

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
VEGETABLES				
Broccoli				
Go this website for more information on weed control in vegetables: http://www.sripmc.org/docs/SoutheasternVegetableGuide.pdf				
S-metolachlor @ 0.47 to 1.2 lb/A	Annual grasses and small-seeded broadleaf weeds.	Dual Magnum 7.62 EC* 0.5 to 1.3 pt/A.	Post-transplant.	Do not exceed 1.3 pt/A. Make only one application per year. Do not harvest within 60 days of application. Do not mechanically incorporate Dual Magnum before transplanting. The risk of crop injury is less with post-transplant applications than from pre-transplant applications, and the risk of crop injury is less with post-directed than from post over-the-top applications. Application before bed formation may result in crop injury. The addition of another registered herbicide, especially Goal, will increase the risk of crop injury from postemergence applications.
oxyfluorfen @ 0.25 to 0.5 lb/A	Annual grasses and small-seeded broadleaf weeds.	Goal 2XL 1 to 2 pt/A.	Pre-transplant.	Do not apply if Dual Magnum herbicide has been applied to the field during the current growing season. Do not apply as a preemergence treatment to direct-seeded broccoli. Do not apply post-transplant or over-the-top of broccoli. Sprinkler irrigation is recommended during early establishment of transplants. Do not apply more than 2 pt/A per season.
bensulide @ 4 to 6 lb ai/A	Annual grasses and broadleaf weeds. Less effective on pig-weeds and morningglories. Will not control emerged weeds.	Prefar 4E 4 to 6 qt/A.	Preplant or preemergence.	For preplant application, incorporate 1-2 inches deep. For preemergence application, incorporate by irrigation 1 to 2 inches. Apply in at least 10 GPA carrier volume. Do not apply more than 6 lb ai/A. Use low rate on light soil. Cool, wet conditions may cause crop injury.
Cabbage				
S-metolachlor @ 0.47 to 1.2 lb/A	Annual grasses and small-seeded broadleaf weeds.	Dual Magnum 7.62 EC* 0.5 to 1.3 pt/A.	Post-transplant.	Do not exceed 1.3 pt/A. Make only one application per year. Do not harvest within 60 days of application. Do not mechanically incorporate before transplanting. The risk of crop injury is less with post-transplant applications than from pre-transplant applications, and the risk of crop injury is less with post-directed than from post over-the-top applications. Application before bed formation may result in crop injury. The addition of another registered herbicide, especially Goal, will increase the risk of crop injury from postemergence applications. Chinese varieties are more sensitive to injury.

*Use of the Dual Magnum 24(c) labels for spinach, collards, kale, mustard greens, turnip greens, cantaloupe, cucumber, summer squash, watermelon, transplanted broccoli, cabbage and Chinese cabbage requires agreeing to **Syngenta's waiver of liability and indemnification agreement**. To accept, go to the website, farmassist.com, and register to set up an account. After registering go to the top left of the home page, click on **Products** and then **Indemnified Labels**. You will then be prompted to select the state, **Arkansas**, the product, **Dual Magnum** and the crop. Read the **waiver of liability and indemnification agreement** and either accept or decline. If the conditions are unacceptable, return the Dual Magnum herbicide at once unopened or use the Dual Magnum herbicide for a different approved use in accordance with the label on the product container.

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VEGETABLES					
Cabbage [cont.]					
oxyfluorfen @ 0.25 to 0.5 lb/A	Annual grasses and small-seeded broadleaf weeds.	1 to 2 pt/A.	Goal 2XL	Pre-transplant.	Do not apply if Dual Magnum herbicide has been applied to the field during the current growing season. Do not apply as a preemergence treatment to direct-seeded cabbage. Do not apply post-transplant or over-the-top of cabbage. Sprinkler irrigation is recommended during early establishment of transplants. Do not apply more than 2 pt/A per season.
bensulide @ 4 to 6 lb ai/A	Annual grasses and broadleaf weeds. Less effective on pigweeds and morningglories. Will not control emerged weeds.	4 to 6 qt/A.	Prefar 4E	Preplant or preemergence.	For preplant application, incorporate 1-2 inches deep. For preemergence application, incorporate by irrigation at least 2 inches. Apply in at least 10 GPA carrier volume. Do not apply more than 6 lb ai/A. Use low rate on light soil. Cool, wet conditions may cause crop injury.
Cucurbits - Cantaloupe, Cucumber, Pumpkin, Summer Squash, Watermelon					
Preplant - Burndown					
carfentrazone @ 0.03 lb/A	Annual broadleaves, excellent control of morningglories.	2 fl oz/A.	Aim 2EC	Apply to actively growing weeds less than 4 inches tall.	Crops: All cucurbits Apply to preformed beds. Transplants: Apply no later than one day before transplanting. Seeded: Apply no later than 7 days after seeding.
glyphosate @ 1 to 2 lb/A	Annual grasses and broadleaf weeds.	2 to 4 pt/A.	Glyphosate (4 lb/gal formulations)	Prior to planting for planting into a weed-free bed.	Crops: All cucurbits Apply directly to emerged weeds. Provides only postemergence control.
paraquat @ 0.5 to 1 lb/A	Annual weeds and foliage of perennials.	2 to 4 pt/A.	Gramoxone 3SL	Apply to emerged and actively growing weeds.	Crops: All cucurbits Contact action. Apply to emerged weeds prior to planting. Add a non-ionic surfactant at 0.25% v/v. Herbicide has no residual activity.
Cucurbits					
Preplant					
ethalfluralin + clomazone @ 0.52 lb total ai	Small-seeded broadleaves and annual grasses.	2 pt/A.	Strategy 2.1L	Incorporate to soil 14 days before seeding on bare ground.	Crops: All cucurbits Activate with at least ½ in of irrigation. Helps reduce weed population early in the season. Follow with appropriate residual herbicide PRE or POST-row middles.
halosulfuron @ 0.024 to 0.048 lb ai/A	Sedges, ragweed, pigweed, smartweed, morningglory.	0.5 – 1 oz.	Sandea 75 DG	Apply to soil surface 7 days pre-transplant or 7 days before seeding, before plastic installation.	Crops: All cucurbits

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bensulide @ 4 lb/A	Annual grasses and broadleaf weeds, not very effective on pigweeds and morningglories.	Prefar 4EC 4 qt/A.	Apply to soil surface of preformed beds 14 days before planting. Or, apply at planting and incorporate with irrigation water.	Crops: All cucurbits Incorporate prior to planting by shallow tillage or 0.5 in irrigation.
S-metolachlor @ 0.67 to 1.33 lb ai/A	Annual grasses, yellow nutsedge and small-seeded broadleaf weeds. Will not control emerged weeds.	Dual Magnum 7.62 EC* @ 0.7 to 1.4 pt/A.	7 to 14 days before planting	Section 24C, indemnified label. Crops: All cucurbits. See pumpkin on the regular label. Use lower rates on coarse-textured soils and higher rates on fine-textured soils. Use an appropriate registered foliar herbicide or mechanical or physical methods to control emerged weeds.
Cucurbits Preemergence				
clomazone @ 0.15 to 0.25 lb/A	Small-seeded broadleaves and annual grasses.	Command 3ME 0.4 to 0.67 pt/A.	Apply to soil surface of preformed beds.	Activate with at least ½ inch of irrigation. Apply after seeding or before transplanting. DO NOT APPLY UNDER PLASTIC.
ethalfluralin				Crops: All cucurbits. DO NOT APPLY UNDER PLASTIC, row covers or hot caps. Apply to the soil surface immediately after seeding. DO NOT SOIL INCORPORATE. May also be used as a BANDED spray BETWEEN rows of plastic mulch. Shallow cultivation, irrigation or rainfall within 5 days is needed for good weed control. Under conditions of unusually cold or wet soil and air temperatures, injury may occur.
ethalfluralin + clomazone @ 0.4 to 1.2 lb/A + 0.125 to 0.375	Small-seeded broadleaves and annual grasses	Strategy 2.1L 2 to 6 pt/A.	Apply to the soil surface of preformed beds.	Crops: All cucurbits Apply immediately after planting. Activate with at least ½ inch of irrigation. DO NOT APPLY UNDER PLASTIC.
ethalfluralin @ 1.1 to 1.7 lb/A	Small-seeded broadleaves and annual grasses.	Curbit 3EC 3 to 4.5 pt/A.	Apply to the soil surface of preformed beds.	Crops: All cucurbits DO NOT APPLY UNDER PLASTIC, row covers, or hot caps. Apply to the soil surface immediately after seeding. DO NOT SOIL INCORPORATE. May also be used as a BANDED spray BETWEEN rows of plastic mulch. Shallow cultivation, irrigation or rainfall within 5 days is needed for good weed control. Do not use under mulches, row covers or hot caps. Under conditions of unusually cold or wet soil and air temperatures, injury may occur.

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VEGETABLES				
Cucurbits				
Preemergence [cont.]				
fomesafen @ 0.156 to 0.188 lb/A	Residual control of grasses and small-seeded broadleaf weeds.	Reflex 10 to 12 fluid oz/A.	Apply within 24 hours of planting.	Crops: Pumpkin and watermelon ONLY Incorporation by rainfall or irrigation within 36 hours of watermelon cracking the ground may cause crop injury. Watermelon varieties may vary in their response and not all varieties have been evaluated for tolerance. Do not apply more than 1 pt/A per crop per season. 35 days PHI.
halosulfuron @ 0.024 to 0.044 lb ai/A	Yellow and purple nutsedge, ragweed, pigweed, smartweed, cocklebur and morningglory.	Sandea 75 DG 0.5 to 1.0 oz.	Apply after seeding on bareground, before cracking.	Crops: All cucurbits Preemergence: apply after planting but before cracking.
S-metolachlor @ 0.67 to 1.2 lb/A	Small-seeded broadleaves and annual grasses.	Dual Magnum 0.67 to 1.27 pt/A.	Apply to soil surface of preformed beds.	Crops: All cucurbits Apply to bare soil after seeding, before crop or weed emergence. Make only one application per crop per year. Do not harvest within 60 days of application. May be applied to row middles as a tank-mixture with Sandea. Dual will not control emerged weeds. If rainfall (0.5 inch) does not occur within 7 to 10 days following application, weed control may be reduced. Irrigation following application will improve weed control. The risk of injury to melons is greater with a broadcast pre-emergence application than with a row middle application. The risk of crop injury is less with transplants than with direct-seeded melons. Application to emerged melon foliage may result in crop injury. Soil incorporation will increase the risk of crop injury.
S-metolachlor + halosulfuron @ 0.64 to 0.95 lb ai + 0.024 to 0.044 lb ai/A	Sedges, annual grasses, small-seeded broadleaves.	Dual Magnum + Sandea 0.67 to 1 pt/A + 0.5 to 1 oz/A.	Apply after seeding on bareground, before cracking.	Crops: All cucurbits
S-metolachlor @ 0.67 to 1.33 lb ai/A	Annual grasses, yellow nutsedge and small-seeded broadleaf weeds. Will not control emerged weeds.	Dual Magnum 7.62 EC* 0.7 to 1.4 pt/A.	Before emergence or transplanting.	Section 24C, indemnified label. Crops: All cucurbits. See pumpkin on the regular label. Use lower rates on coarse-textured soils and higher rates on fine-textured soils. Use an appropriate registered foliar herbicide or mechanical or physical methods to control emerged weeds.

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Cucurbits				
Postemergence				
clethodim @ 0.09 to 0.125 lb/A	Annual and perennial grasses ONLY. Very effective on annual bluegrass.	Select 2 EC or Select Max 8 or 16 fl oz/A. Add crop oil concentrate + AMS.	Postemergence to weeds	Crops: All cucurbits Apply to actively growing grasses not under drought stress. Add 1 gallon crop oil concentrate per 100 gallons spray mix. Adding crop oil may increase the likelihood of crop injury at high air temperatures. Do not apply more than 8 oz/A per application. Do not apply within 14 days of harvest. Multiple applications are required for perennial grass control. Repeat application on 14- to 21-day intervals.
halosulfuron @ 0.024 to 0.044 lb/A	Sedge and broadleaf control; should be mixed with other herbicides to enhance grass activity.	Sandea 75 DG 0.5 to 0.75 oz.	Apply to emerged and actively growing weeds when crop is at 3 to 5 leaves. Split application (PRE fb POST) for better sedge control.	Crops: All cucurbits Do not apply sooner than 14 days after transplanting. Can be applied over the top, if bareground, but reduce late-season applications when the temperature and humidity are high. If on plastic, apply in row middles; keep off the plastic. Do not apply more than 2 ounces per year. Do not apply to crops treated with soil-applied organophosphate insecticides.
sethoxydim @ 0.2 to 0.5 lb/A	Annual and perennial grasses ONLY.	Poast 1.5EC 1 to 2.5 pt/A.	Apply to emerged and actively growing weeds, before annual grasses exceed 14 days after emergence. Timing is very important. Johnsongrass: 15 to 20 inches Bermudagrass: 1-inch height or 6-inch maximum runner length	Crops: All cucurbits Apply to emerged grasses. Consult manufacturer's label for specific rates and best times to treat. Add 1 quart of crop oil concentrate per 100 gal spray. Do not apply on days which are unusually hot and humid. Do not apply within 7 days of harvest. Total cannot exceed 2.5 pt/A/year.
S-metolachlor @ 0.64 to 0.95 lb/A	small-seeded broadleaves and annual grasses.	Dual Magnum 0.67 to 1 pt/A.	Apply to the crop at 2- to 3-leaf stage.	Crops: All cucurbits Dual Magnum is a soil-active herbicide. It has no postemergence activity. Mix with a post-emergence herbicide to kill emerged weeds. Or, soil should be weed-free at application. Row middle applications are recommended in mulched crops.
S-metolachlor @ 0.67 to 1.33 lb ai/A	Annual grasses, yellow nutsedge and small-seeded broadleaf weeds. Will not control emerged weeds.	Dual Magnum 7.62 EC* 0.7 to 1.4 pt/A	Apply to the crop at 1- to 2-leaf stage; or on row middles in mulched crops.	Section 24C, indemnified label. Crops: All cucurbits. See pumpkin on the regular label. Use lower rates on coarse-textured soils and higher rates on fine-textured soils. Use an appropriate registered foliar herbicide or mechanical or physical methods to control emerged weeds.

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VEGETABLES [cont.]				
Greens [Collards, Kale, Mustard, Turnips]				
trifluralin @ 0.3 to 0.5 lb/A		Treflan 4 EC 0.6 to 1 pt/A.	Anytime from 6 weeks prior to planting up to planting.	Trifluralin requires thorough incorporation into soil top a depth of 1 to 1½ inches.
sethoxydim @ 0.2 to 0.3 lb/A	Annual and perennial grasses.	Poast 1.5 EC 1 to 1.5 pt/A.	Postemergence. Consult label for the correct timing for the target weed(s).	Do not apply within 30 days of harvest. Do not apply more than 1.5 pt/A per treatment. Do not exceed 3 pt/A per growing season.
clethodim @ 0.094 to 0.125 lb/A	Grasses.	Select 2 EC or Select Max 8 or 16 oz/A. Add crop oil concentrate + AMS.	Postemergence.	Apply postemergence for annual grasses at 6 to 8 oz/A or bermudagrass and johnsongrass at 8 oz/A. Add 1 gallon crop oil concentrate per 100 gallons spray mix. Adding crop oil may increase the likelihood of crop injury at high air temperatures. Very effective in controlling annual bluegrass. Apply to actively growing grasses not under drought stress. Do not apply more than 8 ounces per acre per application. Do not apply within 14 days of harvest of green crops. Do not apply within 30 days of harvest of turnips grown for roots.
S-metolachlor @ 0.64 to 0.95 lb/A	Annual grasses and small-seeded broadleaf weeds.	Dual Magnum 7.62 EC* 0.67 to 1 pt/A.	Preemergence.	Do not exceed 1 pt/A. Make only one application per year. Do not harvest within 30 days of application. Will not control emerged weeds. May be post-applied when the crop has 1 to 2 true leaves.
bensulide @ 4 to 6 lb/A	Annual grasses and broadleaf weeds. Less effective on pigweeds and morningglories. Will not control emerged weeds.	Prefar 4E 4 to 6 qt/A.	Preplant or preemergence.	Do not use on turnips. For preplant application, incorporate 1-2 inches deep. For preemergence application, incorporate by irrigation at least 2 inches. Apply in at least 10 GPA carrier volume. Do not apply more than 6 lb ai/A. Use low rate on light soil. Cool, wet conditions may cause crop injury.
Okra				
trifluralin @ 0.5 to 0.75 lb/A	Grasses, pigweed, purslane.	Treflan 4 EC 1 to 1.5 pt/A.	Preplant incorporated.	Apply and incorporate before planting.
sethoxydim @ 0.3 lb/A	Grasses only.	Poast 1.5 EC 1 to 1.5 pt/A.	Postemergence.	Apply to grasses that are actively growing and not under stress. Do not apply within 14 days of harvest.
Peppers				
trifluralin @ 0.5 to 0.75 lb/A	Small-seeded annual grass and broadleaf weeds.	Treflan 4 EC 1 to 1.5 pt/A.	Any time from 6 weeks before planting up to planting. After bedding if beds are used.	Requires thorough incorporation to a depth of 1 to 1½ inches.

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sethoxydim @ 0.19 to 0.38 lb/A	Grasses.	Poast 1.5 EC 1 to 2 pt/A.	Before annual grasses exceed 14 days after emergence. Timing is very important. Johnsongrass – 15 to 20 inches; bermudagrass – 1-inch height or 6-inch maximum runner length.	Apply only under conditions of active growth. Thorough coverage required. Do not tank mix with other pesticides. Do not cultivate 7 days before or after treatment. Cultivation soon after 7 days will be helpful. Do not apply within 20 days of harvest. Do not apply more than 3 pt/A per season.
clethodim @ 0.094 to 0.125 lb/A	Grasses.	Select 2 EC or Select Max 8 or 16 oz/A. Add crop oil concentrate + AMS.	Postemergence.	Apply postemergence for annual grasses at 6 to 8 oz/A or bermudagrass and johnsongrass at 8 oz/A. Add 1 gallon crop oil concentrate per 100 gallons spray mix. Adding crop oil may increase the likelihood of crop injury at high air temperatures. Very effective in controlling annual bluegrass. Apply to actively growing grasses not under drought stress. Do not apply more than 8 oz/A per application. Do not apply within 20 days of harvest.
glyphosate @ 0.67 to 0.94 lb ai/A	Nonselective.	Roundup WeatherMax 5.5L 16 to 22 fl oz/A.	Preplant burndown.	At least 7 days before planting.
paraquat @ 0.49 to 1.01 lb ai/A	Nonselective.	Gramoxone Inteon 2.762SL 22.71 to 46.81 fl oz/A.	Preplant burndown, or pretransplant.	Add nonionic surfactant, 0.25% v/v.
bensulide @ 4 to 6 lb ai/A	Annual grasses and broadleaf weeds. Less effective on pigweeds and morningglories. Will not control emerged weeds.	Prefar 4E 4 to 6 qt/A.	Preplant, or preemergence.	For preplant application, incorporate 1-2 inches deep. For preemergence application, incorporate by irrigation at least 2 inches. Apply in at least 10 GPA carrier volume. Do not apply more than 6 lb ai/A. Use low rate on light soil. Cool, wet conditions may cause crop injury.
carfentrazone @ 0.007 to 0.022 lb ai/A	Broadleaf weeds.	Aim 1.9EW 0.5 to 1.5 fl oz/A.	Preplant, pretransplant burndown, before crop emergence or post-directed in row middles.	Apply in the row middles using hooded sprayer. Apply with NIS or crop oil at recommended rates. Does not have residual activity. Drift will burn the crop leaves.
clomazone @ 0.25 to 0.50 lb ai/A	Annual grasses, common lambsquarters, spurred anoda, velvetleaf, prickly sida.	Command 3ME 0.67 to 1.34 pt/A.	Preplant, pretransplant, or pre-emergence.	Do not use on banana peppers. Place seed or root of transplants below the herbicide layer. Do not make more than one application. Use lower rate on light-textured soils.
halosulfuron @ 0.023 to 0.047 lb ai/A	Broadleaf weeds and nutsedge.	Sandea 75DF 0.5 to 1 oz/A.	Preemergence, or in row middles of direct-seeded or transplanted pepper.	Avoid contact with the crop, or with plastic. Do not make more than two applications per crop. Do not exceed 2 oz product/season.

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VEGETABLES				
Peppers [cont.]				
pendimethalin @ 0.95 to 1.42	Annual grasses and small-seeded broadleaf weeds. Will not control emerged weeds.	Prowl H2O (3.8 EC) 2 to 3 pt/A.	Preplant-incorporated, before transplanting.	Bell and nonbell. For non-mulched crop only.
pendimethalin @ 0.95 to 1.42	Annual grasses and small-seeded broadleaf weeds. Will not control emerged weeds.	Prowl H2O (3.8 EC) 2 to 3 pt/A.	Preplant, NOT incorporated, on top of firmed bed, before laying plastic.	Bell and nonbell. For mulched crop only. Can be applied also in the row middles, tank-mixed with a labeled postemergence herbicide. Needs irrigation or shallow incorporation for activation.
pendimethalin @ 0.95 to 1.42	Annual grasses and small-seeded broadleaf weeds. Will not control emerged weeds.	Prowl H2O (3.8 EC) 2 to 3 pt/A.	Post-directed to transplants, or to established direct-seeded crop.	Bell and nonbell. For non-mulched crop only. Can be applied also in the row middles, tank-mixed with a labeled postemergence herbicide. Needs irrigation or shallow incorporation for activation.
Snapbeans, Lima Beans				
halosulfuron @ 0.02 to 0.04 lb/A	Yellow and purple nutsedge, ragweed, pigweed, smartweed, cocklebur and morningglory.	Sandea 75 DF 0.5 to 1 oz/A.	Preemergence.	Preemergence: apply after planting but before cracking.
S-metolachlor @ 0.6 to 1.01 lb/A	Annual weeds.	Dual Magnum 7.62 EC 10 oz to 16 oz/A.	Preemergence.	Apply during or after planting but before weeds emerge.
EPTC + trifluralin @ 3.5 + 0.5 lb/A	Annual weeds.	Eptam + Treflan 4 EC 3.5 pt/A + 1 pt/A.	Just prior to planting.	Requires thorough incorporation to a depth of 3 inches.
trifluralin @ 0.5 lb/A	Small-seeded broadleaf weeds and annual grasses.	Treflan 4 EC 1 pt/A.	Any time from 6 weeks before planting up to planting. After bedding if beds are used.	Requires thorough incorporation to a depth of 1 to 1½ inches.
bentazon @ 0.25 to 0.5 lb/A	Purslane, velvetleaf, ragweed, smartweed, cocklebur, jimsonweed.	Basagran 4S 0.5 to 1 pt/A.	Postemergence to small weeds.	See label for details and weed sizes.
sethoxydim @ 0.3 to 0.5 lb/A	Annual and perennial grasses.	Poast 1.5 EC 1.5 to 2.5 pt/A.	Treat annual grasses within 14 days of emergence. Johnsongrass at 12 to 18 inches.	Do not apply within 15 days of harvest. Do not exceed 4 pt/A per season. Add 1% crop oil concentrate.
fomesafen @ 0.1875 to 0.25 lb ai/A	Many broadleaf weeds.	Reflex 2L 0.75 to 1 pt/A.	Apply postemergence to dry beans having at least 4 expanded trifoliolate leaves or snap beans having at least 1 expanded trifoliolate leaf. Include a nonionic surfactant at 1 quart per 100 gallons spray mixture.	Dry or snap beans only. Total use per year cannot exceed 1.5 pt/A. Do not apply within 45 days of dry bean harvest or 30 days of snapbean harvest. See label for further information.
fomesafen @ 0.25 to 0.375 lb/A	Broadleaf weeds.	Reflex 2L 1 to 1.5 pt/A.	Preplant or early post.	Do not exceed 1.5 pt/A rate. Dry or snapbeans.

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Southernpea - Preemergence				
imazethapyr @ 0.063 lb/A	Small-seeded broadleaves and annual grasses.	Pursuit 4 fl oz/A.	Preplant soil-incorporated, preemergence, or early postemergence.	Has activity on pigweeds, but will not control ALS-resistant pigweeds.
S-metolachlor @ 0.64 to 0.95 lb/A	Small-seeded broadleaves and annual grasses.	Dual Magnum 0.67 to 1 pt/A.	Preplant soil-incorporated or pre-emergence.	Excellent control for pigweeds, other small-seeded broadleaves and annual grasses. Needs 1 inch of rainfall for activation. Rainfall exceeding 2 inches will reduce residual activity.
sulfentrazone + carfentrazone @ 0.1 to 0.2 lb/A + 0.01 to 0.02 lb/A	Annual grasses and small-seeded broadleaves, good activity on pigweeds.	Spartan Charge 3.8 to 7.6 fl oz/A.	Apply to the soil surface immediately after planting.	Do not apply to coarse soil classified as sand which has less than 1% organic matter. <u>For dry cowpeas only!</u>
sulfentrazone + S-metolachlor @ 0.1 lb/A to 0.14 + 0.95 to 1.27 lb/A	Annual grasses and small-seeded broadleaves, excellent on pigweeds and morning-glories. Good control of yellow nutsedge.	Authority Elite 19 to 26 fl oz/A.	Apply to a weed-free bareground soil.	Preplant application is safer than application at planting. Follow the same precautions as with sulfentrazone alone. <u>For dry cowpeas only!</u>
trifluralin @ 0.5 to 0.75 lb/A	Annual grasses and small-seeded broadleaves.	Treflan 4L 1 to 1.5 pt/A.	Apply to a weed-free bareground soil.	Requires thorough incorporation to a depth of 1 to 1.5 inches. Should be applied with another herbicide to improve spectrum of control.
Southernpea - Postemergence				
bentazon @ 0.5 lb/A	Prickly sida, smartweeds, and common cocklebur.	Basagran 1 pt.	Apply over the top of the crop and weed, good coverage required.	Apply over the top. Weak on pigweeds. Excellent activity on prickly sida, smartweeds and common cocklebur.
clethodim @ 0.094 to 0.125 lb/A	Grasses.	Select 2 EC 6 to 8 oz/A.	Apply to small grass seedlings.	Apply to emerged grasses. Consult manufacturer's label for specific rates and best times to treat. For clethodim, add 1 gallon of crop oil concentrate per 100 gallons of spray solution. Adding crop oil to Select may increase the likelihood of crop injury at high air temperatures. Do not apply Select on days that are unusually hot and humid. Do not apply within 14 days of harvest.
fomesafen @ 0.2 lb/A	Annual grasses and small-seeded broadleaves, good activity on pigweeds 2 inches tall.	Reflex 2 SL 13 oz/A.	2 to 4 trifoliolate crop.	Will burn leaves, especially if it is applied on a very hot and sunny day, but the crop will recover. Some varieties will be injured more than others. Dry or snap beans only. Total use per year cannot exceed 1.5 pints/A. Do not apply within 45 days of dry bean harvest. See label for further information.

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
VEGETABLES				
Southernpea - Postemergence [cont.]				
imazamox @0.03 lb/A	Small-seeded broadleaves, annual grasses, and sedges.	4 fl oz/A. Raptor	Apply over the top of the crop and weed, good coverage required.	Similar to Pursuit, but has shorter residual activity. Some varieties may be stunted by Raptor.
imazethapyr @ 0.063 lb/A	Small-seeded broadleaves, annual grasses and sedges.	4 fl oz/A. Pursuit	Apply over the top of the crop and weed, good coverage required.	Annual grasses and broadleaves. Will not control ALS-resistant pigweeds. Good on sedges.
sethoxydim @ 0.2 to 0.5 lb/A	Annual and perennial grasses ONLY.	1 to 2.5 pt/A. Poast 1.5EC	Apply to actively growing weeds.	Thorough coverage required. Do not tank mix with other pesticides. Do not cultivate 7 days before or after treatment. Cultivation soon after 7 days will be helpful. Use a crop oil concentrate at 1% v/v. Add 1 quart of crop oil concentrate per acre. This may cause crop injury on a hot, sunny day. Total cannot exceed 2.5 pt/A/year. Do not apply within 15 days of harvest.
Spinach				
sethoxydim @ 0.19 to 0.38 lb/A	Grasses.	1 to 1.5 pt/A. Poast 1.5 EC	Before annual grasses exceed 14 days after emergence. Timing is very important. Johnsongrass: 15 to 20 inches Bermudagrass: 1-inch height or 6-inch maximum runner length	Apply only under conditions of active growth. Thorough coverage required. Do not tank mix with other pesticides. Do not cultivate 7 days before or after treatment. Cultivation soon after 7 days will be helpful. Do not apply within 15 days of harvest.
clethodim @ 0.094 to 0.125 lb/A	Grasses.	6 to 8 oz/A. Select 2 EC	Postemergence.	Apply to emerged grasses. Consult manufacturer's label for specific rates and best times to treat. For sethoxydim, add 1 quart of crop oil concentrate per acre. For clethodim, add 1 gallon of crop oil concentrate per 100 gallons of spray solution. Adding crop oil to Poast or Select may increase the likelihood of crop injury at high air temperatures. Do not apply Poast or Select on days that are unusually hot and humid. Do not apply sethoxydim within 15 days of harvest or clethodim within 14 days of harvest.
S-metolachlor @ 0.32 to 0.64 lb/A	Annual grasses and small-seeded broadleaf weeds.	0.33 to 0.67 pt/A. Dual Magnum 7.62 EC*	Preemergence.	Do not incorporate. Make only one application per year. Do not exceed 0.67 pt/A. Use low rate on coarse soil. Do not harvest within 50 days of application. Do not apply through an irrigation system. Irrigate within 2 days of application.

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
phenmedipham @ 0.5 to 1 lb/A	Annual broadleaf.	Spin-Aid 1.3 EC 3 to 6 pt/A.	Postemergence.	Do not use when expected high temperatures will be above 75°F. For best results, spray when weeds are in the 2-leaf stage. Use the 6 pint rate only on well-established crops which are not under stress. Do not apply within 40 days of harvest. Spinach plants must have 6 true leaves or more. For processing spinach only. Do not exceed 22 gallons per acre water. Avoid drift.
Sweet Corn				
S-metolachlor + atrazine 1.25 to 1.5 lb + 1 to 1.6 lb/A	Annual weeds.	Dual Magnum 7.62 EC + AAtrex, atrazine See label for specific formulations.	Preplant incorporated, preemergence or early postemergence.	Use high atrazine rate where cocklebur and morningglory are severe. Rainfall in 5-7 days is necessary for best results. With preplant, shallow incorporate 2-3 inches within 7 days of planting.
bentazon @ 0.75 to 1 lb/A	Cocklebur, common ragweed, jimsonweed, Pennsylvania smartweed, velvetleaf, yellow nutsedge, and morningglory.	Basagran 4S 0.75 to 1 qt/A.	Apply early postemergence over top when weeds are small and corn has 1 to 5 leaves.	See label for rates according to weed size and special directions for annual morningglory and yellow nutsedge control. Use a crop oil at a rate of 1 qt/A.
halosulfuron @ 0.032 lb/A	Cocklebur, passionflower, pigweed, pokeweed, ragweed, smartweed, velvetleaf.	Permit 75 DF 0.67 oz/A.	Postemergence.	Apply over the top with drop nozzles to sweet corn from spike to lay-by for control of emerged weeds. Add nonionic surfactant at 1 to 2 quarts per gallon of spray solution or 1 gallon per 100 gallons of spray solution. See label for all instructions and restrictions.
S-metolachlor + atrazine @ 1 to 2 + 0.78 to 1.56	Most annual grass and broadleaf weeds.	Bicep II Magnum 1.3 to 2.6 qt/A.	Preemergence.	Apply to soil surface immediately after planting. See label for further instructions.
atrazine @ 1 to 2 lb/A	Most annual broadleaf and grass weeds.	Aatrex 4L 1 to 2 qt/A.	Preemergence or postemergence.	Apply to soil surface immediately after planting. Shallow cultivation of preemergence applications improves control. Postemergence: Use the 2 quart rate and apply before weeds reach 1.5 inches. See label for amount of crop oil to add. For best results, tank mix with a grass herbicide such as Dual.
Sweet Potatoes				
sethoxydim @ 0.3 to 0.5 lb/A	Annual and perennial grasses.	Poast 1.5 EC 1.5 to 2.5 pt/A.	Apply to small annual grasses, preferably within 14 days after emergence. See label for timing perennial grasses.	Do not apply within 30 days of harvest. Do not apply more than 4 pt/A in one season. Add 1% crop oil concentrate.

*Use of the Dual Magnum 24(c) labels for spinach, collards, kale, mustard greens, turnip greens, cantaloupe, cucumber, summer squash, watermelon, transplanted broccoli, cabbage and Chinese cabbage requires agreeing to **Syngenta's waiver of liability and indemnification agreement**. To accept, go to the website, farmassist.com, and register to set up an account. After registering go to the top left of the home page, click on **Products** and then **Indemnified Labels**. You will then be prompted to select the state, **Arkansas**, the product, **Dual Magnum** and the crop. Read the **waiver of liability and indemnification agreement** and either accept or decline. If the conditions are unacceptable, return the Dual Magnum herbicide at once unopened or use the Dual Magnum herbicide for a different approved use in accordance with the label on the product container.

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
VEGETABLES				
Sweet Potatoes [cont.]				
clethodim @ 0.09 to 0.25 lb/A	Grasses.	Select 2 EC or Select Max 8 to 16 oz/A. Add crop oil concentrate + AMS.	Postemergence.	Apply postemergence for annual grasses at 6 to 8 oz/A or bermudagrass and johnsongrass at 8 oz/A. Add 1 gallon crop oil concentrate per 100 gallons of spray mix. Adding crop oil may increase the likelihood of crop injury at high air temperatures. Very effective in controlling annual bluegrass. Apply to actively growing grasses not under drought stress. Do not apply within 30 days of harvest.
clomazone @ 0.48 to 1.5 lb/A	Annual grasses.	Command 3 ME 1.3 to 4 pt/A.	Pre-transplant.	Use the low rate on coarse soils and the high rate on fine soils. May also be applied as a single, post-transplant application to the crop before weeds emerge at a maximum of 1.5 pt/A.
fluazifop-P @ 0.19 lb/A	Grasses.	Fusilade DX 2 EC 6 to 18 oz/A.	Before annual grasses exceed 14 days after emergence. Timing is very important. Johnsongrass: 12 to 18 inches Bermudagrass: 3-inch height or 6- to 12-inch maximum runner length	Less effective than Poast on annual grasses. More effective on bermudagrass and johnsongrass. Thorough coverage required. Do not tank mix. Do not cultivate 7 days before or after application. Do not apply within 20 days of harvest.
flumioxazin @ 0.094 lb/A	Annual broadleaf weeds including pigweed.	Valor 51 WDG 3 oz/A.	Apply 2 to 5 days prior to transplanting crop.	Movement of soil during transplanting should not occur or reduced weed control may result. Do not use on greenhouse-grown transplants. Do not apply postemergence or serious crop injury will occur. Do not use on transplants harvested more than 2 days prior to transplanting. Do not use on transplant propagation beds. See label for instructions on use. Use only on the 'Beauregard' variety.
S-metolachlor @ 0.95 to 1.26 lb/A	Annual sedge and yellow nutsedge.	Dual Magnum 7.62 EC 1 to 1.33 pt/A.	After the sweet potatoes have been transplanted but before weeds emerge.	Do not incorporate following application. Use the lower rate on coarse-textured soils. The transplanter trench must be closed before applying. Do not apply more than 0.5 inches of irrigation for the first irrigation following application. Make only one application per season.
Tomatoes				
S-metolachlor @ 0.95 to 1.5 lb/A	Yellow nutsedge, annual grasses, broadleaf weeds.	Dual Magnum 7.62 EC 1 to 2 pt/A.	Preplant or postdirected to transplants.	Apply preplant or postdirected to transplants after the first settling rain or irrigation. In plasticulture, apply to preformed beds just prior to applying plastic mulch. Minimize contact with crop. Do not apply within 90 days of harvest. Also registered for use in row middles, and in seeded crop. See label for further instructions.

Crop, Situation, and Active Chemical Per Broadcast Acre	Weeds Controlled	Formulated Material Per Broadcast Acre	Time of Application	Method of Application and Precautions
trifluralin @ 0.5 to 0.75 lb/A	Annual weeds.	Treflan 4 EC 1 to 1.5 pt/A.	Preplant any time from 6 weeks before transplanting up to transplanting. After bedding if beds are used.	Requires thorough incorporation to a depth of 1 to 1½ inches. Do not use on direct-seeded tomatoes.
metribuzin @ 0.25 to 0.5 lb/A	Annual broadleaf and grass weeds.	Metribuzin 75 DF 0.33 to 0.67 lb/A.	After transplants have 5-6 leaves or have fully recovered from shock of transplanting and weeds are small.	Over top. Do not apply within 3 days after period of cool, wet or cloudy weather or injury will occur. See label for other precautions.
halosulfuron @ 0.02 to 0.04 lb/A	Yellow and purple nutsedge, ragweed, pigweed, smartweed, cocklebur and morningglory.	Sandea 75 DF 0.5 to 1.0 oz/A.	Preemergence and postemergence	Direct-seeded, postemergence: Sandea may be applied over the top from the 4-leaf stage to first bloom. After bloom, use shields or directed spray to avoid contact with the plant. Transplants: May be applied from 14 days after transplanting to first bloom. After first bloom, apply as a directed spray.
metribuzin @ 0.5 to 1 lb/A	Same as above but better control.	Metribuzin 75 DF 0.67 to 1.33 lb/A.	Before direct seeding or transplanting.	Directed spray. Avoid contact with foliage. See above precautions and refer to label for further details.
sethoxydim @ 0.19 to 0.38 lb/A	Grasses.	Poast 1.5 EC 1 pt/A.	Before annual grasses exceed 14 days after emergence. Timing is very important. Johnsongrass: 15 to 20 inches Bermudagrass: 1-inch height or 6-inch maximum runner length	Apply only under conditions of active growth. Thorough coverage required. Do not tank mix with other pesticides. Do not cultivate 7 days before or after treatment. Cultivation soon after 7 days will be helpful. Do not apply within 20 days of harvest. Do not apply more than 4.5 pt/A per season.
clethodim @ 0.09 to 0.25 lb/A	Annual and perennial grasses.	Select 2E 6 to 16 oz/A.	Postemergence.	Add 1.0% crop oil concentrate. Apply to actively growing grasses. Repeat applications may be needed for perennial grass control. Good on annual bluegrass and broadleaf signalgrass.
trifloxysulfuron-sodium @ 0.0047 to 0.0094 lb/A	Yellow nutsedge, morningglory, common cocklebur, common lambsquarters and other broadleaf weeds.	Envoke 75 DG 0.1 to 0.2 oz/A.	Post-directed.	In row. Apply post-directed to tomato grown on plastic for control of nutsedge and certain broadleaf weeds. Crop should be transplanted at least 14 days prior to application. The application should be made prior to fruit set and at least 45 days prior to harvest. Use nonionic surfactant at 1 quart per 100 gallons spray solution with all applications. Row middles. Apply for control of nutsedge and certain broadleaf weeds. Crop should be transplanted at least 14 days prior to application. Use nonionic surfactant at 1 quart per 100 gallons spray solution with all applications. See label for information on registered tank mixes. Tank mixtures with Select or Poast may reduce grass control. See label for more information.