PEANUT INSECT CONTROL

David Adams, Interim Extension Entomologist

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Beet Armyworm[1]	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
	Tracer	2.0-3.0 fl. ozs.	0.063-0.094	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.
	Dimilin 2L	4-8 fl. ozs.	0.06-0.125	28 days of harvest	Do not make more than 3 applications per season.
	Intrepid	6-10 fl. ozs.	0.09 - 0.16	7	
Burrower Bug[5]	chlorpyrifos (including Lorsban 15G, Chlorpyrifos 15G AG, Nufos 15G, Pilot 15G)	13.6 lbs. broadcast or banded	2	21 days	DO NOT apply more than 30 ozs. per 1000 feet of row or 26.6 lbs. per acre per crop season. For banded applications use a 10-18 inch band. If banding on row spacings other than 36", use 14.7 oz. per 1000 linear feet.
Corn Earworm[1]	Asana XL	2.9-5.8 fl.ozs.	0.015-0.03	21 days	DO NOT exceed 0.15 lb. ai. per acre per season. DO NOT feed or graze livestock on treated vines.
	Baythroid 2	1.8-2.4 fl. ozs.	0.028-0.038	14	Do not exceed 3 applications per season of 2.8 fl. ozs. per 10 day intervals.
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	1.28-1.92 fl. ozs.	0.02-0.03	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Orthene 75S Orthene 97	1-1.3 lbs. 12-16 ozs.	0.75-1.0 0.72-0.97	14 days (of digging)	Repeat as needed. DO NOT feed treated forage or hay to livestock or allow animals to graze treated areas.
	Lannate SP Lannate LV	0.25-1.0 lbs. 0.75-3.0 pints	0.225-0.9 0.225-0.9	21 days	Up to 3 applications. DO NOT feed treated vines.
	Mustang Max	3.2 - 4.0 oz	0.02 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
	Tracer	1.5-3.0 fl. ozs.	0.047-0.094	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.

PEANUT INSECT CONTROL (continued)

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Cutworm[1]	Asana	9.6 oz.	0.05	21	
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Lannate SP Lannate LV	0.5-1.0 lb. 1.5-3 pts.	0.45-0.9 0.45-0.9	21 21	Spray late in the afternoon for maximum efficacy.
	Karate Z	1.28-1.92 fl. ozs.	0.015-0.025	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Mustang Max	1.28 - 4.0 oz	0.008 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
Fall Armyworm[1]	Lannate SP Lannate LV	0.25-0.5 lbs. 0.75-1.5 pints	0.225-0.45 0.225-0.45	21 days	DO NOT feed treated vines.
	Orthene 75S Orthene 97	1.0-1.3 lbs. 12-16 ozs.	0.75-1.0 0.72-0.97	14 days (of digging)	DO NOT feed treated forage or hay to livestock or allow animals to graze treated areas.
	Dimilin 2L	4-8 fl. ozs.	0.06-0.125	28 days of harvest	Do not make more than 3 applications per season.
	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
	Tracer	2.0-3.0 fl. ozs.	0.063-0.094	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.
Potato leafhopper	Asana XL	2.9-5.8 fl. ozs.	0.015-0.03		DO NOT exceed 0.15 lb. ai. per acre season. DO NOT feed or graze livestock on treated vines.
	Baythroid 2	1.0-1.8 fl. ozs.	0.016-0.028	14	Do not exceed 3 applications per season of 2.8 fl. ozs. per 10 day intervals.
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	0.96-1.6 fl. ozs.	0.015-0.025	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Mustang Max	1.76 - 4.0 oz	0.011 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
	Orthene 75S Orthene 97	1.0-1.3 lbs. 12-16 ozs.	0.75-1.0 0.72-0.97	14 days (of digging)	DO NOT feed treated forage or hay to livestock or allow animals to graze treated areas.

PEANUT INSECT CONTROL (continued)

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Potato leafhopper (cont.)	Sevin XLR or 4F Sevin 80S Sevin 50W	1 quart 1.25 lbs. 2 lbs.	1.0 1.0 1.0	14	Reentry interval - 2 days
Lesser cornstalk borer[2]	chlorpyrifos (including Lorsban 15G, Chlorpyrifos 15G AG, Nufos 15G, Pilot 15G)	13.6 lbs. broadcast or banded	2	21 days	DO NOT apply more than 30 ozs. per 1000 feet of row or 26.6 lbs. per acre per crop season. For banded applications use a 10-18 inch band. If banding on row spacings other than 36", use 14.7 oz. per 1000 linear feet.
Rednecked peanut worm	Asana XL	2.9-5.8 fl.ozs.	0.015-0.03	21 days	DO NOT exceed 0.15 lb. ai. per acre per season. DO NOT feed or graze livestock on treated vines.
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	0.96-1.6 fl. ozs.	0.015-0.025	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Mustang Max	1.28 - 4.0 oz	0.008 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
Southern corn rootworm[2]	chlorpyrifos (including Lorsban 15G, Chlorpyrifos 15G AG, Nufos 15G, Pilot 15G)	13.6 lbs. banded	2	21 days	DO NOT apply more than 30 oz. per 1000 feet of row or 26.6 lbs. per acre per crop season. For banded applications, use an 18" band. If banding on row spacing other than 36", use 14.7 oz. per 1000 linear feet. DO NOT feed peanut forage or hay to meat or dairy animals.
Soybean Loopers	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
	Tracer	1.5-3.0 fl. ozs.	0.047-0.094	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.
	Dimilin 2L (Suppression only)	4-8 fl. ozs.	0.06-0.125	28 days of harvest	Do not make more than 3 applications per season.
Spider mites	Comite	2 pints	1.64	14 days	DO NOT apply more than **twice** per season. DO NOT graze or feed livestock on treated areas or cut treated forage for hay. When temperatures are greater than 90F with high humidity, some leaf phytotoxicity may occur.
	Comite II	2.25 pts.	1.68	14	DO NOT apply more than twice per season. Use a minimum of 20 gal/A for ground application and 5 gal/A aerial application.
	Danitol	10.6-16 fl. ozs.	0.2-0.3	14 days (of digging)	Do not feed treated forage or dried hay within 14 days of last application. Do not exceed 0.8 lb. a.i. per acre season.

PEANUT INSECT CONTROL (continued)

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Spider mites	Omite 30W	3-5 lbs.	0.9-1.5	14 days	DO NOT apply more than **twice** per season. DO NOT graze or feed livestock on treated areas or cut treated forage for hay. DO NOT plant unregistered crops within 6 months of last application.
Three cornered alfalfa hopper	Baythroid 2	1.8-2.4 fl. ozs.	0.028-0.038	14	Do not exceed 3 applications per season of 2.8 fl. ozs. per 10 day intervals.
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	0.96-1.6	0.015-0.025	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Sevin XLR or 4F Sevin 80S Sevin 50W	1 qt. 1.25 lbs. 2 lbs.	1.0 1.0 1.0	14	Reentry interval - 2 days
Thrips[3]	Brigade 2EC	5.12-6.4 fl. ozs.	0.08-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	1.28-1.92 fl. oz.	0.02-0.03	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed.
	Mustang Max	3.2 - 4.0 oz	0.02 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
	Orthene 75S Orthene 97	0.5-1.0 lb. 6-12 ozs.	0.37-0.75 0.36-0.73	14 days (of digging)	DO NOT feed treated forage or hay to livestock or allow animals to graze treated areas. Good results have been obtained by tank mixing with early post-emergence herbicides such as Starfire combinations in lieu of in-furrow treatments. However, timing is critical for adequate thrips control and may not coincide with optimum timing for post-emergence weed control. 11 ozs. of Orthene 75S can be tank mixed with 10.6-16 fl. ozs. of Danitol 2.4 EC.
	Orthene 75S (hopper box)	4 oz.	0.19 (3 oz.)		Apply in 3 layers in the seed hopper. Do not allow treated seed to get wet. The cultivar 'Southern Runner' may have reduced stands when this treatment is used.
	Phorate 20G[4]	5 lbs.	1	See Note	Apply in the furrow at planting. DO NOT graze or feed treated hay or forage to livestock. In furrow applications on row spacings other than 36", use 7.3 oz. of 15G per 1000 ft. of row or 5.5 oz. of 20G per 1000 ft. of row. Soil moisture is necessary for adequate uptake. Young seedlings may exhibit varying degrees of leaf damage.

PEANUT INSECT CONTROL (continued)

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Thrips[3]	Temik 15G	4-7 lbs.	0.6-1.05	90 days	Apply granules in the seed furrow at planting. Soil moisture is necessary for adequate uptake.
	Thimet 20G[4]	5 lbs.	1	See Note	Apply in the furrow at planting. DO NOT graze or feed treated hay or forage to livestock. In furrow applications on row spacings other than 36", use 7.3 oz. of 15G per 1000 ft. of row or 5.5 oz. of 20G per 1000 ft. of row. Soil moisture is necessary for adequate uptake. Young seedlings may exhibit varying degrees of leaf damage.
Tobacco budworm[1]	Orthene 75S Orthene 97	1-1.3 lbs. 12-16 ozs.	0.75-1.0 0.72-0.97	14 days (of digging)	Repeat as needed. DO NOT feed treated forage or hay to livestock or allow animals to graze treated areas.
	Steward	9.2-11.3 fl. ozs.	0.09-0.11	14	Do not apply more than 45 fl. ozs. per acre per season. Minimum interval between treatments is 5 days.
	Tracer	1.5-3.0 fl. ozs.	0.047-0.094	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.
	NOTE: Lannate as applied for corn earworm gives good control.				
Velvetbean caterpillar[1]	Asana XL	2.9-5.8 fl. ozs.	0.015-0.03	21 days	DO NOT exceed 0.15 lb. ai. per acre per season. DO NOT feed or graze livestock on treated vines. Suspected resistance has been observed in extreme SW Georgia.
	Baythroid 2	1.0-1.8 fl. ozs.	0.016-0.028	14	Do not exceed 3 applications per season of 2.8 fl. ozs. per 10 day intervals.
	Brigade 2EC	2.1-6.4 fl. ozs.	0.033-0.1	14 days or harvest	DO NOT apply more than 0.5lb. a.i. per acre per season. DO NOT feed peanut hay to livestock.
	Karate Z	0.96-1.6 fl. ozs.	0.015-0.025	14	Do not apply more than 1 pint per acre per season. Do not graze livestock in treated areas or use treated vines for animal feed. Suspected resistance has been observed in extreme SW Georgia.
	Mustang Max	1.28 - 4.0 oz	0.008 - 0.025	7	Do not apply more than 0.15 pounds active ingredient per season. Do not graze livestock in treated areas. Do not use treated vines for animal feed.
	Dimilin 2L	2-4 fl. ozs.	0.03-0.06	28 days of harvest	Do not make more than 3 applications per season.
	Sevin XLR or 4F Sevin 80S Sevin 50W	1 quart 1.25 lbs. 2.0 lbs.	1.0 1.0 1.0	14	
	Tracer	1.5 fl. ozs.	0.047	3 days of harvest 14 days of forage	Do not apply more than 9 fl. ozs. per acre per crop. Do not make applications less than 7 days apart.

PEANUT INSECT CONTROL (continued)

PEST	INSECTICIDE	AMOUNT OF FORMULATION PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	PRE-HARVEST INTERVAL	COMMENT
Wireworms[2]	chlorpyrifos (including Lorsban 15G, Chlorpyrifos 15G AG, Nufos 15G, Pilot 15G)	13.6 lbs banded	2	21 days	Suppression only. DO NOT apply more than 30 ozs. per 1000 feet of row or 26.6 lbs per acre per crop season. If used in combination with Lorsban 4E do not exceed 4.0 lbs a.i. per crop season. For banded applications, use a 10-18" band. If banding on row spacings other than 36" use 14.7 oz. per 1000 linear feet.
	Lorsban 75WG	2.67 lbs.	2		Suppression only. Broadcast pre-plant and incorporate.
	Lorsban 4E	4 pts.	2		Suppression only. Broadcast pre-plant and incorporate.

[1]The treatment threshold for combined foliage feeders is 4-8 per foot of row depending on the size and condition of the peanut plants. Use a lower threshold for very young plants or plants that are stressed from other factors. Use a higher threshold for healthy plants with ample vine growth.
[2]Preventive treatments are usually more effective than rescue treatments. The need for a rescue treatment should be dependent upon the presence of the insect pest, not just damage. Rainfall or irrigation is necessary after application to obtain adequate control.
[3]Thrips control is recommended only during the first 3-4 weeks after emergence and is more important when herbicide-induced stress also occurs during early season growth. Attempts to control tomato spotted wilt by controlling the thrips vectors are not economically justified.
[4] Suppresses tomato spotted wilt.
[5]Burrower bug is generally confined to conservation tillage situations.

PEANUT DISEASE CONTROL

Bob Kemerait, Extension Plant Pathologist
Tim Brenneman and Albert Culbreath, Plant Pathologists

PEST	FUNGICIDE AND FORMULATION	AMOUNT PER ACRE	REMARKS AND PRECAUTIONS
Seedling Disease	Abound 2.08F	6 fl oz	Apply in-furrow fungicide to cover soil in open furrow and seed. Fungicide rate is per single row; rate per acre will be doubled in twin row peanuts. Both fungicides are active against Rhizoctonia damping off; Abound is also active against Aspergillus crown rot.
	Terraclor 2E	64 fl oz	
Southern Stem Rot (White Mold) and Rhizoctonia Limb Rot	Folicur 3.6F (tebuconazole)	7.2 oz.	Apply **Folicur**, other **tebuconazole** products, or **Quash** 4 times per season starting at the second or third leaf spot spray. It is recommended that growers tank-mix Headline with Quash on the second and fourth application of this product for fungicide resistance management.
	Newly labeled formulations of tebuconazole include:		Note: Recent research has shown that in some instances, tebuconazole is less effective in control of leaf spot than in the past. Where leaf spot is likely to be a problem, growers may consider tank-mixing the tebuconazole with 0.75-1.0 pt/A chorothalonil or 5 fl oz Topsin (1st and 3rd applications only)to insure adequate leaf spot control.
	Orius 3.6F, TriSum 3.6F, Integral 3.6F, Tebustar 3.6F, Muscle 3.6F, Tebuzol 3.6F	7.2 fl oz	
	Quash (tetraconazole)	2.5-4.0 fl oz	
	Moncut 50WP (flutolanil)	1.0-2.0 lb.	Apply **Abound**, **Moncut**, **Artisan**, **Evito** or **Convoy** as a foliar spray at approximately 50-60 days after planting and reapply Abound, Moncut, Convoy or Artisan 28 days later. **Note:** Moncut, Convoy and Artisan may also be applied on a 4-spray program. Consult label for more information. Begin treating immediately if active white mold is observed before the first scheduled application. Consult label for application strategies concerning the use of each product.
	Moncut 70DF (flutolanil)	0.71-1.4 lb.	
	Abound 2.08F (azoxystrobin)	18.5-24.6 fl. oz. 12.3 fl. oz. (dryland only)	Note: A fungicide to control leafspot must be mixed with Moncut and Convoy. Additional leaf spot control is not needed if Artisan is used twice in a season; at labeled rates however if Artisan is applied in four applications, additional fungicides will need to added to supplement control of leaf spot. Using any combination of DMI's (ie. Folicur, Montero, Artisan, Propimax, or Tilt) full season increases the possibility for fungal resistance. If DMI's are used full season make the last application with chlorothalonil.
	Evito 480 SC (fluaxostrobin)	5.7 fl oz	
	Convoy (flutolanil)	2.0 pt (1 application) 1-2 pt (2 applications) 0.5-1 pt (4 applications)	**Headline** at this rate is an effective component of a soilborne program that also includes use of Folicur, Moncut, or Artisan.
	Artisan (flutolanil + propiconazole)	26 or 32 fl. oz. (2 applications) 13 or 16 fl oz (4 applications)	**Evito 480 SC:** This strobilurin fungicide is in the same chemical class as Abound, Headline, and Stratego and should not be used in the same program with these products.
	Headline (pyraclostrobin)	12.0-15.0 fl. oz.	**Provost:** A combination of tebuconazole and prothioconazole, is a new fungicide labeled for the control of leaf spot diseases, peanut rust, white mold, and Rhizoctonia limb rot. It is also labeled for suppression of CBR. Provost is applied in a 4-block program. Higher rates can be used in fields where disease is a particular problem.
	Provost (tebuconazole + prothioconazole)	8.0 - 10.7 fl oz	

PEST	FUNGICIDE AND FORMULATION	AMOUNT PER ACRE	REMARKS AND PRECAUTIONS
Suppression only: Southern Stem Rot (White mold)	Lorsban 15G	13 lb.	Apply in a 12-inch band over the row, 40-60 days after planting. **This product only suppresses stem rot.**
	Dyfonate 15G	13 lb.	Apply in a 18-inch band over the row, 40-60 days after planting. **This product only suppresses stem rot.** Do not feed peanut hay treated with Lorsban, Folicur, or Dyfonate to livestock.
Foliar Diseases including: Late leafspot (*Cercosporidium personatum*), Early leafspot (*Cercospora arachidicola*) and Rust (*Puccinia arachidis*)	Headline	6-9 fl oz	Headline (pyraclostrobin) is a strobilurin fungicide and is in the same chemical class as Abound and the trifloxystrobin component of Stratego and Absolute. To best adhere to fungicide resistance management guidelines, Headline should not be used in the same program with these fungicides.
	Stratego	7.0 fl oz	Stratego is a combination of propiconazole and trifloxystrobin. Fungicide resistance management should be considered when this product is used with either Folicur, other tebuconazole products, Absolute, or Abound.
	Absolute	3.5 fl oz	Absolute is a combination of tebuconazole and trifloxystrobin. Fungicide resistance management should be considered when this product is used with either Folicur, other tebuconazole products, Stratego, or Abound.
	Formulations of chlorothalonil:		
	Bravo Weather Stik	1.5 pt.	Apply chlorothalonil or chlorothalonil + copper on a 10-14 day interval. The exact interval between applications depends on rotation, weather, etc. **Do not feed peanut hay treated with chlorothalonil to livestock**. If rust is found in a field, and the peanuts are more than 3 weeks from expected harvest, apply chlorothalonil every 10 days until 2 weeks from harvest. If peanuts are 2 weeks or less from harvest, no control is necessary.
	Terranil 6L	1.5 pt.	
	Echo 720	1.5 pt.	
	Chemnut 720	1.5 pt.	
	GK-Agragold 720	1.5 pt.	
	Equus 720	1.5 pt.	
	Echo 90DF	1.25 lb.	
	Equus DF	1.36 lb.	
	Bravo Ultrex	1.36 lb.	
	Pre-mix combinations of Chlorothalonil and Sulfur		
	Bravo S	68 fl. oz.	
	Tankmix combinations of Chlorothalonil and Copper hydroxide		**Do not mix any copper fungicide with Folicur**.
	chlorothalonil + Kocide 4.5 LF	(0.75 lb A.I./ac.) 1.0 pt.	
	Tankmix combinations of Chlorothalonil and DMI (propiconazole)		The rate of chlorothalonil when tankmixed with Tilt will vary depending on formulation (ie. 6 lb gallon would require 16 oz and 4.23 would require 22.6 oz) **If RUST is detected and peanuts are more than 3 weeks from expected harvest, use a full rate of chlorothalonil every 10 days until 2 weeks from harvest. Using DMI's (ie. Folicur and Tilt) full season increases the possibility for fungal resistance. If DMI's are used full season make the last leaf spot application with chlorothalonil.** Tilt does not control rust.
	Chlorothalonil + Tilt (e.g. Tilt/Bravo)	(0.75 lb A.I./ac.) 2.0 oz.	
	Chlorothalonil + PropiMax (e.g. Echo-PropiMax)	(0.75 lb A.I./ac.) 2.0 oz.	

PEST	FUNGICIDE AND FORMULATION	AMOUNT PER ACRE	REMARKS AND PRECAUTIONS
Foliar Disease (cont.)	**Thiophanate methyl** Topsin M 70WP Topsin 4.5FL Topsin 4.5 FL + Tebuconazole Thiophanate Methyl 85WDG ELAST 400F (Dodine)	½ lb 10 fl oz 5 fl oz + 7.2 fl oz 0.4 lb 15 fl. oz. (if used alone or tank-mixed with fungicide not effective against leaf spot). 12.8 fl. oz. (if tank-mixed with another fungicide, e.g. tebuconazole) for added control of peanut leaf spot.	NOTE: Neither Topsin nor Thiophanate Methyl 85WDG should be used alone for control of foliar diseases of peanut, but should be tank mixed and/or rotated with other non-benzimidazole fungicides such as chlorothalonil. Use of thiophanate methyl should be restricted to a single solo application or two tank-mix applications per season.
Cylindrocladium Black Rot (CBR)	metam sodium (42%)	10 gal/A	To be effective, the fumigant metam sodium must be applied very carefully. To avoid injury to the seed and the seedlings, the fumigant must be applied at least 14 days before planting to a depth of approximately 8-10 inches. Metam sodium should be applied only when the soil temperature is greater than 60°F and when the soil moisture is like it would be for suitable seed germination. It is critical to get a good seal on the chisel trace left after fumigation so that the metam sodium does not escape directly to the atmosphere. The rows must be marked so that seed can be planted directly above where the fumigant was applied. **Growers who are using this treatment for the first time may want to consult with their local county agent**.
Proline 480SC (prothioconazole)	In-furrow fungicide application for management of CBR. See label for rate information.	0.4 fl. oz/1000 row ft 5.7 fl. oz/A	
	For suppression of CBR only: Abound 2.08F Folicur 3.6F Headline Provost	 18.5 - 24.6 fl oz 7.2 fl oz 12-15 fl oz 8-10.7 fl oz	Provost. Folicur, Abound, and Headline are labeled for the "suppression" of CBR. This means that they may have some limited benefit to the grower in the management of this disease; however neither is likely to result in significant reduction in CBR when compared to the benefits of metam sodium.

RECOMMENDATIONS SET FORTH BY THE NORTH AMERICAN FUNGICIDE RESISTANCE ACTION COMMITTEE

1. Reduce initial inoculum (fungal populations) through good cultural practices
2. Do not use less than the minimum label rate alone or in tank mixtures
3. If more than four sprays of DMI (for example tebuconazole and propiconazole) fungicides will be made in a season, it is strongly recommended that all DMI sprays be mixed with an effective non-DMI fungicide.
4. Use in a preventative application schedule
5. Calibrate sprayer and configure spray tips to ensure thorough coverage of peanut foliage
6. DMI fungicides are not recommended for season-long use alone. Use alternating blocks of sprays of DMI fungicides with non-DMI fungicides, **OR** use tank mixes of DMI and non-DMI fungicides. See label directions!
7. Alternating sprays or tank mixtures with other DMI fungicides will not help prevent resistance development
8. When using a strobilurin fungicide as a solo product, for example Headline, Abound, or Evito, the number of applications should be no more that 1/3 (33%) of the total number of fungicde applications per season.
9. For strobilurin mixes (e.g. Absolute and Stratego) in programs which tank mixes or pre mixes of a strobilurin with mixing partners of a different mode of action are used, the number of strobilurin containing applications should be no more than ½ (50%) of the total number of fungicide applications per season.
10. In programs in which applications of strobilurin fungicides are made with both solo products and mixtures, the number of strobilurin containing applications should be no more than ½ (50%) of the total number of fungicide applications per season.

PEANUT SEED TREATMENT

Bob Kemerait, Extension Plant Pathologist
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Dynasty PD (azoxystrobin + fludioxonil + mefenoxam)	3.0 -4.0 fl oz/100 lb
Trilex Optimum (trifloxystrobin + metalaxyl)	0.32-0.64 fl oz/100 lb
Granox PFM	6 oz./100 lb.
Vitavax PC	4-5 oz./100 lb.
Pro-Ized System II (Thiram + RTU-PCNB)	15 fl. oz./100 lb.
Pro-Ized System III (Thiram + RTU-PCNB + Vitavax)	15 fl. oz./100 lb.
Gustafson 4-Way	5 oz./100 lb.

PEANUT NEMATODE CONTROL

PEST	NEMATICIDE & FORMULATION	AMOUNT PER ACRE	REMARKS AND PRECAUTIONS
Nematodes	Temik 15G	20 lb. or 10 lb. + 10 lb.	Apply in 6-12-inch band before or at planting and incorporate 2-4 inches. Split application (recommended): Apply 10 lbs. at planting as above or in seed furrow plus 10 lbs. in a 12-18 inch band at pegging. Do not exceed 20 lbs./A of Temik 15G per season. Do not harvest within 90 days of application.
	Nemacur 3	3.3 qt.	Apply in 12-inch band before or at planting and incorporate into soil.
	Telone II	5 - 6 gal.	Apply broadcast with moldboard plow. Apply 7 to 14 days before planting.
	Mocap 15G	13-26 lb.	Apply in 15 to 18 inch band at pegging. May be applied within 90 days of harvest.
	Vydate C-LV	17-34 fl. ounces	Must be used with a preplant or at-plant nematicide. Recommend a split application applied 28 and 42 days after planting. Best used in low nematode pressure fields. Vydate may be used within 90 days of harvest.
			A nematicide application at pegging is recommended regardless of which nematicide is used at planting. **DO NOT FEED PEANUT HAY TREATED WITH THESE NEMATICIDES TO LIVESTOCK.**

NEMATICIDE CONTROL RATING

Nematicides listed below are rated on a scale of excellent, good, fair and poor. Those listed as poor to fair would be acceptable in low nematode population fields, but should not be used in fields where root-knot nematodes cause severe problems.

NEMATICIDE	RATING
Mocap	poor to fair
Nemacur	good
Temik	good
Telone II	excellent
Vydate	poor to fair

PEANUT WEED CONTROL

Eric P. Prostko, Extension Agronomist - Weed Science

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE: AMOUNT OF FORMULATION/A	BROADCAST RATE/ACRE: LBS ACTIVE INGREDIENT/A	REMARKS AND PRECAUTIONS
EARLY PREPLANT FOLIAR BURNDOWN OF EMERGED ANNUAL WEEDS AND/OR COVER CROPS IN REDUCED TILLAGE SYSTEMS			
glyphosate (various trade names) 3.00 lb ae/gal 3.73 lb ae/gal 4.00 lb ae/gal 4.17 lb ae/gal 4.50 lb ae/gal 5.00 lb ae/gal	 16 - 48 ozs 13 - 39 ozs 12 - 36 ozs 11.7 - 35 ozs 11 - 32 ozs 10 - 29 ozs	0.38 to 1.13 ae	Apply any time prior to planting to control emerged weeds. Refer to specific label for weeds controlled, application rates, adjuvants, and precautions. Glyphosate does not adequately control cutleaf eveningprimrose or Carolina geranium, and may not provide acceptable control of wild radish. For cover crop control, use the following rates: wheat ≤ 6", 0.38 lb ae/A; wheat > 6" or rye ≤ 20", 0.56 lb ae/A; rye > 20", 0.75 lb ae/A. Glyphosate can also be tank-mixed with Valor (1-3 ozs/A) or Aim (1-1.5 ozs/A) to improve the spectrum of control, particularly for annual morningglories. Refer to specific comments for Valor. **Applications to wheat should be made before the boot stage or after the wheat is fully headed.** MOA = 9.
glyphosate (various trade names) 3.00 lb ae/gal 3.73 lb ae/gal 4.00 lb ae/gal 4.17 lb ae/gal 4.50 lb ae/gal 5.00 lb ae/gal + 2,4-D amine (various trade names) 3.8 lb/gal	 16 - 48 ozs 13 - 39 ozs 12 - 36 ozs 11.7 - 35 ozs 11 - 32 ozs 10 - 29 ozs + 0.5 to 1.0 pt	0.38 to 1.13 ae 0.24 to 0.48	Refer to comments for glyphosate applied alone. 2,4-D is the most cost-effective option available for burndown of cutleaf eveningprimrose. 2,4-D does not control Carolina geranium. Some 2,4-D products are labeled for application to previous crop stubble or fallow land. In this case, the label directs the user to not plant a crop "until 3 months after application or until the product disappears from the soil". MOA = 9 + 4.
paraquat (Gramoxone Inteon) 2.0 lb/gal (Gramoxone Max/ Firestorm/Parazone) 3.0 lb/gal	2.5 to 3.75 pt 1.7 to 2.5 pt	0.63 to 0.94	Apply anytime prior to planting to control emerged weeds. Add non-ionic surfactant at 1 pt/100 gals or crop oil at 1 gal/100 gals. **Paraquat will not adequately control horseweed, swinecress, purslane speedwell, curly dock, cutleaf eveningprimrose and larger wild radish**. For cover crop control, use the following rates: wheat, 0.63 lb ai/A (2.5 pt/A of 2.0 lb/gal or 1.7 pt/A of 3.0 lb/gal); rye, 0.49 lb ai/A (1.95 pt/A of 2.0 lb/gal or 1.3 pt/A of 3.0 lb/gal). **Cover crops must be mature (seedheads) for adequate control.** Can also be tank-mixed with Valor (1-3 ozs/A) to improve the spectrum of control and provide residual weed control. Refer to specific comments for Valor. MOA = 22.
paraquat (Gramoxone Inteon) 2.0 lb/gal (Gramoxone Max/ Firestorm/Parazone) 3.0 lb/gal + 2,4-D amine (various trade names) 3.8 lb/gal	2.5 to 3.75 pt 1.7 to 2.5 pt 0.5 to 1.0 pt	0.63 to 0.94 0.24 to 0.48	Refer to comments for paraquat applied alone. 2,4-D is the most cost-effective option available for burndown of cutleaf eveningprimrose. 2,4-D does not control Carolina geranium. Some 2,4-D products are labeled for application to previous crop stubble or fallow land. In this case, the label directs the user to not plant a crop "until 3 months after application or until the product disappears from the soil". MOA = 22 + 4.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE: AMOUNT OF FORMULATION/A	BROADCAST RATE/ACRE: LBS ACTIVE INGREDIENT/A	REMARKS AND PRECAUTIONS
PREPLANT SOIL INCORPORATED			
ethalfluralin (Sonalan) HFP 3.0 lb/gal	2 pt	0.75	Controls annual grasses and small-seeded broadleaf weeds. Soil incorporate 2 to 3 inches deep within 2 days of application. Incorporation with implements other than power tiller requires two passes, preferably at cross angles. May be tank-mixed with Frontier/Outlook or Dual for control of mixed infestations of annual grasses and nutsedge. *Sonalan may also be applied as a surface application to freshly prepared seedbeds but* ***must be incorporated by 0.5-1.0" of rainfall or irrigation within 2 days after application.*** MOA = 3.
pendimethalin (Prowl/Pendimax) 3.3 lb/gal (Prowl $H_2$0) 3.8 ACS	1.8 to 2.4 pt 2.0 pts	0.75 to 1.0 0.95	Controls annual grasses and small-seeded broadleaf weeds. Soil incorporate 1 to 2 inches deep within 7 days of application. Incorporation with implements other than power tiller requires two passes, preferably at cross angles. Use high rate for Texas panicum or where heavy weed populations are anticipated. May be tank-mixed with Frontier/Outlook, Dual, or Pursuit for control of mixed infestations of annual grasses and nutsedge. *Prowl can be applied immediately after planting to a freshly prepared seedbed up to 2 days after planting but before crop emergence.* ***However, adequate incorporation in the form of 0.75" of irrigation or rainfall is needed within 48 hours for optimum activation when applied by this method.*** **In strip- tillage production systems, the rate of pendimethalin should be increased to 3.0 pts/A (Prowl 3.3EC) or 2.6 pts/A (Prowl H_2O)**. MOA = 3.
dimethenamid- P (Outlook/Propel) 6.0 lb/gal	12 to 21 oz	0.56 to 0.98	Controls some annual grasses (not Texas panicum) and small-seeded broadleaf weeds. Suppresses yellow nutsedge but not purple nutsedge. May be tank-mixed with Prowl/Pendimax or Sonalan for control of mixed infestations of annual grasses and yellow nutsedge. PPI treatments generally provide better control of yellow nutsedge. MOA = 15.
metolachlor (Stalwart, Parallel PCS, Me-Too Lachlor) *S*-metolachlor (Dual Magnum 7.62EC) (Dual II Magnum 7.64EC) (Cinch 7.64EC)	1.0 to 1.33 pt 1.0 to 1.33 pt	1.0 to1.33 0.96 to 1.27	Controls some annual grasses (not Texas panicum) and small-seeded broadleaf weeds and may provide limited Florida beggarweed suppression. Controls or suppresses yellow nutsedge but not purple nutsedge. Incorporation with implements other than power tiller requires two passes, preferably at cross angles. Deep incorporation may reduce effectiveness. May be tank-mixed with Prowl/Pendimax or Sonalan for control of mixed infestations of annual grasses and yellow nutsedge. PPI treatments generally provide better control of nutsedge. Heavy rainfall after planting and/or non-uniform incorporation may result in crop injury expressed as delayed emergence and stunted growth of emerging plants. The generic formulations of metolachlor (**Parallel PCS**, **Stalwart**, **Me-Too-Lachlor**) have not provided the same length of residual control of certain weeds as similar rates of Dual Magnum formulations in some UGA field trials. MOA = 15
diclosulam (Strongarm) 84WG	0.45 oz	0.024	Provides general broadleaf weed control. Incorporate into top 1-3" of final seedbed. Good to excellent control of many species including bristly starbur, wild poinsettia, eclipta, and copperleaf. Should be tank-mixed with a grass herbicide. **Poor control of sicklepod.** Control of nutsedge has been variable and inconsistent. Can also be applied preemergence. **Crop rotation restrictions: cotton = 10 months; soybeans = 0 months; wheat, barley = 4 months; oats, rye = 6 months; corn = 18 months (10 months - IR hybrids); tobacco, sorghum = 18 months; other crops = 30 months.** MOA = 2.
imazethapyr (Pursuit) 2.0 lb/gal 70 DG	 4 oz 1.44 oz	0.063	Controls purple and yellow nutsedge, wild poinsettia, wild radish, pigweed, burgherkin, and several other annual species. Does not control Florida beggarweed or sicklepod. Shallow incorporation is preferred. May be tank- mixed with Dual, Prowl/Pendimax, or Sonalan. Incorporated treatments are more persistent than preemergence or postemergence applications and are more likely to result in carryover. **Rotation intervals for various crops include the following: lima beans, southern peas, soybeans, peanuts, IMI corn hybrids - 0 months; wheat, rye - 4 months; field corn - 8.5 months; barley, tobacco - 9 months; bahiagrass, cabbage, canteloupe, cotton, cucumber, Irish potato, lettuce, oats, onion, sorghum, sunflower, sweet corn, sweet potato transplants, sweet pepper transplants, tomato transplants; and watermelon - 18 months; canola - 40 months.** MOA = 2.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE: AMOUNT OF FORMULATION/A	BROADCAST RATE/ACRE: LBS ACTIVE INGREDIENT/A	REMARKS AND PRECAUTIONS
CHEMIGATION			
metolachlor - (Stalwart, Parallel PCS, Me-Too-Lachlor), *S*-metolachlor - (Dual Magnum 7.62E), (Cinch 7.64EC) pendimethalin - (Prowl/Pendimax) 3.3EC (Prowl H_20 3.8ACS)			May be applied by injection through center pivot irrigation systems. Use at normal recommended rates. Apply after planting but before crop emergence. Requires proper system calibration and safety devices (check valves, cutoff switches, etc.) to provide effective weed control and prevent environmental contamination. Accurate herbicide application through chemigation may provide superior weed control compared to conventional ground applications. The generic formulations of metolachlor (**Parallel PCS**, **Stalwart**, **Me-Too-Lachlor**) have not provided the same length of residual control of certain weeds as similar rates of Dual Magnum formulations in some UGA field trials.
PREEMERGENCE			
imazethapyr (Pursuit) 2.0 lb/gal 70 DG	4 fluid oz 1.44 oz	0.063	See comments for Pursuit PPI. Controls the same weeds as listed for Pursuit PPI but with greater dependency on rainfall or irrigation for activation. MOA = 2.
metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor) *S*-metolachlor (Dual Magnum 7.62EC) (Dual II Magnum 7.64EC) (Cinch 7.64EC)	1.0 to 1.33 pt 1.0 to 1.33 pt	1.0 to 1.33 0.96 to 1.27	Controls some annual grasses (not Texas panicum) and small-seeded broadleaf weeds. Provides some suppression of sicklepod and Florida beggarweed. Apply after planting and before crop and weeds emerge. If Dual is used as a PPI treatment, any additional application of Dual should be delayed until peanuts begin emerging (AC). Multiple applications--preplant incorporated followed by at-cracking treatments--improve control of sicklepod, Florida beggarweed, and yellow nutsedge. Preemergence treatments generally provide better broadleaf weed control/suppression. Up to 2 pts/A of any metolachlor formulation can be applied preemergence for the partial control of Florida beggarweed in the southeast Do not apply more than 2.66 pts/A/year of Stalwart/Parallel/Me-Too-Lachlor or 2.8 pts/A/year of Dual Magnum/Dual II Magnum/Cinch formulation. The generic formulations of metolachlor (**Parallel**, **Stalwart**, **Me-Too-Lachlor**) have not provided the same length of residual control of certain weeds as similar rates of Dual Magnum formulations in some UGA field trials. MOA = 15.
dimethenamid-P (Outlook/Propel) 6.0 lb/gal	12 to 21 oz	0.56 to 0.98	Controls some annual grasses (not Texas panicum) and small-seeded broadleaf weeds. Provides some suppression of sicklepod, Florida beggarweed. Apply after planting and before crop and weeds emerge. May be used in a split application method. Preemergence treatments generally provide better broadleaf weed control/suppression. Do not exceed 21 oz/A/year of Outlook/Propel 6E. MOA = 15.
diclosulam (Strongarm) 84WG	0.45 oz	0.024	Refer to PPI section. MOA = 2.
flumioxazin (Valor) 51WP	3.0 oz	0.096	Apply immediately after planting but no later than 2 days after planting. Plant peanuts at least 1.5" deep. **DO NOT** irrigate when peanuts are cracking. Rainfall or irrigation at cracking will cause temporary crop injury that should not result in reduced yields if applied according to the label. Valor will provide good to excellent control of many broadleaf weeds including Florida beggarweed, Palmer amaranth, and tropic croton. **Valor will not control annual/perennial grasses, sicklepod, nutsedge, and cocklebur**. Valor can be tank-mixed with Prowl, Sonalan, Dual Magnum, or Outlook. **Can also be used in strip-tillage peanut production systems in combination with glyphosate or paraquat to improve burndown control**. Rotation restrictions include the following: cotton - 2 months; field corn - 2 months; soybeans - 0 months; tobacco - 2 months; wheat - 2 months. Refer to current product label for additional rotational restrictions. **Completely clean spray equipment THE SAME DAY OF USE as directed on the herbicide label!!!!** MOA = 14.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE		REMARKS AND PRECAUTIONS
	AMOUNT OF FORMULATION/A	LBS ACTIVE INGREDIENT/A	
AT CRACKING OR EARLY POSTEMERGENCE			
imazethapyr (Pursuit) 2.0 lb/gal 70 DG	 4 fluid oz 1.4 4 oz	 0.063	See comments for Pursuit PPI and PRE. Provides effective control of nutsedge, wild poinsettia, wild radish, bristly starbur, prickly sida, and several other annual species. Weed size is especially critical for effective control of nutsedge, bristly starbur, and prickly sida. If weeds are emerged, surfactant or crop oil concentrate should be included. May be tank-mixed with paraquat or 2,4-DB for broader spectrum control of emerged weeds. MOA = 2.
metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor *S*-metolachlor (Dual Magnum) 7.64 lb/gal	1.0 to 1.33 pt 1.0 to 1.33 pt	1.0 to 1.33 0.96 to 1.27	See comments for Dual PPI and PRE. Compared to PPI and PRE treatments, AC applications provide better control of non-emerged broadleaf weeds such as Florida beggarweed and sicklepod. May be tank-mixed with paraquat treatments for improved contact activity and for suppression/control of problem broadleaf weeds and yellow nutsedge. May also be tank-mixed with Basagran, Basagran + 2,4-DB, or Storm. **Do not use Dual II Magnum/Cinch formulations after peanut emergence.** Do apply more than 2.66 pts/A/year of Stalwart/Parallel/Me-Too-Lachlor or 2.8 pts/A/year of Dual Magnum. Research has shown that Dual will provide good to excellent residual control of tropical spiderwort if applied before weed emergence. Do not apply within 90 days of harvest. The generic formulations of metolachlor (**Parallel PCS**, **Stalwart**, **Me-Too-Lachlor**) have not provided the same length of residual control of certain weeds as similar rates of Dual Magnum formulations in some UGA field trials. MOA = 15.
paraquat (Gramoxone Max/ Firestorm/Parazone) 3.0 lb/gal (Gramoxone Inteon) 2.0 lb/gal	5.4 fluid oz 8.0 fluid oz	0.125	Provides effective contact control of sicklepod, Florida beggarweed, Texas panicum, and many other problem weeds. When used alone, paraquat is not effective on smallflower morningglory, prickly sida, wild radish, or tropic croton. Apply anytime up to 14 days after ground crack. After 14 days after ground crack, apply in combination with Basagran or Storm. Include surfactant at 1 pt/100 gal spray solution with all paraquat treatments. Do not make more than 2 applications per season. Do not apply a total of more than 10.8 ozs/A/year (Gramoxone Max) or 16.0 ozs/A/year (Gramoxone Inteon). Peanut foliage injury is usually temporary. Conditions of high humidity, wet foliage, and/or wet soils result in greater foliage burn. Thrips injury retards crop recovery. Research indicates no adverse effects of adding chlorothalonil products with paraquat tank-mixtures where fungicide treatments are needed. **The success of "at-crack" sprays can be greatly improved by 1) applying herbicides in a minimum of 15 GPA; 2) using flat fan nozzles; 3) decreasing ground speed**; **and 4) using lower spray pressures (30 PSI). Rain-free period for paraquat is 30 minutes.** MOA = 22.
paraquat (Gramoxone Max/ Firestorm/Parazone) 3.0 lb/gal (Gramoxone Inteon) 2.0 lb/gal + bentazon+acifluorfen (Storm) 4.0 lb/gal	8.0 fluid oz 12.0 fluid oz + 1-1.5 pt	0.188 + 0.5 + 0.25	Provides effective, broad-spectrum weed control. Provides some suppression of yellow nutsedge. Addition of Dual or Frontier/Outlook improves contact activity and provides residual weed suppression/control, but could result in increased foliar peanut burn. Apply anytime up to 28 days after ground crack. Include surfactant at 1 pt/100 gal spray solution with all paraquat treatments. **The success of "at-crack" sprays can be greatly improved by 1) applying herbicides in a minimum of 15 GPA; 2) using flat fan nozzles; 3) decreasing ground speed**; **and 4) using lower spray pressures (30 PSI)** Research indicates no adverse effects of adding chlorothalonil products with paraquat tank-mixtures where fungicide treatments are needed MOA = 22 + 6 +14.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE: AMOUNT OF FORMULATION/A	BROADCAST RATE/ACRE: LBS ACTIVE INGREDIENT/A	REMARKS AND PRECAUTIONS
AT CRACKING OR EARLY POSTEMERGENCE (cont.)			
paraquat (Gramoxone Max/ Firestorm/Parazone) 3.0 lb/gal (Gramoxone Inteon) 2.0 lb/gal + bentazon (Basagran, Depend, Leader) 4.0 lb/gal	8.0 fluid oz 12.0 fluid oz + 0.5 to 1.0 pt	0.189 + 0.25 + 0.5	Provides effective, broad-spectrum weed control. Provides some suppression of yellow nutsedge. Generally reduces peanut injury compared to other paraquat treatments. The lower rate of Basagran (0.5 pt) is usually sufficient to reduce peanut foliar burn and provide control of smallflower morningglory. The higher rate (1 pt) is necessary for control of weeds such as bristly starbur and prickly sida. Addition of Dual or Frontier/Outlook improves contact activity and provides residual weed suppression/control. Apply anytime up to 28 days after ground crack. Include surfactant at 1 pt/100 gal spray solution with all paraquat treatments. **The success of "at-crack" sprays can be greatly improved by 1) applying herbicides in a minimum of 15 GPA; 2) using flat fan nozzles; 3) decreasing ground speed; and 4) using lower spray pressures (30 PSI).** . Research indicates no adverse effects of adding chlorothalonil products with paraquat tank-mixtures where fungicide treatments are needed. MOA = 22 + 6.
diclosulam (Strongarm) 84WG	0.45 ozs	0.024	24(c) label for use in Georgia**. Only weed on current 24(c) label is tropical spiderwort**. Can be applied up until 30 days after planting. Use in combination with a NIS @ 0.25% v/v (1 qt/100 gals). **When applied postemergence in peanut, cotton rotation restriction is 18 months**. Follow other rotation restrictions listed in PPI section. Label must be in the possession of user at the time of application. MOA = 2.
POSTEMERGENCE			
acifluorfen (Ultra Blazer) 2L 2.0 lb/gal	0.5 to 1.5 pt	0.125 to 0.38	Especially useful for control of morningglories, tropic croton, wild radish, wild poinsettia, hophornbeam copperleaf, and spider flower. Adjust rate according to weed size and species as noted on the label. Use 1.0 pt/A or less for control of highly sensitive species such as hemp sesbania and showy crotalaria. Slight to moderate peanut foliage burn may result. Observations over the past several years indicate that newer amine formulation may be less injurious than older sodium salt formulation. Do not apply within **75** days of harvest or more than 2 pt/A per season as a postemergence treatment. Apply with nonionic surfactant at 1 qtt/100 gal spray solution (0.25% v/v). May be tank-mixed with 2,4-DB (1 pt/A). The Blazer + 2,4-DB tank mixture is generally more injurious to peanuts than either product alone. May be tank-mixed with Basagran for control of broadleaf weeds such as morningglories, cocklebur, and prickly sida. A pre-packaged mix of acifluorfen + bentazon is marketed as Storm. **Rain-free period for Ultra Blazer is 4 hours.** MOA = 14.
bentazon (Basagran) 4.0 lb/gal	1.5 to 2.0 pt	0.75 to 1.0	Apply for postemergence control of yellow nutsedge, cocklebur, bristly starbur, smallflower morningglory, prickly sida, and certain other weeds. Treat when broadleaf weeds are small and actively growing. Adjust rate according to weed size as noted on label. Two applications may be required for control of yellow nutsedge. For yellow nutsedge, include crop oil concentrate at 1 qt/A. Do not foliarly apply sulfur 14 days before or after use of crop oil concentrate to minimize risk of peanut foliage burn. May be tank-mixed with 2,4-DB amine 2L (0.5 pt/A) for improved control of morningglories. Early-season applications of bentazon at high rates following in-furrow applications of Di-Syston may infrequently result in SEVERE peanut injury. **Rain-free period for Basagran is 4 hours.** MOA = 6.
bentazon + acifluorfen (Storm) 4 lb/gal	1.5 pt	0.5 + 0.25	Controls morningglories, cocklebur, prickly sida, ragweed, eclipta, tropic croton, and several other broadleaf weeds with less injury than Blazer alone. Application timing is critical--weeds must be small. Include surfactant or crop oil concentrate. Can be mixed with 2,4-DB for control of larger weeds and for control of sicklepod. Do not apply within 75 days of harvest. May be tank-mixed with paraquat. **Rain-free period for Storm is 4 hours**. MOA = 6 + 14.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE: AMOUNT OF FORMULATION/A	BROADCAST RATE/ACRE: LBS ACTIVE INGREDIENT/A	PRECAUTIONS AND REMARKS
POSTEMERGENCE continued			
2,4-DB (Butyrac 175) 1.75 lb/gal (Butyrac 200) 2.0 lb/gal (Butoxone 175) 1.75 lb/gal (Butoxone 200) 2.0 lb/gal	14 to 18 oz 13 to 16 ozs 16 to 28 ozs 14 to 26 ozs	0.19 to 0.25 0.20 to 0.25 0.22 to 0.38 0.22 to 0.40	Apply up to 2 applications per season as an over-the-top treatment for broadleaf weed control. Use rates and application timing varies by specific product label. For control of morningglory and citronmelon, apply in the seedling stage. Cocklebur one foot or more in height can be controlled; however, earlier treatment is preferred. Also effective for control of escaped sicklepod. Do not apply if peanuts are under drought stress. Butyrac may be applied up to 12 weeks after planting. Do not apply Butoxone within 30 days of harvest. Research indicates no adverse effects of adding chlorothalonil products with 2,4-DB where fungicide treatments are needed. **Rain-free period for 2,4-DB is 1 hour. Do not tank-mix with postemergence grass herbicides.** MOA = 4.
imazethapyr (Pursuit) 2.0 lb/gal 70 DG	4 fluid oz 1.44 oz	0.063	See comments for Pursuit PPI, PRE, and AC/EP. Generally should be used early postemergence-when weeds are extremely small. Controls wild radish, pigweeds, morningglories, cocklebur, and several other annual species. Compared to PPI, PRE. and AC/EP treatments, POST applications are less effective on nutsedge, wild poinsettia, and some other species. Applications should be made before nutsedge exceeds 3 to 4 inches and bristly starbur exceeds 2 inches. May be tank-mixed with paraquat or 2,4-DB. Post control of escaped wild poinsettia is greatly enhanced in combination with paraquat**. Rain-free period for Pursuit is 1 hour**. Do not apply within 85 days of harvest. MOA = 2.
imazapic (Cadre)70DG (Cadre/Impose) 2AS	1.44 oz 4.0 oz	0.063	Provides excellent control of many broadleaf and grass weeds and both purple and yellow nutsedge. Apply as an early postemergence treatment when weeds are less than 2-3 inches in height. Under conditions of heavy weed pressure, applications of Cadre 10-14 days following an at-cracking treatment (paraquat combination) has resulted in superior weed control. Do not apply within 90 days of harvest. Use with NIS (0.25% v/v) or COC (1 qt/A). **Rotation restrictions include: wheat, rye - 4 months; corn, snapbeans, southern peas, soybeans, tobacco - 9 months; cotton, oats, sweet corn, grain sorghum - 18 months; canola - 40 months. See label for additional restrictions. Rain-free period for Cadre is 3 hours.** MOA = 2.
lactofen (Cobra 2EC)	12.5 ozs	0.195	Apply after peanuts reach 6 true leaf stage of growth. Use a crop oil concentrate at 1% v/v (1 gal/100 gals). Provides good control of pigweeds, morningglories, ragweed, copperleaf, wild poinsettia, and eclipta. Cobra can be tank-mixed with Basagran, Cadre, Pursuit, Select, and 2,4-DB**. Preharvest interval is 45 days**. **Rain-free period is 30 minutes.** MOA = 14.
sethoxydim (Poast) 1.5 lb/gal (Poast Plus) 1.0 lb/gal	1.0 to 1.5 pt 1.5 to 2.25 pt	0.19 to 0.28	For control of annual and perennial grasses. Apply when annual grasses are small (1-6 inches) and actively growing. Under favorable conditions, large Texas panicum can be controlled. For perennial grass control, two applications are usually required for satisfactory control. Always apply with 1 qt/A crop oil concentrate. Tank-mixtures with other herbicides, such as 2,4-DB, may reduce grass control. Do not foliarly apply sulfur 14 days before or after application to minimize risk of peanut foliage burn. Reduced spray volumes (10 GPA) may improve grass control. Do not apply within 40 days of harvest. **Rain-free period for Poast is 1 hour.** MOA = 1.
clethodim (Select, Arrow, others) 2EC (Select Max) 0.97EC	6 to 8 oz 12 to 16 oz	0.09 to 0.125	For control of annual and perennial grasses. Apply when grasses are small (<6 inches) and actively growing. Under favorable conditions, large Texas panicum and bermudagrass can be effectively controlled. Heavy bermudagrass pressure or larger Texas panicum will require a follow-up treatment. When tank-mixing with a broadleaf herbicide or controlling perennial grasses, increase rates (8-16 ozs/A-Select; 16-32 oz/A-Select Max). Do not apply more than 32 oz/A/year (Select) or 64 oz/A/year (Select Max). Always apply with a crop oil concentrate at 1% v/v (Select/Arrow). A NIS (0.25% v/v) can be used with Select Max to reduce crop injury potential. May be tank-mixed with Basagran, Blazer, Storm, Orthene, Danitol, or Folicur. **Do not tank-mix with chloro-thalonil products or reduced grass control can occur**. Do not apply within 40 days of harvest. **Rain-free period is 1 hour.** MOA = 1.

USE STAGE/ AND HERBICIDE	BROADCAST RATE/ACRE		PRECAUTIONS AND REMARKS
	AMOUNT OF FORMULATION/A	LBS ACTIVE INGREDIENT/A	
POSTEMERGENCE continued			
chlorimuron (Classic) 25DF	0.5 oz	0.008	Make one application per season as an over-the-top treatment for mid-season Florida beggarweed and bristly starbur control or suppression. Under favorable conditions--good soil moisture, moderate temperatures, and high relative humidity--other species such as cocklebur, ragweed, and sicklepod may be suppressed. Avoid applications during periods of drought/heat stress because of potential for poor weed control and crop injury. **Applications of Classic may not provide acceptable control of Florida Beggarweed that has escaped control or is regrowing after an previous application of Cadre.** Include nonionic surfactant at 1 qt/100 gals spray solution with all Classic applications. Addition of ammonium sulfate (2 lb/A) or feed grade urea (2 gal/A) improves activity on bristly starbur. Classic can be applied from 60 days after peanut emergence to within 45 days of harvest. **APPLICATIONS OF CLASSIC APPLIED FROM 60 DAYS AFTER CROP EMERGENCE TO 45 DAYS BEFORE HARVEST MAY CAUSE AN INCREASE IN TSWV SYMPTOMS.** Temporary yellowing of peanut foliage and reduction of canopy growth sometimes occur. Can be tank-mixed with Bravo or 2,4-DB. However, combinations of Classic + 2,4-DB result in significantly more foliar crop injury compared to Classic alone. **Do not use on Spanish peanut. Do not use the combination of Classic + 2,4-DB on Southern Runner. Do not tank-mix with elemental sulfur. Rain-free period for Classic is 1 hour.** MOA = 2.
HARVEST AID			
carfentrazone (Aim) 2EC	1 - 2 oz	0.156 - 0.031	Useful for the late-season dessication/defoliation of annual morningglories. Apply 7 days before harvest. Use in combination with either a NIS (0.25% v/v) or COC (1% v/v). Aim may cause leaf spotting or burning. Use at least 15 GPA for optimum results. The higher rate (2 oz/A) may be needed if smallflower morninglory is present. Do not graze or feed peanut hay to livestock. Only 1 application per season is permitted. Rain-free period = 6-8 hours . MOA = 14.

WEED RESPONSE TO BURNDOWN HERBICIDES USED IN PEANUT

Eric P. Prostko, A. Stanley Culpepper, and Steve M. Brown

Weed Species	Burndown Treatment[1]							
	2,4-D[3]	glyphosate acid	glyphosate acid[2] + 2,4-D[3]	glyphosate acid[2] + Valor	glyphosate acid[2] + Aim	paraquat	paraquat + 2,4-D	paraquat + Valor[4]
GRASSES / SEDGES								
annual bluegrass	N	E	E	E	E	G-E	G-E	
bermudagrass	N	F	F	F	F	P	P	
crabgrass	N	E	G-E	E	E	G		
goosegrass	N	E	G-E	E	E	F-G		
Italian ryegrass	N	G-E	G	G	G	P-F	P-F	
johnsongrass	N	G-E	G	G-E	G-E	P		
little barley	N	E	E	E	E	G	G	
sandbur	N	E	G-E	E	E	G		
Texas panicum	N	E	G-E	E	E	G		
volunteer corn	N	E	E	E	E	F-G		
purple nutsedge	N	F-G	F-G	G	F-G	P-F		
yellow nutsedge	N	P-F	P-F	F	P-F	P-F		
BROADLEAVES								
bristly starbur	G	G-E	G-E	E	E	E		
buttercup	G	G-E	E	G-E	G-E	E		
Carolina geranium	F	P-F	G	G	F-G	G-E	G-E	
chickweed	P	E	E	E	E	E	E	
citronmelon	F	G-E	E	E	E	F		
cocklebur	E	E	E	E	E	G-E		
coffee senna	G	E	E	E	E	F		
corn spurry	P-F	G-E	G-E			F-G		
cowpea	G	E			E	E		
cudweed	P-F	G-E	G-E	E		F-G		
curly dock	P-F	F	F-G	F	F	P	P-F	
eveningprimrose	E	P-F	E	F-G	F	P-F	E	F-G
eclipta	P	F			G-E	F		G
Florida beggarweed	F-G	E	E	E	E	E		
Florida pusley	F	F	G	F-G	G	F		G
field pansy	P-F	F-G	F-G	G		G-E		
hemp sesbania	G-E	P-F	E		G-E	F		
henbit	P-F	F	G-E	E	E	G	G-E	
horsenettle	F	F			P-F	P-F		
horseweed	F-G	F-G[5]	G-E	G-E[5]	G-E[5]	P	P-F	P
lambsquarters	E	G	E		G-E	F-G		

WEED RESPONSE TO BURNDOWN HERBICIDES USED IN PEANUT (continued)

Weed Species	Burndown Treatment[1]							
	2,4-D [3]	glyphosate acid	glyphosate acid [2] + 2,4-D [3]	glyphosate acid [2] + Valor	glyphosate + Aim	paraquat	paraquat + 2,4-D	paraquat + Valor[4]
morningglory, *Ipomoea*	G	F	E	E	E	F-G		
morningglory, smallflower	F	G	E	E	G-E	P		
Pennsylvania smartweed	F	G	G		G-E	P		
pigweed	G-E	E	E	E	E	G		
prickly sida	F-G	F-G	G		F-G	P-F		
purslane	G-E	F-G	G-E	G	F-G	G		
ragweed	E	G	E		G-E	G		
redweed	F	G			G-E	F		
shepherdspurse	G	G			G	G	G-E	
sicklepod	F-G	G-E	E	E	G-E	E		
speedwell	P-F	G-E	G-E	E	E	F	G	
spurred anoda	F-G	G			G	F-G		
swinecress	F-G	F-G	G	F-G	F-G	P	P-F	
tropic croton	F	G-E	G-E	E	G-E	F		
tropical spiderwort	G-E	P	G-E	F	G-E	G	G-E	
velvetleaf	F-G	G			E	P		
vines (maypop, trumpet creeper, bigroot mg)	F	P-F			P-F	P		
Virginia pepperweed	G-E	G			G	P-F	G-E	
volunteer peanuts	P	F		F-G	F	P	P	G
wild lettuce	G	G	G-E	E	G-E	P		
wild poinsettia	F-G	G			G-E	G-E		
wild radish	G	F-G	E	G	G	F	F-G	G
COVER CROPS								
clover	F	F	F-G		F	F-G		
lupine	G	G	G		G	F-G		
small grains	N	E	G-E	E	E	G		G
vetch	G	F	G-E	F	F	F		

Key: E = 90% or better control; G = 80% to 90% control; F = 60% to 80% control; P = 30% to 60% control; N = < 30% control.

[1]Application rates per acre: 2,4-D, 1 pt; glyphosate acid, 0.75 lb a.e.; paraquat (Gramoxone Inteon, Gramoxone Max, Firestorm), 0.63 lb a.i.; Valor, 1 to 2.0 oz (Note: if 3 ozs/A of Valor is used, burndown control may be better than indicated and residual control will be increased)

[2]Mixing herbicides with glyphosate occasionally reduces grass control (including cover crops). This is more likely to occur with large weeds in dry conditions.

[3]Labels for 2,4-D are ambiguous concerning the waiting period between application and planting.

[4]Use a NIS (0.25% v/v) or COC (1% v/v) with this tank-mixture. A COC may be preferred if weeds are large

[5]Glyphosate resistant horseweed has been detected in neighboring states. Glyphosate will not control glyphosate resistant horseweed.

WEED RESPONSE TO HERBICIDES USED IN PEANUTS

Eric P. Prostko, Extension Agronomist - Weed Science

	I PPI/PRE[1,2]						PRE		POSTEMERGENCE	
	Prowl Pendimax Sonalan	**Dual Magnum[3]**	**Lasso Intrro**	**Frontier Outlook**	**Pursuit**	**Strongarm**	**Solicam**	**Valor**	**Paraquat[4]**	**Paraquat + Storm**
Perennials bermudagrass	P	P	P	P	P	P	P	P	P	P
johnsongrass-rhizome	P	P	P	P	P	P	P	P	P	P
nutsedge, purple	P	P	P	P	G	P-F	P-F	P	P-F	F
nutsedge, yellow	P	F-G	F	F	F-G	P-F	P-F	P	P-F	F-G
Grasses (annual) broadleaf signalgrass	G-E	F-G	P	F	P	P	G	P	G	G
crabgrass	E	E	E	E	F	P	G-E	P	F-G	F-G
crowfootgrass	E	E	E	E	P	P	G	P	G	G
fall panicum	G	G	G	G	P-F	P	G	P	G	G
goosegrass	E	E	E	E	F	P	G	P	F-G	F-G
johnsongrass-seedling	E	F	F	F	G	P		P	G	G
sandbur	E	F-G	F-G	F-G		P		P	F	F-G
Texas panicum	G-E	P	P	P	P-F	P-F	P	P	G-E	G-E
Broadleaves bristly starbur	P	P	F	P	F	E	P-F	F	P-F	F-G
burgherkin	P	P	P	P	E	G	G	G	F	G
carpetweed	G	P-F	P-F	G	F-G	G	G		F-G	G
citronmelon	P	P	P	P	P	G		G	F	G
cocklebur	P	P	P	P	G-E	G-E	P-F	P	G	G-E
coffee senna	P	P	P	P	F-G	P	F	P-F	F	E
copperleaf	P	P		F-G	P	G-E		G-E	P	G
cowpea	P	P	P	P	P	P	P	P-F	F-G	F
crotalaria	P	P	P	P				G		F-G
croton, tropic	P	P	P-F	P	P	F-G	G	G	P	G
dayflower/tropical spiderwort	P	G-E		F		G	P-F	F	G	G
eclipta	P	P-F	P-F	P-F	P	G-E	P	G-E	P-F	F-G
Florida beggarweed	P	P-F	F	P-F	P	F-G	G	G-E	G-E	G-E
Florida pusley	E	G-E	G-E	G-E	G	G-E	G-E	G-E	P	P
groundcherry, cutleaf	P	G	G	G						
jimsonweed	P				G	G-E	F-G	G	P	F

WEED RESPONSE TO HERBICIDES USED IN PEANUTS (continued)

	I PPI/PRE[1,2]						PRE		POSTEMERGENCE	
	Prowl Pendimax Sonalan	**Dual Magnum[3]**	**Lasso Intrro**	**Frontier Outlook**	**Pursuit**	**Strongarm**	**Solicam**	**Valor**	**Paraquat[4]**	**Paraquat + Storm**
hairy indigo	P	F				G	G	G	F	
hemp sesbania	P	P	P	P	P	P-F	P	G		G
lambsquarters	E	F	F	G	F	G-E	F-G	G-E	F	F-G
morningglory spp.	P	P	P	P	G	F-G	P-F	F-G	P	F
cypressvine	P	P	P	P	G		F	G	F-G	F-G
entireleaf/ivyleaf	P	P	P	P	G	F-G	P	F-G	F	G
pitted	P	P	P	P	G	F-G	P	F	F	G
purple moonflower	P	P	P	P			P		F	G
red	P	P	P	P	G	F		G	F	G
smallflower	P	P	P	P	E	G	P-F	G-E	P	G-E
tall	P	P	P	P	G			F-G	F	G
pigweeds[5,6]	G	G	G	G	E	G	G	E	P-F	G-E
poorjoe										
prickly sida	P	F	F	F	G-E	F-G	G-E	G-E	F	G
purslane	G-E	G	G	G	G		F	G-E	G	G
ragweed	P	P	P	F-G	P	G-E	G	G-E	P-F	G
redweed	P					G	G-E	G-E	F	G
spurred anoda	P	P	P	P		F-G		F	P	G
sicklepod	P	P	F	P	P	P	F	P	G-E	G-E
smartweed	P				G	G		P-F	G-E	G
spider flower	P	P	P	P	G					
spurge spp.	P	P-F	P	P-F			F-G	G-E		
velvetleaf	P	P	P	P	P-F	G-E		F	F	F-G
wild poinsettia	P	P	P	P	E	G-E	P	F-G	F	G
wild radish	P	P	P	P	E		F		F	G

Abbreviations: E = Excellent (> 90%); G = Good (80-89%); F = Fair (70-79%); P = Poor (< 70%). (If no letter is given, response is unknown.)
PPI=Preplant Incorporated, PRE=Preemergence.

[1]Ratings for Pursuit PPI and PRE are similar. [2]Ratings for Dual, Lasso and Frontier PRE and AC are similar. See remarks for additional information.

[3] The generic formulations of metolachlor (**Parallel PCS**, **Stalwart**, **Me-Too-Lachlor**) have not provided the same length of residual control of certain weeds as similar rates of Dual Magnum formulations in some UGA field trials.

[4]Comercially available as Gramoxone Max/Firestorm or Gramoxone Inteon.

[5]Palmer amaranth control may be less than indicated.

[6]Control of ALS- resistant pigweed may be less than indicated with the following herbicides: Pursuit (imazethapyr), Cadre (imazapic), Classic (chlorimuron), and Strongarm (diclosulam).

WEED RESPONSE TO HERBICIDES USED IN PEANUTS (continued)

	POSTEMERGENCE											
	Paraquat + Basagran	2,4-DB	Pursuit	Basagran Others	Ultra Blazer	Cobra	Storm	Cadre	Strongarm**	Select	Poast	Classic
Perennials bermudagrass	P	P	P	P	P	P	P	P	P	G	F-G	P
johnsongrass	P	P	P	P	P	P	P	F-G	P	G	G	P
nutsedge, purple	F	P	G	P	P	P	P	G-E		P	P	P
nutsedge, yellow	F-G	P	F-G	G	P	P-F	F	G-E		P	P	F-G
Grasses broadleaf signalgrass	G	P	P	P	P	P-F	P	G	P	E	E	P
crabgrass	F-G	P	P-F	P	P	P-F	P	G	P	E	G-E	P
crowfootgrass	G	P	P-F	P	P	P	P	G	P	G-E	G	P
fall panicum	G	P	P	P	F	P	P	G	P	G	G	P
goosegrass	F-G	P	P	P	P	P	P	F	P	G	F-G	P
johnsongrass-seedling	G	P	F	P	P	P	P	F-G	P	G-E	G-E	P
sandbur	F-G	P		P	P	P-F	P	G	P	G-E	G	P
Texas panicum	G-E	P	P-F	P	P	P	P	F-G	P	G-E	G-E	P
Broadleaves bristly starbur	F	P-F	P-F	G	P-F	G	F-G	F	E	P	P	F
burgherkin	F	F	F	P	G	G	F	G-E		P	P	P
carpetweed	P	P	F-G	P	G-E	G-E	G	F-G		P	P	
citronmelon	F	G	P	P	F	G	F	G		P	P	P
cocklebur	G	E	E	E	G	G-E	E	E	E	P	P	F
coffee senna	E	F-G	F	G	P	P-F	F	G		P	P	P
copperleaf	P	P	P	P	G-E	G-E	F	P-F	P	P	P	P
cowpea	P-F	P-F	P	P	P-F	P-F	P-F	P-F		P	P	F
crotalaria				P	E	E	G-E			P	P	
croton, tropic	P	P	P	P	E	E	G-E	P	P	P	P	P
dayflower/tropical spiderwort	G			G				F-G	G	P	P	
eclipta	F	P	P	G	F-G	F-G	G	P-F	G-E	P	P	P
Florida beggarweed	G-E	P	P	P	P	P-F	P	F-G	P-F	P	P	F-G
Florida pusley	P	P	P	P	P	F-G	P	P		P	P	P
groundcherry, cutleaf	F-G			P	G	G	F-G			P	P	
jimsonweed	E	P	F-G	E	E	E	G	E		P	P	

WEED RESPONSE TO HERBICIDES USED IN PEANUTS (continued)

	POSTEMERGENCE											
	Paraquat + Basagran	2,4-DB	Pursuit	Basagran Others	Ultra Blazer	Cobra	Storm	Cadre	Strongarm**	Select	Poast	Classic
hairy indigo		F	P	P	G	G	F	F		P	P	F-G
hemp sesbania			P	P	E	E	G-E	P		P	P	F-G
lambsquarters	F	F	P	F	P-F	P-F	F	P-F		P	P	P
morningglory spp.	F-G	F-G	G	F	G-E	G-E	G	G	G-E	P	P	
cypressvine	G-E	F	G	G	G	G-E	G	G		P	P	
entireleaf/ivyleaf		G	F-G	P	G	F-G	F	G	G-E	P	P	
pitted		F-G	G	P	G-E	G	F-G	G	G-E	P	P	
purple moonflower		F-G	P	P	G-E	F-G	G		G	P	P	P
red		G		F-G	G-E	G-E	G-E			P	P	
smallflower	G-E	F	E	E	G-E	G-E	G-E	E	G-E	P	P	
tall		G		P	G	G	F-G	G		P	P	
pigweeds[5,6,5]	F-G	F	E	P	E	E	G	E		P	P	P-F
poorjoe		F			G	G						
prickly sida	G	P	P-F	G	P	G	G	G		P	P	P
purslane	G	G	P-F	G	E	E	G-E	P-F		P	P	
ragweed	F	F	P	F	E	E	G	F	E	P	P	P-F
redweed	G	P	P	G	P	F	G	G		P	P	P
spurred anoda	F-G	P		G	P	P	F	G		P	P	
sicklepod	G	F-G	P	P	P	P-F	P	G-E	P	P	P	P-F
smartweed	G	P	G-E	G-E	G-E	G-E	G-E	F-G		P	P	P
spider flower			F-G		G	G	F	F-G		P	P	F
spurge spp.		P	P	P	F	F	F					P
velvetleaf	G	P	P-F	G	P-F	G	F-G			P	P	
wild poinsettia	G-E	P	P-F	P	G-E	G-E	G	E	P-F	P	P	P
wild radish	F	P	G-E	P-F	E	E	G	E	G-E	P	P	P

Abbreviations: E = Excellent (> 90%); G = Good (80-89%); F = Fair (70-79%); P = Poor (<70%). If no symbol is given, response is unknown. [4]Palmer amaranth control may be less than indicated.
[5]Control of ALS- resistant pigweed may be less than indicated with the following herbicides: Pursuit (imazethapyr), Cadre (imazapic), Classic (chlorimuron), and Strongarm (diclosulam).
**24(c) label for use in Georgia only for tropical spiderwort.

SUGGESTED HERBICIDE PROGRAMS FOR THE CONTROL OF TROPICAL SPIDERWORT (BENGHAL DAYFLOWER) IN PEANUT:

Program 1

a) **PRE Immediately After Planting**: Valor @ 3 oz/A + Dual Magnum or generic metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor) @ 1 pt/A **and**

b) **POST when spiderwort is 1-2" tall:** Cadre/Impose 2L @ 4 oz/A or Strongarm @ 0.45 oz/A + Dual Magnum or generic metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor) @ 1 pt/A.

Program 2

a) **AT-CRACK (before 28 days after peanut cracking)**: Apply Gramoxone Inteon @ 12 oz/A or Gramoxone Max/Firestorm/Parazone @ 8 oz/A + Basagran @ 8 oz/A + Dual Magnum or generic metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor) @ 1 pt/A **and**

b) **POST (2-3 weeks after at-crack spray):** Apply Cadre/Impose 2L @ 4 oz/A or Strongarm @ 0.45 oz/A + Dual Magnum or generic metolachlor (Stalwart, Parallel PCS, Me-Too-Lachlor) @ 1 pt/A.

*When using Dual Magnum or generic metolachlor POST in combination with Cadre/Impose, Gramoxone/Firestorm, or Strongarm, additional spray adjuvants (NIS, COC) are not necessary. The maximum amount/A/year of Dual Magnum that can be applied is 2.8 pts. The maximum amount/A/year of Stalwart, Parallel PCS, or Me-To-Lachlor that can be applied is 2.66 pts.

Suggested Herbicide Programs for Managing ALS-Resistant Palmer Amaranth in Peanut. [1]

Preplant Incorporated	Preemergence[2]	Cracking or early postemergence[3] (Palmer < 2 in.)	Postemergence[4] (Palmer < 3 in.)
Prowl[5] or Sonalan	Valor[6,7]		Cobra[7] or Ultra Blazer[7,8]
Prowl[5] or Sonalan	Valor[6,7] + Dual Magnum[9]		Cobra[7] or Ultra Blazer[7,8]
Prowl[5] or Sonalan		Paraquat + Storm + Dual Magnum[9]	Cobra[7] or Ultra Blazer[7] + Dual Magnum[9]

[1]ALS-resistant Palmer amaranth is a very serious concern. An aggressive management program is necessary to slow spread of the resistant biotypes and to reduce selection pressure in areas currently not infested with resistant biotypes. A combination of soil residual and postemergence herbicides will be required for optimum control.

[2]Strongarm is not included in this table because it is an ALS-inhibiting herbicide. However, it can be used for the control of other broadleaf weeds. If Strongarm is used preemergence, Cadre or Pursuit should **NOT** be applied postemergence.

[3]Apply cracking or early postemergence treatment only if weeds have emerged.

[4]Cadre or Pursuit may be tank-mixed with Cobra or Ultra Blazer if needed for control of other weed species. Cadre and Pursuit are ALS- inhibitors. Because of concerns with weed resistance to ALS-inhibitors, a mixture of Cobra or Ultra Blazer with Cadre or Pursuit would be preferred over Cadre or Pursuit alone. When using Cadre or Pursuit, follow all labeled crop rotation restrictions.

[5]Generic brands of Prowl (pendimethalin) are available and perform similarly. Prowl or Sonalan can be used preemergence if 0.5-0.75" of water can be applied within 48 hours of application. They can be tank-mixed with Valor in this situation.

[6]If Valor is properly activated with 0.5-0.75" of rainfall or irrigation within 7 days of application, it is unlikely that an "at-cracking" treatment will be required. However, if control with Valor is unacceptable, an "at-cracking" treatment of paraquat + Storm + Dual Magnum should be applied.

[7]Valor, Cobra, Storm, and Ultra Blazer have the same mode of action (PPO inhibitor). Consequently, no more than 2 applications of these herbicides should be used in a season.

[8]Dual Magnum can be tank-mixed with Cobra or Ultra Blazer if additional residual control is needed in these programs.

[9]Generic brands of metolachlor are available (Stalwart, Parallel PCS, Me-Too-Lachlor). However, these generic brands have not provided the same length of residual control as Dual Magnum (*S*-metolachlor) in some UGA field trials. When tank-mixing paraquat, Cobra or Ultra Blazer with Dual Magnum/generics, additional spray adjuvants (NIS, COC) are not needed and will likely increase peanut injury.