

Weed Management in Peanuts

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General Production Practices

- Apply nutrients based on soil test (pH 5.8 to 6.2)
- Avoid excessive Mg and K
- Avoid fields with zinc
- Establish good rotations (cotton, corn, sorghum)
- Plant a disease-resistant variety in May
- 5 plants per foot of row on 36-inch rows
- Conventional tillage
- Inoculate with *Bradyrhizobia* for BNF
- Apply calcium at pegging
- Apply boron and manganese as needed
- Dig based on pod mesocarp color
- Control pests using IPM practices

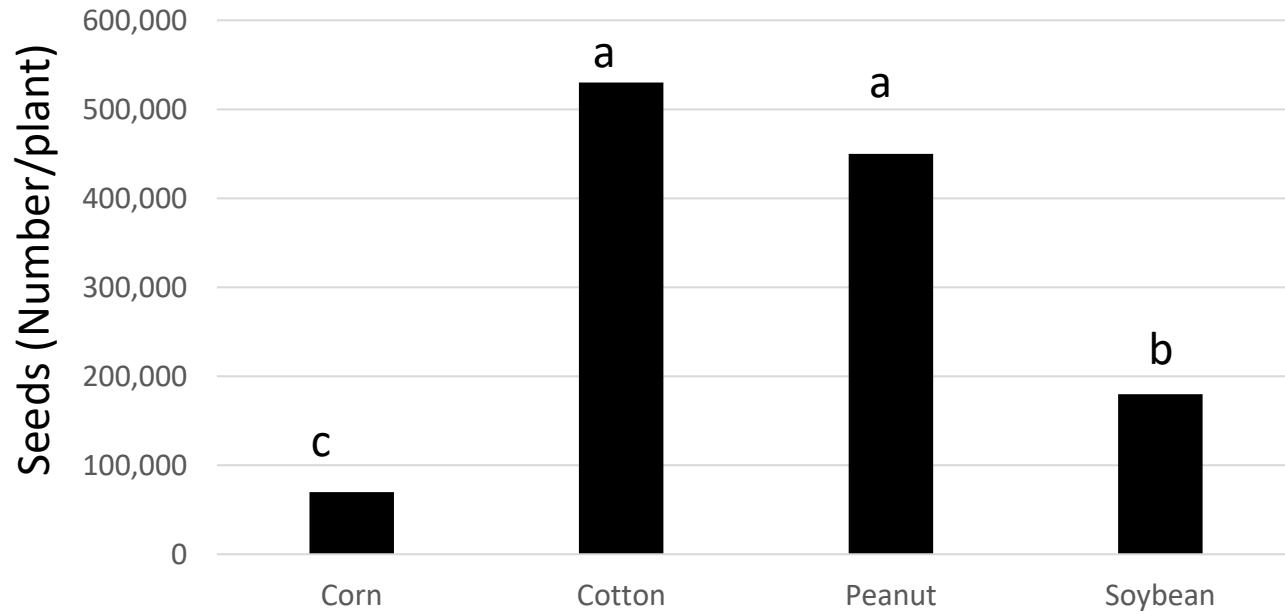


Figure caption. Weeds in peanut early in the cropping cycle (left) and in a research trial late in the cropping cycle (bottom right)

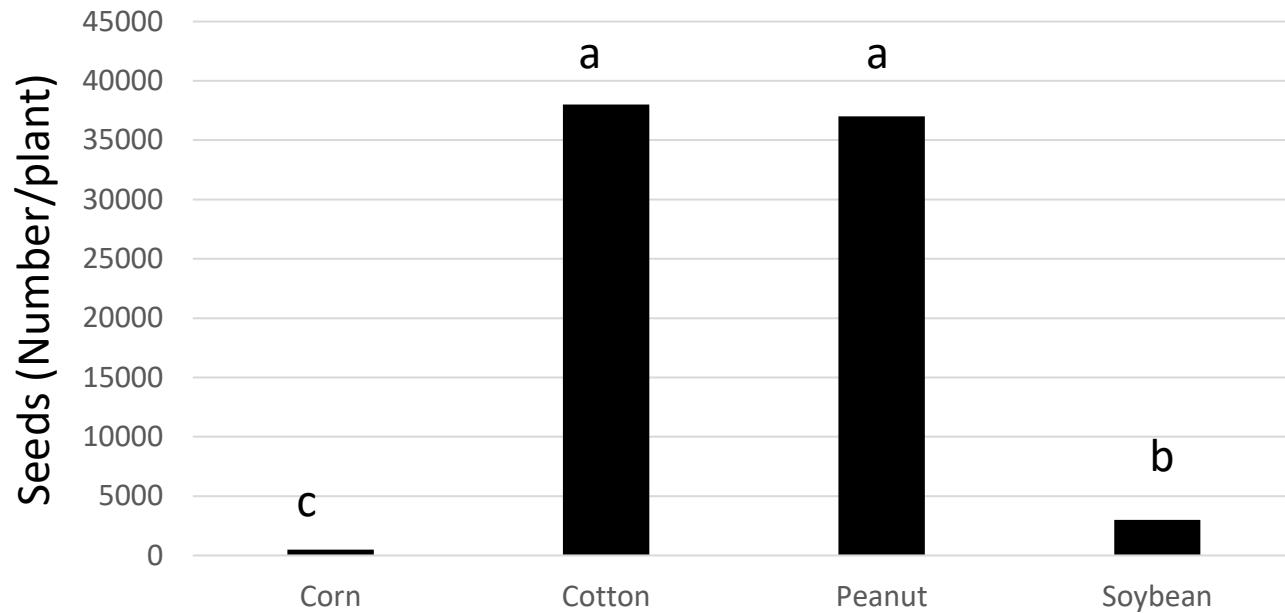
Comparison of Actual and Percent Yield Loss and Economic Loss for Cotton, Corn, Peanut, and Soybean under Similar Weed Pressure

Weeds: 2 cocklebur, 2 signalgrass, 3 lambsquarters, 1 pigweed

Crop	Actual loss (lbs/acre)	Loss (%)	Loss (\$/acre)
Corn 150 bu/acre @ \$4/bu	9.7	6.5	\$39
Soybean 42 bu/acre @ \$8/bu	8.4	20.1	\$67
Cotton 905 lb lint/acre @ \$0.65/lb lint	298	32.9	\$194
Peanut 3900 lb/acre @ \$535/ton	1,673	42.9	\$434



Seed production of female Palmer amaranth when weeds emerged with the crop. Means followed by the same letter are not significantly different at $p \leq 0.05$.



Seed production of female Palmer amaranth when weeds emerged three weeks after the crop emerged. Means followed by the same letter are not significantly different at $p \leq 0.05$.

Note Scale

Components of Weed Management

- Crop Competition
- Crop Rotation
- Cultivation
- Weed Scouting
- Herbicides

Challenges of Managing Weeds in Peanut

Relatively weed-free conditions are needed throughout the season

- Peanuts are low growing and are very susceptible to weed interference.
- Peanuts have to be dug and inverted, and pod loss can be high if weeds are present.
- Multiple fungicide applications are needed to control diseases. Weeds can prevent uniform and adequate fungicide deposition into the peanut canopy.

Preplant Incorporated Options

- Prowl, Sonalan, Dual, Dual Magnum, Warrant, Outlook, Pursuit, and Strongarm
- Mixtures of herbicides are needed to control complexes of grass and broadleaf weeds and sedges

Preemergence Options

- Dual, Dual Magnum, Warrant, Outlook, Pursuit, Strongarm, Valor SX, Spartan Charge, and Brake
- Mixtures of herbicides are needed to control complexes of grass and broadleaf weeds and sedges

At-Cracking Options and Postemergence

- Dual Magnum, Warrant, Outlook, Pursuit, Strongarm, Zidua, Anthem Flex
- Paraquat
- Paraquat with Basagran
- Paraquat with Basagran and residual herbicides

Postemergence Options

- Paraquat applied within 28 days after emergence
- Basagran, Ultra Blazer, Storm, Cobra
- Cadre and Pursuit
- Various formulations of 2,4-DB
- Clethodim (various formulations), Poast, and Poast Plus
- Dual, Dual Magnum, Warrant, Outlook, Zidua, Anthem Flex
- Paraquat (wiper/roller application)



Figure caption. Palmer amaranth plants late in the cropping cycle

Herbicide Rotation Restrictions

See *Peanut Information* and product label

Restrictions on Feeding Herbicide-Treated Vines to Livestock

See *Peanut Information* and product label

Selecting the Best Herbicide

Ultimately, the product label is the law

Figure caption. Herbicide efficacy chart from *Peanut Information* guide

Table 4-5. Weed Response to Postemergence Herbicides – Peanuts (continued)

Species	Butyrac 200	Gramoxone ¹	Gramoxone + Basagran	Gramoxone + Storm	Basagran	Basagran + Butyrac 200	Ultra Blazer	Ultra Blazer + Butyrac 200	Ultra Blazer + Basagran ²	Storm	Storm + Butyrac 200	Pursuit + Butyrac 200	Cadre or Impose	Cobra	Cobra + Basagran	Cobra + Basagran + Butyrac 200	Cobra + Cadre or Impose	Cobra + Pursuit	Poast or Poast Plus	Clethodim products
Lambsquarters	PF	F	G	G	FG	G ⁴	G	G	GE	G	G	P	PF	P	FG	G	PF	P	N	N
Morningglory, Pitted	FG	F	FG	E	P	G	E	E	E	E	E	G	GE	G	G	G	GE	G	N	N
Morningglory, Others	E	F	FG	E	P	E	GE	E	E	GE	E	E	G	G	G	E	G	E	N	N
Nutsedge, Yellow	N	PF	FG	G	G ³	G	N	N	G	F	F	F	G	N	G ³	G ³	G	F	N	N
Nutsedge, Purple	N	PF	PF	PF	NP	P	N	N	P	N	N	FG	G	N	P	P	G	FG	N	N
Palmer amaranth and other pigweeds	PF	G	G	E	N	P	E	E	E	E	E	E	E	E	E	E	E	E	N	N
Prickly sida	F	F	G	G	G	G	N	F	G	FG	G	P	G	G	G	G	G	G	G	N
Purslane	FG	—	G	G	G	G	E	E	E	GE	GE	FG	—	E	E	E	E	E	N	N
Sicklepod	G ³	G	G	G	N	G ⁶	NP	G ⁶	NP	NP	G ⁶	G ⁶	E	P	P	G ⁶	E	F	N	N
Smartweed	PF	G	E	E	E	E	GE	E	E	E	E	G	F	F	E	E	F	G	N	N
Spurge spp.	P	F ¹	F ¹	F ¹	P	P	F ¹	F ¹	F ¹	PF ¹	PF ¹	PF ¹	—	F ¹	F ¹	F ¹	F ¹	—	N	N
Spurred anoda	P	P	FG	G	G	GE	P	P	G	F	F	F	G	F	G	GE	G	F	N	N
Texas panicum	N	GE	G	GE	N	N	NP	NP	NP	NP	NP	NP	NP	G	N	N	G	NP	E	E
Tropic croton	PF	F	F	G	F	F	G	G	G	G	G	P	P	G	G	G	G	G	N	N
Velvetleaf	P	F	G	FG	G	G	PF	PF	FG	FG	FG	FG	FG	G	G	G	G	G	N	N

E = excellent control, 90% or better; G = good control, 80% to 90%; F = fair control, 50% to 80%; P = poor control, 25% to 50%; N = no control, less than 25%; — = inadequate data; not rated.

¹ Assumes weeds are 2 in. tall or smaller. ² Assumes optimum rates and ratios of Basagran and Blazer; see labels. ³ Two applications, 10 to 14 days apart.

⁴ Assumes optimum conditions and addition of crop oil concentrate. ⁵ Ratings assume weeds in one- to two-leaf stage. ⁶ Assumes follow-up treatment with 2,4-DB.

Figure caption. Herbicide details from *Peanut Information* guide**Table 4-3. Chemical Weed Control in Peanuts (continued)**

Herbicide and Formulation	Pounds Active Ingredient per Acre	Precautions and Remarks
Postemergence: Annual broadleaf weeds (continued)		
bentazon, MOA 6 (Basagran 4 L)	0.75 to 1 (1.5 to 2 pt)	Apply when weeds are small and actively growing. Use minimum of 20 GPA and high pressure (40 to 60 psi). See label for addition of oil concentrate, species controlled, and maximum weed size to treat. Basagran may also be applied at 1 pt per acre for control of cocklebur, jimsonweed, and smartweed 4 in. or shorter. Do not apply more than 4 pt of bentazon per acre per season. Can be applied with residual herbicides for improved control.
bentazon, MOA 6 (Basagran 4 L) + acifluorfen, MOA 14 (Ultra Blazer 2 L)	0.5 to 1 (1 to 2 pt) + 0.25 to 0.38 (1 to 1.5 pt)	See above comments for Ultra Blazer and Basagran. See labels for weeds controlled, maximum weed size to treat, and use of adjuvants. Can be applied as a tank mixture or as Storm 4L. Can be applied with residual herbicides for improved control.
bentazon, MOA 6 + acifluorfen, MOA 14 (Storm 4L)	0.5 + 0.25 (1.5 pt)	These rates of bentazon and acifluorfen (Ultra Blazer and Basagran) may not provide consistent control of lambsquarters, prickly sida, spurred anoda, and morningglory. Can be applied with residual herbicides for improved control.
bentazon, MOA 6 (Basagran 4 L) + acifluorfen, MOA 14 (Ultra Blazer 2 L) + 2,4-DB, MOA 4 (Butyrac 200 2 L)	0.5 (1 pt) + 0.25 (1 pt) + 0.125 to 0.25 (8 to 16 fl oz)	Adding 2,4-DB will improve control of larger morningglory, cocklebur, common ragweed, pigweed, jimsonweed, and citron. Add surfactant or crop oil according to label directions. Apply when peanuts are at least 2 weeks old. Do not apply after pod filling begins. See comments for Ultra Blazer and Basagran alone. Can be applied with residual herbicides for improved control.

Peanuts planted May 10, emerged May 20
 Scouting date June 15 (what if July 1)
 Next crop will be cotton (what if soybean)
 Weeds present: Palmer amaranth
Goosegrass
Common ragweed

		Palmer	Goose	Ragweed
1	Cade	E	F	PF
2	Gramoxone	G	G	G
	Basagran			
3	Butyrac 200	PF	N	PF
	Clethodim	N	GE	N
4	Storm	E	N	E
5	Cobra	E	N	E
	Clethodim	N	GE	N

Figure caption. Sample grid for selecting the most effective herbicide(s)

Peanut | NC State Extension x NC Herbicide Selection Tool x +

cropmanagement.cals.ncsu.edu/weeds/herbicideselect.aspx

New Tab Our Calendar Privacy error Benefit Details Influence of Plantin... ScholarOne Manusc... May 7, 2020 - PBS...

North Carolina Herbicide Selection Tool

Crop

Click on crop name to select crop for herbicide recommendation.

 Peanut

Crop management resources.

[NC Extension Peanut Portal](#)
[2026 Peanut Information](#)
[2026 N.C. Agricultural Chemicals Manual](#)

Weeds

Click on weed names to select/unselect weeds for herbicide recommendation.

amaranth, Palmer EPPO: AMAPA Competitive Index: 4 Resistant Biotype: <input type="radio"/> Nonresistant <input checked="" type="radio"/> (02) ALS Inhibitors <input type="radio"/> (05) Photosystem II Inhibitors <input type="radio"/> (09) EPSP Synthase Inhibitors <input type="radio"/> (14) PPO Inhibitors <input type="radio"/> (27) HPPD Inhibitors <input type="radio"/> (02) ALS Inhibitors + (14) PPO Inhibitors Links: NC STATE VT VICTORIA TECH	johnsongrass <i>rhizome</i> <i>seedling</i> lambsquarters, common	panicum, fall pigweed <i>redroot</i> <i>smooth</i>
millet, Texas EPPO: PANTE Competitive Index: 3.5 Resistant Biotype: <input checked="" type="radio"/> Nonresistant	millet, Texas EPPO: PANTE Competitive Index: 3.5 Resistant Biotype: <input checked="" type="radio"/> Nonresistant	purslane, common pusley, Florida ragweed, common
anoda, spurred beggarweed, Florida bermudagrass	morningglory <i>entireleaf</i> <i>ivyleaf</i> <i>pitted</i>	sicklepod EPPO: CASOB Competitive Index: 3.6 Resistant Biotype: <input checked="" type="radio"/> Nonresistant Links: NC STATE VT VICTORIA TECH

Set weed density levels by clicking on a density range bar or by clicking and sliding a red bar. The competitive load column indicates potential impact each weed has on the crop. Higher competitive load values indicate greater impact and need for control.

Selected Weed (Resistance)	Comp. Index	Relative Weed Density	Comp. Load (Density)
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Figure caption. Weed selection step in Herbicide Selection Tool

Peanut | NC State Extension x NC Herbicide Selection Tool x +

cropmanagement.cals.ncsu.edu/weeds/herbicideselect.aspx

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amaranth, Palmer
EPPO: AMAPA
Competitive Index: 4
Resistant Biotype:
 Nonresistant
 (02) ALS Inhibitors
 (05) Photosystem II Inhibitors
 (09) EPSP Synthase Inhibitors
 (14) PPO Inhibitors
 (27) HPPD Inhibitors
 (02) ALS Inhibitors + (14) PPO Inhibitors
Links: NC STATE VT VIRGINIA TECH

anoda, spurred
beggarweed, Florida
bermudagrass

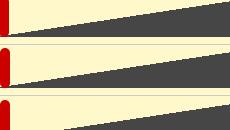
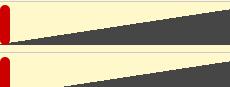
johnsongrass
rhizome
seedling
lambsquarters, common

millet, Texas
EPPO: PANTE
Competitive Index: 3.5
Resistant Biotype:
 Nonresistant
Links: NC STATE VT VIRGINIA TECH

morningglory
entireleaf
ivyleaf
pitted

sicklepod
EPPO: CASOB
Competitive Index: 3.6
Resistant Biotype:
 Nonresistant
Links: NC STATE VT VIRGINIA TECH

Set weed density levels by clicking on a density range bar or by clicking and sliding a red bar. The competitive load column indicates potential impact each weed has on the crop. Higher competitive load values indicate greater impact and need for control.

Selected Weed (Resistance)	Comp. Index	Relative Weed Density	Comp. Load (Density)
amaranth, Palmer (02) ALS Inhibitors	4.0		10.0 (2.5)
sicklepod Nonresistant	3.6		10.0 (2.8)
millet, Texas Nonresistant	3.5		10.0 (2.9)

Clear Selected Weeds

Herbicide Application Timing

Click on herbicide application timing to view herbicide recommendations. (Note: Changing crop traits, weeds, or weed density will clear herbicide timing and recommendations.)

Preplant Incorporated
 Preemergence
 At-Cracking + Residual
 At-Cracking
 Residual Only (AC or Post)
 Postemergence

Herbicide Recommendations

Click on herbicide line to show/hide additional information.

Herbicide	Rating
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Figure caption. Selection of method or timing of herbicide application

Peanut | NC State Extension x NC Herbicide Selection Tool x +

cropmanagement.cals.ncsu.edu/weeds/herbicideselect.aspx

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Herbicide Application Timing

Click on herbicide application timing to view herbicide recommendations. (Note: Changing crop traits, weeds, or weed density will clear herbicide timing and recommendations.)

Preplant Incorporated Preemergence At-Cracking + Residual
 At-Cracking Residual Only (AC or Post) Postemergence

Herbicide Recommendations

Click on herbicide line to show/hide additional information.

Herbicide	Rating
Cadre 2 AS + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Cadre 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Impose 2 AS + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Impose 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Cadre 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Cadre 2 AS + Butyrac 200 2 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Clethodim + Butyrac 200 2 L + Ultra Blazer 2 L <small>POST</small>	92 GE ▼
Impose 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Impose 2 AS + Butyrac 200 2 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Cadre 2 AS + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Cadre 2 AS + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Clethodim + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POST</small>	92 GE ▼
Clethodim + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POST</small>	92 GE ▼
Clethodim + Butyrac 200 2 L + Storm 4 L <small>POST</small>	92 GE ▼
Impose 2 AS + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POSTR</small>	92 GE ▼
Impose 2 AS + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE ▼
Storm 4 L + Gramoxone 2 SL <small>POST</small>	90 GE ▼
Storm 4 L + Parazone 3 SL <small>POST</small>	90 GE ▼
Basagran 4 L + Gramoxone 2 SL <small>POST</small>	85 G ▼
Basagran 4 L + Parazone 3 SL <small>POST</small>	85 G ▼
Clethodim + Pursuit 2 L + Cobra 2 EC <small>POSTR</small>	85 G ▼
Clethodim + Butyrac 200 2 L <small>POST</small>	77 F ▼
Clethodim + Butyrac 200 2 L + Basagran 4 L <small>POST</small>	77 F ▼
Clethodim + Pursuit 2 L + Butyrac 200 2 L <small>POSTR</small>	77 F ▼
Clethodim + Cobra 2 EC <small>POST</small>	76 F ▼
Clethodim + Basagran 4 L + Cobra 2 EC <small>POST</small>	76 F ▼
Clethodim + Ultra Blazer 2 L <small>POST</small>	76 F ▼

Figure caption. Herbicide recommendations

Clethodim + Butyrac 200 2 L + Basagran 4 L POST	77 F	▼
Clethodim + Pursuit 2 L + Butyrac 200 2 L POSTR	77 F	▼
Clethodim + Cobra 2 EC POST	76 F	▼
Clethodim + Basagran 4 L + Cobra 2 EC POST	76 F	▼
Clethodim + Ultra Blazer 2 L POST	72 F	▼
Clethodim + Basagran 4 L + Ultra Blazer 2 L POST	72 F	▼
Clethodim + Storm 4 L POST	72 F	▼
Butyrac 200 2 L + Ultra Blazer 2 L POST	68 F	▼
Butyrac 200 2 L + Storm 4 L POST	68 F	▼
Pursuit 2 L + Cobra 2 EC POSTR	62 F	▼
Cadre 2 AS POSTR	60 F	▼
Impose 2 AS POSTR	60 F	▼
Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC POST	60 F	▼
Pursuit 2 L + Butyrac 200 2 L POST	53 F	▼
Ultra Blazer 2 L POST	48 PF	▼
Basagran 4 L + Ultra Blazer 2 L POST	48 PF	▼
Storm 4 L POST	48 PF	▼
Butyrac 200 2 L POST	45 P	▼
Cobra 2 EC POST	44 P	▼
Basagran 4 L + Cobra 2 EC POST	44 P	▼
Butyrac 200 2 L + Basagran 4 L POST	41 P	▼
Clethodim Products POST	32 P	▼
Poast 1.5 EC POST	32 P	▼
Poast Plus 1 EC POST	32 P	▼
Clethodim + Basagran 4 L POST	32 P	▼
Zidua 4.17 SC POST	30 P	▼
Zidua 85 WG POST	30 P	▼

Herbicide Control Rating Key

E	Excellent 93% or better	PF	Poor/Fair 48% to 53%
GE	Good/Excellent 88% to 93%	P	Poor 28% to 48%
G	Good 83% to 88%	NP	Very Poor/Poor 23% to 28%
FG	Fair/Good 78% to 83%	N	None/Very Poor 0% to 23%
F	Fair 53% to 78%		

Figure caption. Herbicide recommendations



Peanut | NC State Extension x NC Herbicide Selection Tool x +

cropmanagement.cals.ncsu.edu/weeds/herbicideselect.aspx

Influence of Plantin... ScholarOne Manusc... May 7, 2020 - PBS...

millet, Texas 3.5 10.0 (2.9)

Nonresistant

Clear Selected Weeds

Herbicide Application Timing

Click on herbicide application timing to view herbicide recommendations. (Note: Changing crop traits, weeds, or weed density will clear herbicide timing and recommendations.)

Preplant Incorporated Preemergence At-Cracking + Residual
 At-Cracking Residual Only (AC or Post) Postemergence

Herbicide Recommendations

Click on herbicide line to show/hide additional information.

Herbicide	Rating
Cadre 2 AS + Cobra 2 EC <small>POSTR</small>	92 GE

⚠ Do not apply when cotton will be planted the following growing season. Cadre/Impose carry-over.

Active Ingredient(s):
imazapic + lactofen

Chemical Family:
Imidazolinone + Diphenylether

Mode of Action (WSSA):
02 Inhibits acetolactate synthase (ALS), also called acetohydroxyacid synthase (AHAS)
14 Inhibitor of protoporphyrinogen oxidase (Protop, PPO)

Weed Control:

Weed	%Eff	Rating
amaranth, Palmer (02) ALS Inhibitors	95	E
sicklepod Nonresistant	95	E
millet, Texas Nonresistant	85	G

Application and Rate Information:

[2026 N.C. Agricultural Chemicals Manual](#)
[2026 Peanut Information - Weed Management](#)

Cadre 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE
Impose 2 AS + Cobra 2 EC <small>POSTR</small>	92 GE
Impose 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE
Cadre 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE
Cadre 2 AS + Butyrac 200 2 L + Ultra Blazer 2 L <small>POST</small>	92 GE
Clethodim + Butyrac 200 2 L + Ultra Blazer 2 L <small>POST</small>	92 GE
Impose 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE

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Figure caption. Precautions for use of the herbicide selected

sicklepod	95	E
Nonresistant		
millet, Texas	85	G
Nonresistant		

Application and Rate Information:[2026 N.C. Agricultural Chemicals Manual](#)[2026 Peanut Information - Weed Management](#)

Cadre 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Impose 2 AS + Cobra 2 EC <small>POSTR</small>	92 GE	▼
Impose 2 AS + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Cadre 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE	▼
Cadre 2 AS + Butyrac 200 2 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Clethodim + Butyrac 200 2 L + Ultra Blazer 2 L <small>POST</small>	92 GE	▼
Impose 2 AS + Butyrac 200 2 L + Cobra 2 EC <small>POSTR</small>	92 GE	▼
Impose 2 AS + Butyrac 200 2 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Cadre 2 AS + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POSTR</small>	92 GE	▼
Cadre 2 AS + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Clethodim + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POST</small>	92 GE	▼
Clethodim + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POST</small>	92 GE	▼
Clethodim + Butyrac 200 2 L + Storm 4 L <small>POST</small>	92 GE	▼
Impose 2 AS + Butyrac 200 2 L + Basagran 4 L + Cobra 2 EC <small>POSTR</small>	92 GE	▼
Impose 2 AS + Butyrac 200 2 L + Basagran 4 L + Ultra Blazer 2 L <small>POSTR</small>	92 GE	▼
Storm 4 L + Gramoxone 2 SL <small>POST</small>	90 GE	▲

⚠️ Herbicides containing paraquat must be applied within 28 days of emergence.

Active Ingredient(s):

bentazon + acifluorfen + paraquat dichloride

Chemical Family:

Benzothiadiazinone + Diphenylether + Bipyridylum dichloride

Mode of Action (WSSA):

- 06 Inhibitor of photosynthesis at photosystem II site B
- 14 Inhibitor of protoporphyrinogen oxidase (Protox, PPO)
- 22 Photosystem I electron diverter

Weed Control:

Weed	%Eff	Rating
amaranth, Palmer (02) ALS Inhibitors	95	E
sicklepod	85	G
Nonresistant		
millet, Texas	90	GE
Nonresistant		

Application and Rate Information:

Figure caption. Precautions for use of the herbicide selected

Mode of Action (WSSA):

- 06 Inhibitor of photosynthesis at photosystem II site B
- 14 Inhibitor of protoporphyrinogen oxidase (Protox, PPO)
- 22 Photosystem I electron diverter

Weed Control:

Weed	%Eff	Rating
amaranth, Palmer (02) ALS Inhibitors	95	E
sicklepod Nonresistant	85	G
millet, Texas Nonresistant	90	GE

Application and Rate Information:

[2026 N.C. Agricultural Chemicals Manual](#)
[2026 Peanut Information - Weed Management](#)

Storm 4 L + Parazone 3 SL <small>POST</small>	90 GE	▼
Basagran 4 L + Gramoxone 2 SL <small>POST</small>	85 G	▼
Basagran 4 L + Parazone 3 SL <small>POST</small>	85 G	▼
Clethodim + Pursuit 2 L + Cobra 2 EC <small>POSTR</small>	85 G	▲

⚠ Clethodim or Poast grass control may be lower due to antagonism when co-applied with broadleaf and sedge herbicides and some fungicides. Increasing rates can partially minimize the antagonism.

Active Ingredient(s):

clethodim + imazethapyr + lactofen

Chemical Family:

Cyclohexanedione (DIMs) + Imidazolinone + Diphenylether

Mode of Action (WSSA):

- 01 Inhibits the enzyme acetyl-CoA carboxylase (ACCase)
- 02 Inhibits acetolactate synthase (ALS), also called acetohydroxyacid synthase (AHAS)
- 14 Inhibitor of protoporphyrinogen oxidase (Protox, PPO)

Weed Control:

Weed	%Eff	Rating
amaranth, Palmer (02) ALS Inhibitors	95	E
sicklepod Nonresistant	65	F
millet, Texas Nonresistant	95	E

Application and Rate Information:

[2026 N.C. Agricultural Chemicals Manual](#)
[2026 Peanut Information - Weed Management](#)

Clethodim + Butyrac 200 2 L <small>POST</small>	77 F	▼
Clethodim + Butyrac 200 2 L + Basagran 4 L <small>POST</small>	77 F	▼
Clethodim + Pursuit 2 L + Butyrac 200 2 L <small>POSTR</small>	77 F	▼
Clethodim + Cobra 2 EC <small>POST</small>	76 F	▼



Figure caption. Precautions for use of the herbicide selected

Herbicide Resistance Management

Residual herbicides

Timely applications

Multiple MOAs

Prevent production of weed seed