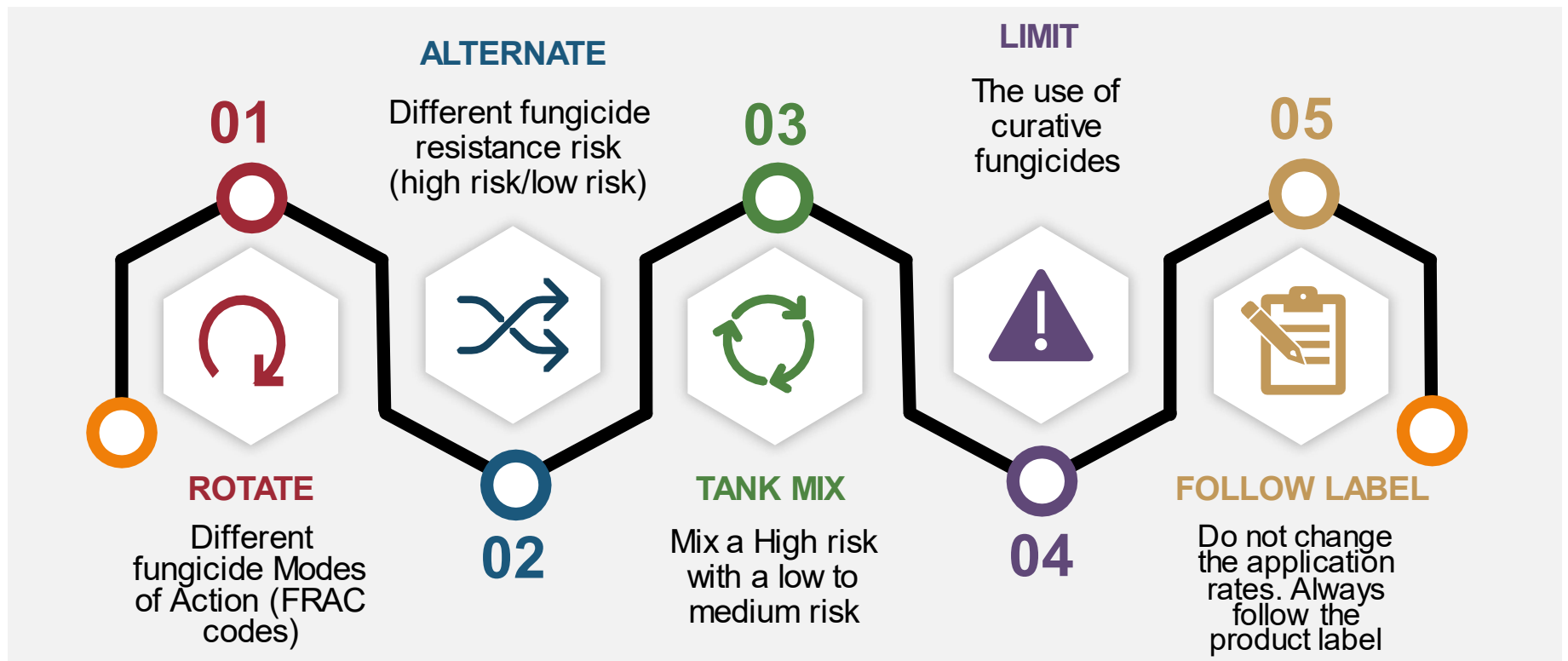


Table 1: Seed treatments registered for peanuts.

Pesticide product name	Active Ingredient (FRAC code)	Resistance risk*	Rate (cwt Seed for seed treatment)	Hay/ Feeding/ grazing restriction	Aflatoxin (<i>A. flavus</i>)	Aspergillus crown rot	Cylindrocladium Black Rot	<i>Fusarium</i> spp.	Southern blight, white mold	Sclerotinia blight	Penicillium	<i>Pythium</i> spp.	<i>Rhizoctonia solani</i>	<i>Rhizopus</i> sp.	Seed Decay	Seedling Blight
Apron XL	mefenoxam (4)	H	0.16-0.64 fl oz /100 lb of seed									√				
Dynasty PD	mefenoxam (4) + azoxystrobin (11) + fludioxonil (12)	H H L-M	3-4 oz /100 lb seed			Δ	√		Δ			√	√		√	√
Maxim 4 FS	fludioxonil (12)		0.08-0.16 fl oz/A									√	√		√	√
Rancona V PD	metalaxyl (4) + ipconazole (3) + carboxin (7)	H M M-H	4 oz /100 lb seed	Do not feed	√	Δ	Δ	√	Δ	√	√	√	√	√		√
Vibrance	sedaxane (7)	M-H	0.013-0.0265 mg ai/seed										√		√	√
Kodiak HB	<i>Bacillus subtilis</i>	-	2-4 oz /A			Δ		Δ					Δ			
Afla-Guard GR	<i>Aspergillus flavus</i>	-	20 lb/A	-	√											

Comments: **Dynasty PD** - Peanuts may be replanted immediately after last treatment. Do not plant other crops within 45 days after last application.

Rancona V PD - Do not mix Rancona V PD with water. Do not use Ranvona V PD in combination with liquid seed treatment products. **Vibrance** - Peanut and cotton can be replanted immediately. **Afla-Guard GR**- biological.

PHI: Not applicable for any seed treatment or biologicals.

*: Based on FRAC code 2020 for fungicide resistance development. H= High risk; M=Medium risk; M-H=Medium to High risk; L=Low risk; L-M=Low to Medium risk. √: Highly effective. Δ: Suppression

Table 2: Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	Application timing DAP: days after planting	App. Int.	Hay/feed/graze restriction	PHI	Aspergillus crown rot	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	Southern blight, white mold	<i>Pythium</i> spp.	Pythium Pod rot	<i>Rhizoctonia solani</i>	Seedling Blight	Rhizoctonia Pod rot	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Abound, Azoxy, AzoxyStar and generics	azoxystrobin (11)	H	0.4-0.8fl oz /1000 ft row (early) 12.0-24.5 fl oz/ ac (mid-late)	At planting, 60 & 90	14		14	√	√	Δ	√	√	Δ	√	√	√	Δ	√		√		√
Absolute and generics	tebuconazole (3) + trifloxystrobin (11)	M H	3.5-7 fl oz/A	At favorable disease conditions	14	Do not feed	14			√	√								√	√		√
Acropolis	thiophanate-methyl (1) + tetraconazole (3)	H M	23 fl oz/A	30-40	14	Do not feed	14			√	√								√	√		√
Approach Prima	picoxystrobin (11) + cyproconazole(3)	H M	5-6.8 fl oz.	Early vegetative	28	Do not feed	30			√	√	Δ							Δ	√		√
Alto 100 SL and generics	cyproconazole (3)	M	5.5 fl oz/A	30-45	28	Do not feed	30			√	√	Δ							Δ	√		√
Arius ADV	chlorothalonil (M5) + azoxystrobin (11)	L H	21-30 fl oz/A	30-40 / 60-90	14	Do not feed	14		Δ	√	√	√		Δ			√	√		√		√
AzoxyTeb, and others	azoxystrobin (11) + tebuconazole (3)	H M	15.5 fl oz/A	35-40	14				Δ	√	√	√		Δ					√	√	√	√

App Int- Application Interval. **PHI-** Preharvest Interval. Comments: **Abound-** in-furrow or foliar. **Absolute-** Do not make more than two sequential applications before alternating with a non-group 11 fungicide. Utilize resistance management strategies. **Acropolis-** Do not exceed 3 applications per year. **Alto 100 SL-** Make up to 2 applications no closer than 28 days apart. **Arius ADV-** Assure product penetration of crop canopy. **AzoxyTeb-** Up to 4 mid-season applications.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	Hay/feed/graze restriction	PHI	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Pythium</i> spp.	Pythium Pod rot	<i>Rhizoctonia solani</i>	Rhizoctonia Pod rot	Rhizoctonia Limb rot	Southern blight, white mold	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Badge SC	copper hydroxide (M1) copper oxychloride(M1)	L L	1-2.5 pt	35-40					√										√
Bighorn and generics	thiophanate methyl (1) + tebuconazole (3)	H M	12.4 fl oz/A		14	Do not feed	14	Δ					√		√		√	√	√
Blocker 4F	PCNB (14)	L-M	2-4 pt/A	At planting or pegging									√			√			
Bravo WS, Echo, generics	chlorothalonil (M5)	L	1-1.5 lb/A Various rates	30 to 40 DAP	14	Do not feed	14		√	√							√	√	√
Catamaran	chlorothalonil (M5) + phosphorous acid (33)	L L	3-5.5 pt/A	30 DAP	14	Do not feed	14		√	√	√	√					√	√	√
Convoy	flutolanil (7)	M-H	10-32 fl oz/A	At planting	21-30		40							√	√	√			
Cuprofix Ultra 40 DF and generics	Copper sulfate (M1)	L	1-2 lb/A Various rates	35-40 DAP	10-14		0		√										
Dexter Max	Mancozeb (M3) + azoxystrobin (11)	L H	2.1 lb/A	when disease appear	7-14	Do not feed			√	√							√		√
Echo 720 and generics	chlorothalonil (M5)	L	1.0-1.5 pt/A	30-40 DAP	14	Do not feed			√	√							√	√	√

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Badge SC**- Repeat applications every 7-14 days. Tank mix or alternate with another fungicide. Oxychloride provides slow release. **Blocker 4F** - In-furrow. **Convoy**- In-furrow, no more than 4 applications. **Cuprofix Ultra 40 DF**- Repeat applications every 7-14 days. Tank mix or alternate with another fungicide. Use the high rate when applied alone.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	Hay/ feed/ graze restriction	PHI	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Pythium</i> spp.	Pythium Pod rot	<i>Rhizoctonia solani</i>	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Southern blight, white mold	Sclerotinia blight	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Elast 400 and other generics	dodine (U12)	L-M	0.9-1.5 pt/A	35 DAP	10 to 14	Do not feed	14		√	√										
Elatus	azoxystrobin (11) + benzovindiflupyr (7)	H M-H	7.3-9.5 fl oz	14 to 21 DAP	14		30	Δ	√	√			√		Δ	√	Δ	√	√	√
Eminent VP and other generics	tetraconazole (3)	M	6-13 fl oz/A Various rates	30 to 40 DAP	14	Do not feed	14		√	√								√		√
Endura and other generics	boscalid (7)	M-H	6.5-10 oz/A	After row closure at the first sign of disease	14 to 21		14		√	√						Δ	√	√		
Evito 480 SC	fluoxastrobin (11)	H	5.7 fl oz/A	Before disease	14		14		√	√	√	√		√	√	√				√
Evito T	fluoxastrobin (11) + tebuconazole (3)	H M	6-11.2 fl oz/A		14	Do not feed	14		√	√			√		Δ	Δ				√
Excalia	inpyrfluxam (7)	M-H	2-4 Fl oz/A						Δ	Δ			√		√	√	√			

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Elast 400**- Test compatibility before mixing. **Elatus**- Banded application 7-10in or foliar application. **Eminent VP**- Alternate with a fungicide from different mode of action group. **Endura**- Make up to 2 additional applications. **Evito 480 SC**- Do not make more than two sequential applications before alternating with a non-Group 11 fungicide. Utilize resistance management strategies. **Evito T**- Max. 4 applications per year.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	Hay/feed/graze restriction	PHI	Aspergillus crown rot	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Rhizoctonia solani</i>	Rhizoctonia Pod rot	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Southern blight, white mold	Sclerotinia blight	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Folicur 3.6F, Granite and others	tebuconazole (3)	M	7.2fl oz/A	60 DAP	14	Do not feed	14			√	√		√		√	√		√	√	√
Fontelis	penthiopyrad (7)	M-H	16-24 fl oz/A	60 DAP	14-21		14		√	√	√	√			√		√	√	√	
Gold Rush Trio and others	thiophanate methyl (1) + tebuconazole (3) + azoxystrobin (11)	H M H	12.4 fl oz/A		14	Do not feed	14		Δ						√			√	√	√
Headline	pyraclostrobin (11)	H	6-15 fl oz/A	30 to 40 DAP	14-21		14		√	√	√		√	√	√	√	√	√	√	√
Kocide 3000, Champ WG 1.5 and other generics	Copper hydroxide (M1)	L	0.75-1.25 lb/A Various rates	At very early pod stage (R3)	7-14		0			√										
Lucento	flutriafol (3) + bixafen (7)	M M-H	3-5.5 fl oz/A	60 DAP	14	Do not feed	14	√	√	√	√	√			√	√		√	√	√
Mankocide and other generics	Mancozeb and copper hydroxide (M3)	L	2-2.6 lb/A	when disease appear	7-14	Do not feed	14			√										
Priaxor	fluxapyroxad (7) + pyraclostrobin (11)	M-H H	4-8 fl oz/A	Prior to disease	14-21	Do not feed	14		Δ	√	√				√	√	Δ	√	√	√

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Folicur 3.6F**- Make up to 4-mid season applications. **Gold Rush Trio**- Use surfactant for foliar application. **Kocide 3000**- Repeat applications every 7-14 days. Tank mix or alternate with another fungicide. Use the high rate when applied alone. **Lucento**- Make up to 2 sequential applications per year. **Priaxor**- No more than 2 sequential applications.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	Hay/ feed/ graze restriction	PHI	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Pythium</i> spp.	Pythium Pod rot	<i>Rhizoctonia solani</i>	Southern blight, white mold	Sclerotinia blight	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Manzate, Koverall and other generics	Mancozeb (M3)	L	0.8-1.6 qt/A		14	Do not feed	14		√									√
MetaStar 2E	metalaxyl (4)	H	2-4 qt/A	At early pod set or pegging		Do not graze					√	√						
Miravis and other generics	pydiflumetofen (7)	M-H	3.4 fl oz/A	Prior to disease development	21-28		14		√	√					Δ		√	√
Muscle ADV	chlorothalonil (M5) + tebuconazole (3)	L M	2.0 pt/A	60 DAP	14		14		√	√			√	√		√	√	√
Omega 500F	fluazinam (29)	L	16-24 fl oz/A	45-70 DAP	3 to 4 weeks	Do not feed	30								√			
Proline 480 SC and other generics	prothioconazole (3)	M	5.7 fl oz/A or 0.4 fl oz/1000 ft oz /1000 row ft	At planting or near emergence			NA	Δ	√	√			√	√				

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **MetaStar 2E**- Can be combined with Terraclor 2E or PCNB 2E. **Muscle ADV**- Make up to 4 mid-season applications. **Omega 500F**- Make up to 2 additional applications. **Proline 480 SC**- Apply as in-furrow spray or 4-6in banded at planting or full emergence for suppression of CBR. Use Adjuvant.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	Hay/ feed/ graze restriction	PHI	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Pythium</i> spp.	Pythium Pod rot	<i>Rhizoctonia solani</i>	Rhizoctonia Pod rot	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Southern blight, white mold	Sclerotinia blight	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust	Nematode
Propulse and other generics	prothioconazole (3) + fluopyram (7)	M M-H	13.6 fl oz/A		14		14	Δ	√	√			√	√	√	√	√	√			√	√
Provost Opti and other generics	prothioconazole (3) + tebuconazole (3)	M M	7-10.7 fl oz/A	60 DAP	14		14	Δ	√	√			√		√	√	√		√	√	√	
Quash and other generics	metconazole (3)	M	2.5-4 oz/A		14	Do not feed	14		√	√						√	√		√		√	
Ridomil Gold GR	mefenoxam (4)	H	50 lc/ac	45 to 60 DAP or pegging to early pod			75				√	√										
Ridomil Gold SL	mefenoxam (4)	H	0.5-1.0 pt/A	45 to 60 DAP or pegging to early pod			75				√	√										
Rovral	Iprodione (2)	M-H	2.0 pt/A	Favorable disease condition	14-21	Do not feed	10											√				

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Propulse**- Seed treatment, soil and foliar applications. In-furrow to control nematodes. **Provost Opti**- Make up to 4 mid-season applications. **Quash**- Tank mix with a non-group 3 fungicide. Make up to 4 mid-season applications. **Ridomil Gold GR**- In a 7- inch band (at planting) 12-inch band (at pegging). **Ridomil Gold SL**- In a 7-inch band. **Rovral**- Do not exceed 3 applications per year.

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Table 2: (continued) Fungicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	App. timing DAP: days after planting	App. Int.	PHI	Aspergillus crown rot	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	<i>Pythium</i> spp.	<i>Rhizoctonia solani</i>	Rhizoctonia Pod rot	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Southern blight, white mold	Seedling Blight	Web blotch (<i>Ascochyta</i>)	Pepper spot	Rust
Topguard	flutriafol (3)	M	7-14 fl oz/A	Prior to disease	14	7			√	√						Δ		√	√	√
Topguard EQ	flutriafol (3) + azoxystrobin (11)	M H	5.0-7.0 fl oz/A	35-90 DAP	7-14	14			√	√		√	Δ	Δ		Δ		√	√	√
Topsin and other generics	thiophanate methyl(1)	H	10 fl oz/A	when disease appear	14	14			√	√		√			√			√		
Umbra	Flutolanil (7) + Flutriafol (3)	M-H M	12-38 fl oz	45-60 DAP	14-30	40			√	√						√		√		√
Uniform	mefenoxam (4) + azoxystrobin (11)	H H	0.34-0.62 fl oz/1000 ft of row	At planting		75	√				√	√				Δ	√			
	Sulfur	-	5-8 lb ai/A		7-14	0			√											

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Topguard** and **Topguard EQ**- No more than 4 applications per year. **Topsin**- Apply in a tank mixture with chlorothalonil (e.g., Bravo) or mancozeb (e.g., Dithane). **Uniform**- In-furrow (No more than 1.0lb/ai mefenoxam; nor 0.8lb/ai azoxystrobin). **Umbra**- Appears good on leaf spot, unknown effectiveness. **Vapam HL**- FUMIGANT. Apply at least 2 weeks before planting or longer if cool/ or wet conditions. Inject 8-10 inches deep in front of a bed shaper or strip till machine to seal and mark rows.

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Table 3: Nematicides registered for use in peanuts.

Pesticide product name	Active ingredients (FRAC code)	Resistance risk*	Rate	Application timing DAP: days after planting	App. Int.	Hay/feeding/grazing restriction	PHI	Cylindrocladium Black Rot	Early Leaf Spot (<i>Cercospora</i>)	Late leaf spot (<i>Cercosporidium</i>)	Southern blight, white mold	Sclerotinia blight	<i>Rhizoctonia solani</i>	Rhizoctonia Pod rot	Rhizoctonia Peg Rot	Rhizoctonia Limb rot	Rust	Nematode
Propulse and other generics	prothioconazole (3) + fluopyram (7)	M M-H	13.6 fl oz/A	At planting	14		14	Δ	√	√	√	√	√	√	√	√	√	√
Telone II (97.5%) and Telone EC (93.6%)	1-3 dichloropropene	-	Various rates	At least 2 weeks before planting			NA											√
Telone C17, Telone C35, InLine	1-3 dichloropropene + chloropicrin	-	Various rates				NA											√
Vapam HL	Sodium methyldithiocarbamate	-	6.61 fl oz/100ft of row (7.5 gal/ ac in 36in row)	At least 2 wks before planting			NA		√									√
Velum Total	fluopyram (7) + imidacloprid (4A)	H -	18 fl oz/A	At planting		Do not feed	30		√	√	√							√
Vydate C-LV	oxamyl (1A)	-	17-68 fl oz/A	At planting														√

App Int.- Application Interval. **PHI**- Preharvest Interval. Comments: **Propulse**- Non-fumigants. Apply as in-furrow spray for suppression of CBR and nematodes. **Telone II**- Fumigants. Inject 12 inches below soil surface. **Telone C17**- Fumigant. **Vapam HL**- Fumigant. **Vydate C-LV**- Apply in a 7-inch band immediately behind planter in furrow or incorporate 2 inches deep mechanically. **Velum Total**- Non-fumigant, in-furrow.

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