

VEGETABLE CROPS

ROTATION GUIDELINES FOR VEGETABLE CROPS FOLLOWING SOYBEAN HERBICIDE USE¹. Consult label for products or crops not listed.

| Herbicide | Snap bean | Lima bean | Cantaloupe | Cole crops ² | Cucumber | Greens ³ | Okra | Onion | Pepper |
|-------------------------|-----------------|-----------|-----------------|-------------------------|----------|---------------------|-------|-------|--------|
| Assure II | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d |
| Basagran | none | none | none | none | none | none | none | none | none |
| Boundary | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 18 m | 12 m |
| Butyrac | none | none | none | none | none | none | none | none | none |
| Canopy EX | 12 m | 12 m | 30 m | 30 m | 18 m | 30 m | 30 m | 18 m | 30 m |
| Canopy XL ⁴ | 30 m | 30 m | 30 m | 18 m ⁵ | 18 m | 30 m | 30 m | 30 m | 30 m |
| Classic ⁴ | 9 m | 9 m | 30 m | 18 m | 18 m | 30 m | 30 m | 30 m | 30 m |
| Cobra | none | none | none | none | none | none | none | none | none |
| Command | | | | | | | | | |
| 1 pt/A | 9 m | 12 m | 9 m | 12 m | 9 m | 12 m | 12 m | 12 m | 12 m |
| 1.5–2 pt/A | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m |
| 2.5 pt/A | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m |
| Detail | 11 m | 11 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Dual Magnum | none | none | 12 m | 12 m ⁶ | 12 m | 12 m | 12 m | 12 m | NS |
| FirstRate ⁴ | 9 m | 9 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Frontrow ⁴ | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Fusilade | none | none | none | none | none | none | none | none | none |
| Fusion | none | none | none | none | none | none | none | none | none |
| Gangster ⁴ | 18 m | 18 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Lasso | none | none | none | none | none | none | none | none | none |
| Lorox | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m |
| Outlook | NS ⁷ | NS | NS | NS | NS | NS | NS | NS | NS |
| Poast Plus | none | none | none | none | none | none | none | none | none |
| Prefix | none | none | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Prowl | none | none | NS ⁷ | NS | NS | NS | NS | NS | NS |
| Pursuit | 4 m | none | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m |
| Python ⁴ | 26 m | 4 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m |
| Reflex | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Scepter | 11 m | 11 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Select Max | none | none | none | none | none | none | none | none | none |
| Sencor | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m ⁸ | 12 m | 18 m | 12 m |
| Sequence | none | none | NS ⁷ | NS | NS | NS | NS | NS | NS |
| Spartan 4F ⁴ | 12 m | none | 12 m | none | 12 m | 12 m | 12 m | 12 m | 12 m |
| Storm | none | none | none | none | none | none | none | none | none |
| Treflan 4EC | none | none | none | none | none | none | none | 5 m | none |
| Ultra Blazer | none | none | none | none | none | none ⁸ | none | none | none |
| Valor SX | 12 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Valor XLT | | | | | | | | | |
| soil pH<7 | 12 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| soil pH≥7 | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Zorial | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m |

¹Numbers in the table followed by d or m refer to days and months, respectively.

²Cole crops include broccoli, cabbage and cauliflower.

³Greens include collard, kale, mustard, and turnips.

⁴A successful field bioassay must be conducted prior to crop rotation. See label for bioassay procedure.

⁵Cabbage and mustard 18 m; other cole crops 30 m.

⁶Except cabbage, which can be planted next year.

⁷NS designates next season.

⁸Product labels restrict root crop production (e.g., turnips grown for root harvest) less than 18 months after application.

ROTATION GUIDELINES FOR VEGETABLE CROPS FOLLOWING SOYBEAN HERBICIDE USE¹. Consult label for products or crops not listed.

| Herbicide | Irish potato | Pumpkin | Southern pea | Squash | Sweet corn | Sweetpotato | Tomato | Watermelon |
|-------------------------|---------------------|-----------------|---------------------|---------------|-------------------|--------------------|---------------|-------------------|
| Assure II | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d | 120 d |
| Basagran | none | none | none | none | none | none | none | none |
| Boundary | 8 m | 12 m | 8 m | 12 m | 12 m | 18 m | 12 m | 12 m |
| Butyrac | none | none | none | none | none | none | none | none |
| Canopy EX | 18 m | 18 m | 12 m | 30 m | 18 m | 18 m | 10 m | 18 m |
| Canopy XL ² | 30 m | 18 m | 30 m | 30 m | 18 m | 30 m | 18 m | 18 m |
| Classic ² | 30 m | 18 m | 9 m | 30 m | 18 m | 10 m | 9 m | 18 m |
| Cobra | none | none | none | none | none | none | none | none |
| Command | | | | | | | | |
| 1 pt/A | 9 m | none | 12 m | 12 m | 9 m | 9 m | 9 m | 9 m |
| 1.5–2 pt/A | 12 m | none | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m |
| 2.5 pt/A | 12 m | 9 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m |
| Detail | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Dual Magnum | none | 12 m | none | 12 m | none | NS | 6 m | 12 m |
| FirstRate ² | 30 m | 30 m | 9 m | 30 m | 18 m | 30 m | 30 m | 30 m |
| Frontier | NS ³ | NS | NS | NS | NS | NS | NS | NS |
| Frontrow ² | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Fusilade | none | none | none | none | 60 d | none | none | none |
| Fusion | none | none | none | none | 60 d | none | none | none |
| Gangster ² | 18 m | 30 m | 18 m | 30 m | 18 m | 30 m | 30 m | 30 m |
| Lasso | none | none | none | none | none | none | none | none |
| Lorox | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m |
| Poast Plus | none | none | none | none | none | none | none | none |
| Prefix | 18 m | 18 m | 10 m | 18 m | 10 m | 18 m | 18 m | 18 m |
| Prowl | NS ³ | NS | none | NS | none | NS | NS | NS |
| Pursuit | 26 m | 26 m | none | 26 m | 18 m | 26 m | 26 m | 26 m |
| Python ² | 12 m | 26 m | 4 m | 26 m | 18 m | 4 m | 26 m | 26 m |
| Reflex | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Scepter | 18 m | 18 m | 11 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Select Max | none | none | none | none | none | none | none | none |
| Sencor | 4 m | 12 m | 12 m | 12 m | 12 m | 18 m | 4 m | 12 m |
| Sequence | none | NS ³ | none | NS | NS | NS | 6 m | NS |
| Spartan 4F ⁴ | 12 m | 12 m | 12 m | 12 m | 18 m | 12 m | 12 m | 12 m |
| Storm | 18 m | none | none | none | none | 18 m | none | none |
| Treflan 4EC | none | 5 m | none | 5 m | 5 m | 5 m | none | none |
| Ultra Blazer | 18 m | none | none | none | none | 18 m | none | none |
| Valor SX | 18 m | 18 m | 12 m | 18 m | 18 m | none | 12 m | 18 m |
| Valor XLT | | | | | | | | |
| soil pH<7 | 18 m | 18 m | 12 m | 18 m | 18 m | 18 m | 12 m | 18 m |
| soil pH≥7 | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 18 m | 30 m |
| Zorial | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m | 16 m |

¹Numbers in the table followed by d or m refer to days and months, respectively.

²A successful field bioassay must be conducted before crop rotation. See the label for bioassay procedure.

³NS designates next season.

Consult labels for approved adjuvants.

Weed resistance to recommended use-rates of certain herbicides has been documented in Mississippi — SEE PAGE 9.

ROTATION GUIDELINES FOR VEGETABLE CROPS FOLLOWING SOYBEAN HERBICIDE USE¹. Consult label for products or crops not listed.

| Herbicide | Snap bean | Lima bean | Cantaloupe | Cole crops ² | Cucumber | Greens ³ | Okra | Onion | Pepper |
|----------------------------|-------------------|-------------------|-------------------|-------------------------|-------------------|---------------------|-------------------|-------------------|-------------------|
| 2,4-D | NS | NS | NS | NS | | NS | NS | NS | NS |
| Aatrex | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Accent | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ |
| Axiom | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 12 m | 18 m | 12 m |
| Basagran | none | none | none | none | none | none | none | none | none |
| Beacon | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Bicep | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Bladex | NF/S ⁵ | NF/S | NF/S | NF/S | NF/S | NF/S | NF/S | NF/S | NF/S |
| Buctril | 30 d | 30 d | 30 d | 30 d | 30 d | 30 d | 30 d | none | 30 d |
| Clarity | FNH ⁶ | FNH | FNH | FNH | FNH | FNH | FNH | FNH | FNH |
| Dual II | none | none | 12 m | 12 m ⁷ | 12 m | 12 m | 12 m | 12 m | NS |
| Evik | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| Exceed | 300 d | 18 m | 18 m | 18 m ⁸ | 18 m | 18 m | 18 m | 24 m | 18 m |
| Guardsman | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Harness | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Harness Xtra | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Hornet ⁹ | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m |
| Integrity | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| Lasso | none | none | none | none | none | none | none | none | none |
| Lightning ⁹ | 9.5 m | 9.5 m | 40 m | 40 m | 40 m | 40 m | 40 m | 40 m | 40 m |
| Lorox | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m |
| Outlook | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| Permit | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Prowl | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| Pursuit | 4 m | none | 40 m | 40 m | 40 m | 40 m | 40 m | 40 m | 40 m |
| Python | 26 m | 4 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m |
| Scorpion III ¹⁰ | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m | 26 m |
| Sharpen | 8 m | 8 m | 8 m | 8 m | 8 m | 8 m | 8 m | 8 m | 8 m |
| Simazine | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Surpass | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |

| Herbicide | Irish potato | Pumpkin | Southern pea | Squash | Sweet corn | Sweetpotato | Tomato | Watermelon |
|----------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| 2,4-D | NS | NS | NS | NS | none | NS | NS | NS |
| Aatrex | 24 m | 24 m | 24 m | 24 m | none | 24 m | 24 m | 24 m |
| Accent | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ | 10 m ¹⁰ | 10 m ⁴ | 10 m ⁴ | 10 m ⁴ |
| Axiom | 1 m | 12 m | 12 m | 12 m | 12 m | 18 m | 12 m | 12 m |
| Banvel | FNH ⁶ | FNH | FNH | FNH | FNH | FNH | FNH | FNH |
| Basagran | none | none | none | none | none | none | none | none |
| Beacon | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m | 18 m |
| Bicep | 24 m | 24 m | 24 m | 24 m | none | 24 m | 24 m | 24 m |
| Bladex | NF/S ⁵ | NF/S | NF/S | NF/S | NF/S | NF/S | NF/S | NF/S |
| Broadstrike SF + Dual | 26 m | 26 m | 26 m | 26 m | 26 m | 4 m | 26 m | 26 m |
| Buctril | 30 d | 30 d | 30 d | 30 d | 30 d | 30 d | 30 d | 30 d |
| Dual II | none | none | 12 m | 12 m ⁷ | 12 m | 12 m | 12 m | 12 m |
| Evik | NS | NS | NS | NS | NS | NS | NS | NS |
| Exceed | 300 d | 18 m | 18 m | 18 m ⁸ | 18 m | 18 m | 18 m | 24 m |
| Guardsman | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Harness | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Harness Xtra | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Hornet ⁹ | 26 m | 26 m | 26 m | 26 m | 10.5 m | 26 m | 26 m | 26 m |
| Integrity | NS | NS | NS | NS | NS | NS | NS | NS |
| Lasso | none | none | none | none | none | none | none | none |
| Lightning ⁹ | 26 m | 40 m | 9.5 m | 40 m | 18 m | 40 m | 40 m | 40 m |
| Lorox | none | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m | 4 m |
| Outlook | NS | NS | NS | NS | NS | NS | NS | NS |
| Permit | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |
| Prowl | NS | NS | NS | NS | NS | NS | NS | NS |
| Pursuit | 26 m | 40 m | none | 40 m | 18 m | 40 m | 40 m | 40 m |
| Python | 12 m | 26 m | 26 m | 26 m | 18 m | 4 m | 26 m | 26 m |
| Scorpion III ¹⁰ | 26 m | 26 m | 26 m | 26 m | 10.5 m | 26 m | 26 m | 26 m |
| Sharpen | 8 m | 8 m | 6 m | 8 m | none ⁹ | 8 m | 8 m | 8 m |
| Simazine | 24 m | 24 m | 24 m | 24 m | NS | 24 m | 24 m | 24 m |
| Surpass | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m | 24 m |

¹Numbers in the table followed by d or m refer to days and months, respectively.

²Cole crops include broccoli, cabbage, and cauliflower.

³Greens include collards, kale, mustard, and turnips.

⁴Unless soil pH is greater than 6.5, the interval is 18 months.

⁵NF/S indicates the crop can be planted in fall or spring after application.

⁶FNH indicates anytime following normal corn harvest.

⁷Except cabbage, which can be planted next season.

⁸Replant interval for cabbage is 300 days. Weed response ratings for vegetable crops herbicides.

⁹The Label requires the interval shown plus a successful field bioassay; see the label for instructions.

¹⁰Except cultivars 'Merit,' 'Carnival,' and 'Sweet Success,' which require 15 months rotation interval.

WEED RESPONSE RATINGS FOR VEGETABLE CROPS HERBICIDES.

| | Barnyardgrass | Bermudagrass | Crabgrass | Fall panicum | Foxtail | Goosegrass | Johnsongrass (S) | Johnsongrass (R) | Signalgrass | Texas panicum | Carpetweed | Chickweed | Cocklebur | Evening primrose | Hophornbeam | Copperleaf | Lambsquarter | Morningglory | Nightshade | Pigweed | Prickly sida | Purslane | Ragweed | Sicklepod | Smartweed | Velvetleaf | Nutsedge, yellow | Nutsedge, purple |
|--------------------|---------------|--------------|-----------|--------------|---------|------------|------------------|------------------|-------------|---------------|------------|-----------|-----------|------------------|-------------|------------|--------------|--------------|------------|---------|--------------|----------|---------|-----------|-----------|------------|------------------|------------------|
| Alanap | - | - | - | - | - | - | - | - | - | - | L | L | L | - | - | L | - | - | L | - | L | L | - | - | L | - | - | |
| Atrazine | G | P | G | P | G | G | P | P | P | P | E | E | G | E | - | E | G | G | E | G | E | E | F | E | E | P | P | |
| Basagran | P | P | P | P | P | P | P | P | P | P | P | G | G | E | G | - | F | F | P | P | G | G | P | E | G | G | P | |
| Command | E | N | E | E | E | E | E | N | E | E | - | - | P | - | G | G | P | - | F | E | G | - | F | F | E | N | N | |
| Curbit | G | N | E | G | G | G | G | N | G | G | G | - | N | - | - | - | N | - | G | - | - | - | N | N | N | N | N | |
| Dacthal | F | P | E | F | E | E | G | P | G | G | G | F | P | F | - | E | P | P | E | P | G | P | P | P | P | P | P | |
| Dual | G | P | E | E | E | E | F | P | E | F | G | G | P | G | - | F | P | G | G | P | E | F | P | F | P | G | P | |
| Eptam | G | P | E | G | E | G | G | P | F | G | G | F | P | F | - | G | P | P | G | P | G | P | P | P | P | E | G | G |
| Fusilade DX | E | E | E | E | E | E | E | E | E | E | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| Goal | E | P | E | F | F | E | F | P | F | F | E | E | - | G | - | E | P | E | E | E | E | E | E | E | - | P | P | |
| Lasso | G | - | E | E | - | E | F | P | G | - | - | - | P | - | F | F | P | P | E | E | P | E | - | P | P | P | P | |
| Lasso + AAtrex | G | P | E | E | E | E | F | P | E | F | E | E | E | E | - | E | G | G | E | G | E | E | E | E | F | E | F | P |
| Methyl Bromide | E | E | E | E | E | E | E | E | E | E | E | E | E | E | - | E | P | E | E | P | E | E | P | E | E | E | E | E |
| Gramoxone | E | P | E | E | E | E | E | P | E | E | E | G | G | G | - | E | G | G | E | G | G | E | G | G | G | P | P | |
| Poast | E | E | E | E | E | E | E | E | E | E | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| Prefar | E | P | E | E | E | E | G | P | G | G | P | P | P | P | - | G | P | P | G | P | G | P | P | E | P | P | P | |
| Prowl | E | E | E | E | - | E | E | P | E | - | G | G | P | - | P | G | P | P | G | P | G | P | P | E | P | P | P | |
| Pursuit | F | F | F | F | - | P | G | F | F | - | - | - | E | - | P | - | G | P | E | F | - | G | P | F | G | F | - | |
| Roundup Ultra | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E | E |
| Sencor/Lexone Pre | P | G | E | E | E | F | P | P | F | E | G | F | G | F | E | F | P | E | G | - | E | G | F | G | G | P | P | |
| Sencor/Lexone Post | G | P | G | E | E | E | F | P | P | F | E | G | E | G | - | E | E | P | E | G | E | G | E | G | E | G | E | P |
| Treflan | G | N | E | G | E | E | G | F | G | G | G | E | P | P | P | G | P | P | G | P | G | F | P | P | E | P | P | |

At recommended rates for your soil type or weed species: E=90% control or better; G=75-90% control; F=50-75% control; P=5-50% control; N=less than 5% control; L=labeled. **NOTE:** Always check recommendations to be sure the herbicide is registered for the crop in question.

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---|--|--|--|---|--|
| SPECIAL PRECAUTION: Many vegetable crops, especially cucumbers, are sensitive to residual herbicides like substituted ureas and triazines. Use care following these chemicals with susceptible crops for up to one year. | | | | | |
| Beans (lima and snap) | benazon <i>Basagran 4 SL</i> | 0.5 to 1 lb ai 1 to 2 pt | Cocklebur, yellow nutsedge, and velvetleaf. | After beans have 1 to 2 expanded trifoliolate leaves. | Sequential applications 7 to 10 days apart may be needed for control. Do not apply more than 2 quarts per acre per season or within 30 days of harvest. Do not use crop oil concentrate with applications on snap or pole beans. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.38 to 1.13 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates and perennials at higher rates. | Before crop emergence. | Rate should be adjusted to weed species present at the time of application. Avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| | metolachlor <i>Dual Magnum</i> <i>Dual Magnum II</i> | 0.95 to 1.91 lb ai 1 to 2 pt/A 1 to 2 pt/A | Annual grasses and some small-seeded broadleaf weeds. | Preplant incorporate or at planting. | If preplant incorporated, incorporate in top 2 inches of soil within 14 days before planting. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---------------------------|---|--------------------------------------|--|---|---|
| Beans (continued) | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals, top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of non-ionic surfactant to each 100 gallons of spray mix. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 30 days of harvest of dry or 15 days of harvest of succulent beans. |
| | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, purslane. | Before planting. | Apply and incorporate before planting. |
| (lima only) | alachlor <i>Lasso 4EC</i> | 1.5 to 3 lb ai 1.5 to 3 qt | Annual grasses and some small-seeded broadleaf weeds. | Preplant incorporated or at planting. | If preplant incorporated, apply within 7 days before planting and incorporate 1 to 2 inches. See label for restrictions. |
| | imazethapyr <i>Pursuit DG</i> | 0.047 lb ai 0.72 to 1.08 oz | Annual broadleaves and grasses. | Preplant incorporated or after planting. | Pursuit DG may be tank-mixed with grass herbicides. |
| (snap only) | clomazone <i>Command 3ME</i> | 0.15 to 0.25 lb ai 0.4 to 0.67 pt | Annual grasses and some broadleaf weeds, but poor pigweed control. | Before or after seeding but before crop emergence | Place seed below treated zone. Use lower rates on coarse soil, higher rates on fine soils. Do not apply within 1,200 feet of towns or housing developments, commercial fruit/nut/vegetable production, commercial greenhouses, or nurseries. Do not apply within 45 days of harvest. Temporary yellowing may occur. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | Immediately after planting. | Erratic control of pigweed. Thorough agitation required. |
| | quizalofop <i>Assure II</i> | 0.04 to 0.08 lb ai 6 to 12 oz | Annual and perennial grasses. | After grasses emerge. | Add 1 quart crop oil concentrate per 100 gallons. Do not apply within 15 days of harvest. |
| Cantaloupe and Watermelon | bensulide <i>Prefar</i> | 4 to 6 lb ai 4 to 6 qt | Annual grasses. | Immediately before planting. | Apply and incorporate before planting. Has 18 months restriction for crops not labeled. |
| | clethodim <i>Select 2 EC</i> | 0.09 to 0.125 lb ai 6 to 8 oz | Emerged annual and perennial grasses. | Post. | Use 8 ounces per acre for johnsongrass. Do not apply more than 8 ounces per acre per application. Do not apply within 14 days of harvest. Add crop oil concentrate at 1% by volume finished spray. Crop oil concentrate may cause leaf speckling under hot and humid conditions. |

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---------------------------------------|--|--|--|--|--|
| Cantaloupe and Watermelon (continued) | clomazone <i>Command 3ME</i> | 0.15 to 0.25 lb ai 0.4 to 0.67 pt | Annual grasses and some broadleaf weeds, but poor pigweed control. | Before or after seeding but before crop emergence. | Watermelon only. Place seed below treated zone. Use lower rates on coarse soil, higher rates on fine soils. Do not apply within 1,200 feet of towns or housing developments, commercial fruit/nut/vegetable production, commercial greenhouses, or nurseries. Temporary yellowing may occur. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | Apply when vines have 4-5 true leaves. | Apply to weed-free soil. Thorough agitation required. |
| | ethalfuralin <i>Curbit 3 lb/gal</i> | 1.125 to 1.68 lb ai 3 to 4.5 pt | Grasses and small-seeded broadleaf weeds. | Immediately after planting. | Do not incorporate prior to planting. Do not apply any later than 2 days after planting. Do not apply under mulch. |
| | ethalfuralin + clomazone <i>Strategy</i> | 0.4 to 1.2 lb ai 0.13 to 0.38 lb ai 2 to 4 to 6 pt | Annual grasses, plus some broadleaf weeds. | Before weeds emerge. | Apply after seeding but before crop emergence or as a banded spray between row middles after crop emergence or transplanting. Use low rates on coarse, middle rate on medium, and high rate on fine textured soils. Do not incorporate, apply under plastic mulch or crop covers, broadcast over transplants, or make more than one application per season. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz/A 11 to 32 oz/A | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |
| | halosulfuron <i>Sandea</i> | 0.38 to 0.56 oz ai 0.5 to 0.75 oz | Purple nutsedge, pigweed, ragweed, smartweed plus others. | Pre. | Cantaloupe, honeydew, and crenshaw melons only. Direct seeded without plastic mulch, apply after planting but before cracking. If used with plastic mulch, apply after final bed shaping but before laying plastic. Do not seed into treated areas less than 7 days after laying plastic. If transplanting without plastic mulch, do not transplant into treated areas within 7 days after application. If transplanting with plastic mulch, apply Sandea after final bed shaping but before laying plastic. Do not transplant within 7 days after application. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---------------------------------------|---|--------------------------------------|---|-----------------------------|--|
| Cantaloupe and Watermelon (continued) | halosulfuron <i>Sandea</i> | 0.38 to 0.56 oz ai 0.5 to 0.75 oz | Purple nutsedge, pigweed, ragweed, smartweed plus others. | Post. | Cantaloupe, honeydew, and crenshaw melons only. Direct seeded bareground or with plastic mulch, apply after crop has 3 to 5 true leaves but before flowering. Postemergence applications to transplants should not be made less than 14 days after transplanting. For best results on nutsedge, a sequential application may be needed. |
| | | 0.38 to 0.75 oz ai 0.5 to 1 oz | | Row middles only. | |
| | naptalam <i>Alanap</i> | 2 to 3.5 lb ai 4 to 7 qt | Some broadleaf weeds. | Immediately after planting. | Weed control erratic. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints crop oil concentrate per acre. Do not apply within 14 days of harvest. |
| | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, purslane. | 3- to 4-true leaf stage. | Apply as a directed spray between rows and incorporate. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|--|---|---|--|--|---|
| Cole Crops broccoli cabbage cauliflower | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses | Post. | Add crop oil concentrate at 1% by volume finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 30 days of harvest. |
| | clomazone <i>Command 3ME</i> | 0.25 to 0.5 lb ai 0.67 to 1.3 pt | Annual grasses and some broadleaf weeds, but poor pigweed control. | After transplanting. | Cabbage only. Place transplant roots below treated zone. Use lower rates on coarse soils, higher rates on fine soils. Do not apply within 1,200 feet of towns or housing developments, commercial fruit/nut/vegetable production, commercial greenhouses, or nurseries. Do not apply within 45 days of harvest. Temporary yellowing may occur. |
| | clopyralid <i>Stinger 3 EC</i> | 0.09 to 0.187 lb ai 0.25 to 0.5 pt | Emerged broadleaf weeds. | Post. | Will control most legume weeds. Do not apply within 30 days of harvest. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | At seeding or transplanting. | Apply to weed-free soil. Thorough agitation required. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz/A 11 to 32 oz/A | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Extreme care must be used to avoid contact with foliage or stems of desirable plants. For spot applications, use a 2% by volume solution. |
| | oxyfluorfen <i>Goal</i> | 0.25 to 0.5 lb ai 1.25 to 2.5 pt | Small-seeded annual broadleaf. | After soil preparation prior to transplanting. | Severe crop response may result if transplants are under stress. |
| | paraquat <i>Gramoxone Inteon</i> <i>2 lb/gal</i> | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of non-ionic surfactant to each 100 gallons of spray. |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. |
| trifluralin <i>Treflan 4EC</i> | 0.5 to 1 lb ai 1 to 2 pt | Grasses. | Prior to planting. | Apply and incorporate before planting. | |
| Cucumber | bensulide <i>Prefar 4E</i> | 4 to 6 lb ai 4 to 6 qt | Annual grasses. | Immediately before planting. | Apply and incorporate before planting. Has 18 month restriction for crops not labeled. |
| | bensulide <i>Prefar 4E</i> + naptalam <i>Alanap-L</i> | 4 to 6 lb ai 4 to 6 qt + 2 to 4 lb ai 4 to 8 qt | Germinating annual grasses and broadleaf weeds. | Preplant incorporated. | Do not plant uncleared crops for 18 months. Use lower rates on lighter soils. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|-------------------------|--|--|--|--|---|
| Cucumber (continued) | clethodim Select | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses. | Post. | Add crop oil concentrate at 1% by volume finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 14 days of harvest. |
| | clomazone <i>Command 3ME</i> | 0.15 to 0.38 lb ai 0.4 to 1 pt | Annual grasses and some broadleaf weeds, but poor pigweed control. | Before or after seeding but before crop emergence. | Place seed below treated zone. Use lower rates on coarse soils, higher rates on fine soils. Do not apply within 1,200 feet of towns or housing developments, commercial fruit/nut/vegetable production, commercial greenhouses, or nurseries. Do not apply within 45 days of harvest. Temporary yellowing may occur. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | Apply when vines have 4-5 true leaves. | Apply to weed-free soil. Thorough agitation required. |
| | ethalfluralin <i>Curbit</i> 3 lb/gal | 1.125 to 1.68 lb ai 3 to 4.5 pt | Grasses and small-seeded broadleaf weeds. | Immediately after planting. | Do not incorporate prior to planting. Do not apply any later than 2 days after planting. Do not apply under mulch. |
| | ethalfluralin + clomazone <i>Strategy</i> | 0.4 to 1.2 lb ai 0.13 to 0.38 lb ai 2 to 4 to 6 pt | Annual grasses plus some broadleaf weeds. | Before weeds emerge. | Apply after seeding but before crop emergence or as a banded spray between row middles after crop emergence or transplanting. Use low rate on coarse, middle rate on medium, and high rate on fine textured soils. Do not incorporate. Do not broadcast over transplants. Do not apply within 45 days of harvest. Do not apply more than once per season. Do not apply under plastic mulch or crop covers. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz/A 11 to 32 oz/A | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks | |
|-------------------------|---|-----------------------------------|--|-----------------------------|--|---|
| Cucumber (continued) | halosulfuron <i>Sandea</i> | 0.38 to 0.56 oz ai | Purple nutsedge, pigweed, ragweed, smartweed, plus others. | Pre. | Direct seeded without plastic mulch, apply after planting but before cracking. If used with plastic mulch, apply after final bed shaping but before laying plastic. Do not seed into treated areas less than 7 days after laying plastic. If transplanting without plastic mulch, do not transplant into treated areas within 7 days after application. If transplanting with plastic mulch, apply <i>Sandea</i> after final bed shaping but before laying plastic. Do not transplant within 7 days after application. | |
| | | 0.5 to 0.75 oz | | Post. | | Direct seeded bareground or with plastic mulch, apply after crop has 3 to 5 true leaves but before flowering. Postemergence applications to transplants should not be made less than 14 days after transplanting. For best results on nutsedge, a sequential application may be needed. |
| | | 0.38 to 0.75 oz ai 0.5 to 1 oz | | Row middles only. | | Apply to row middles only, taking precautions to avoid contacting vegetable foliage or minimizing deposits on plastic mulch. Always add nonionic surfactant at 1 quart per 100 gallons of spray solution. Do not exceed 2 ounces per acre per 12-month period. Do not apply over the top of plastic mulch or apply to crops treated with soil-applied organophosphate insecticides. Do not apply an organophosphate insecticide 21 days before or until 3 days after a <i>Sandea</i> application. |
| | naptalam <i>Alanap-L</i> | 2 to 3.5 4 to 7 qt | Broadleaf weeds. | Immediately after planting. | Weed control erratic. | |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. | |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|--|--|--|---|--|--|
| Cucumber (continued) | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 14 days of harvest. |
| Greens collard kale mustard turnip | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses | Post | Add crop oil concentrate at 1% by volume finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 14 days of harvesting greens or within 30 days of root harvest. |
| | clopyralid <i>Clopyr AG</i> | 0.187 lb ai 0.5 pt | Emerged broadleaf weeds. | Post. | Turnip greens only. Do not make more than one application per season. Allow at least 15 and 30 days between application and harvesting turnip tops and roots, respectively. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | Immediately after planting. | Apply to weed-free soil. Thorough agitation is required. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Use only for kale and mustard. Rate should be adjusted to weed species present. For spot applications, use a 2% by volume solution. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Use only for collards and turnips. Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Annual and perennial grasses. | After grass emergence. | Do not apply to turnips. Use 2 pints of crop oil concentrate per acre. Do not apply less than 45 days before harvest. |
| Okra | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, purslane. | Before planting. | Do not use on turnip greens except for processing greens. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Rate should be adjusted to weed species present. At time of application, avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| Onion | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, purslane. | Before planting. | Apply and incorporate before planting. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 10 lb | Germinating grasses, purslane, wild verbena, chickweed. | At seeding, transplanting, and/or layby. | Apply to weed-free soil. Thorough agitation required. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|----------------------|--|--|---|---|--|
| Onion (continued) | clethodim <i>Select 2 EC</i> | 0.09 to 0.25 lb ai 6 to 16 oz | Emerged annual and perennial grasses. | Post. | Dry bulb only. Do not apply within 45 days of harvest. Add crop oil concentrate at 1% by volume finished spray. Crop oil concentrate may cause leaf speckling under hot and humid conditions. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Rate should be adjusted to weed species present at time of application. Avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| | oxyfluorfen <i>Goal 1.6 lb/gal</i> | 0.12 to 0.5 lb ai 0.6 to 2.5 pt | Broadleaf weeds. | When onions have at least 2 true leaves. | Multiple treatments may be applied. Do not exceed 0.5 pound (2.5 pints) per acre per year. Use only on dry bulb onions. |
| | pendimethalin <i>Prowl 3.3EC</i> | 0.5 to 1.5 lb ai 1.2 to 3.6 pt | Annual grasses and some small-seeded broadleaf weeds. | Apply preemergence as a broadcast treatment when onions have 2 to 9 true leaves. | Do not apply to green, bunching onions or leeks. Do not incorporate or injury will occur. Do not exceed 3.6 pints per acre per season or apply within 45 days of harvest. |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 30 days of harvest. |
| | trifluralin <i>Treflan 4EC</i> | 0.375 to 0.62 lb ai 0.75 to 1.25 pt | Grasses, pigweed, purslane. | Up to 60 days before harvest. | Postplant as directed. Spray between rows. |
| Pepper | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses | Post | Add crop oil concentrate at 1% by volume finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 20 days of harvest. |
| | clomazone <i>Command 3ME</i> | 0.5 to 1 lb ai 0.67 to 2.67 pt | Annual grasses and some broadleaf weeds. | Soil application prior to seeding or transplanting. | All peppers (including bell, hot, pimento, and sweet, except banana). Some varieties may be injured. Seeds or transplants should be placed below the treated barrier. If stand failure occurs, peppers may be replanted, but do not make a second application. Do not exceed 2 pints per acre per season. Do not graze, harvest for food, or feed cover crops planted less than 9 months following Command application. Do not apply within 1,500 feet of towns, subdivisions, commercial subdivisions, commercial vegetable or fruit production, commercial nurseries, or greenhouses. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | 4 to 6 weeks after transplanting or direct seeded plants at 4 to 6 inches height. | Apply to weed-free soil. Thorough agitation required. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|-----------------------|--|--|---|--|--|
| Pepper (continued) | glyphosate 4 lb/gal 5.5 lb/gal | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |
| | halosulfuron Sanda | 0.38 to 0.75 lb ai 0.5 to 1 oz | Purple nutsedge, pigweed, ragweed, smartweed, plus others | Row middles only. | Apply to row middles only, taking precautions to avoid contacting vegetable foliage or minimizing deposits on plastic mulch. Always add nonionic surfactant at 1 quart per 100 gallons of spray solution. Do not exceed 2 ounces per acre per 12-month period. Do not apply over the top of plastic mulch or apply to crops treated with soil-applied organophosphate insecticides. Do not apply an organophosphate insecticide 21 days before or until 3 days after a Sandea application. |
| | paraquat Gramoxone Inteon 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | sethoxydim Poast 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 20 days of harvest. |
| | trifluralin Treflan 4EC | 0.5 to 1 lb ai 1 to 2 pt | Grasses, pigweed, purslane. | Before transplanting. | Apply and incorporate before transplanting. |
| Potatoes, Irish | clethodim Select | 0.09 to 0.26 lb ai 6 to 16 oz | Annual and perennial grasses | Post. | Add crop oil concentrate at 1% by volume finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 30 days of harvest. |
| | DCPA Dacthal W-75 | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | At planting or up to 9 weeks after planting. | Apply to weed-free soil. Thorough agitation required. |
| | EPTC Eptam-7E | 3 lb ai 3.5 pt | Grasses, pigweed, nutsedge (stunts swinecress). | Preplant, postplant, postemergence. | See label for specific use in instructions. Do not let EPTC come in contact with seed piece. |
| | glyphosate 4 lb/gal 5.5 lb/gal | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Rate should be adjusted to weed species present. At time of application, avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| | linuron Lorox 50DF | 0.5 to 1 lb ai 1 to 2 lb | Annual grasses and broadleaf weeds. | Pre. | Apply before crop emergence. Plant seed at least 2 inches deep. Use lower rates on coarse textured soils, higher rates on medium or fine textured soils. Add 0.5% by volume nonionic surfactant if emerged weeds are present. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|--------------------------------|--|--|---|---|--|
| Potatoes, Irish (continued) | metolachlor <i>Dual Magnum</i> <i>Dual II Magnum</i> | 0.95 to 1.91 lb ai 1 to 2 pt/A 1 to 2 pt/A | Annual grasses and some small-seeded broadleaf weeds. | Pre- or postplant incorporated or preemergence after final drag off. | Cool, wet conditions after application may delay maturity and/or reduce yield of Superior and other early-maturing varieties. |
| | metribuzin 4 lb/gal or 75% DF | 0.5 to 1 lb ai 1 to 2 pt or 0.67 to 1.33 lb | Most small-seeded annuals. | After planting and before crop emergence or after crop emergence for certain white-skinned varieties. | Use lower rates on sandy soil. Do not use postemergence on early-maturing, smooth-skinned white or red varieties. Do not plant treated area to crop other than potatoes for 1 year after treatment. Do not plant sensitive crops such as onions, cole crops, or cucurbit during the growing season following application of metribuzin. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 30 days of harvest. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | pendimethalin <i>Prowl 3.3EC</i> | 0.75 to 1.5 lb ai 1.8 to 3.6 pt | Annual grasses and some small-seeded broadleaf weeds. | After planting but before potatoes and weeds emerge. | Incorporation not required if adequate rainfall or irrigation for crop and weed emergence occurs within 7 days. |
| Pumpkin | bensulide <i>Prefar 4E</i> | 4 to 6 lb ai 4 to 6 qt | Annual grasses. | Before planting. | Incorporate 1 to 2 inches deep. Has 18 months restriction on crops not labeled. |
| | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses | Post. | Add crop oil concentrate at 1% by volume of finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 14 days of harvest. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|------------------------|--|--|--|---|--|
| Pumpkin (continued) | ethalfluralin + clomazone <i>Strategy</i> | 0.4 to 1.2 lb ai 0.13 to 0.38 lb ai 2 to 4 to 6 pt | Annual grasses plus some broadleaf weeds | Before weeds emerge. | Apply after seeding but before crop emergence or as a banded spray between row middles after crop emergence or transplanting. Use low rate on coarse, mid- dle rate on medium, and high rate on fine-textured soils. Do not incorporate. Do not broadcast over trans- plants. Do not apply within 45 days of harvest. Do not apply more than once per season. Do not apply under plastic mulch or crop covers. |
| | halosulfuron <i>Sandea</i> | 0.38 to 0.75 oz ai 0.5 to 1 oz | Purple nutsedge, pigweed, ragweed, smartweed, plus others | Row middles only. | Apply to row middles only, taking precautions to avoid contacting vegetable foliage or minimizing deposits on plastic mulch. Always add nonionic surfactant at 1 quart per 100 gallons of spray solution. Do not exceed 2 ounces per acre per 12-month period. Do not apply over the top of plastic mulch or apply to crops treat- ed with soil-applied organophosphate insecti- cides. Do not apply an organophosphate insecticide 21 days before or until 3 days after a Sandea application. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after appli- cation will not be controlled. Add 2 pints of nonionic sur- factant to each 100 gallons of spray. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treat- ment and planting. For spot applications, use a 2% by volume solution. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concen- trate per acre. Do not apply within 14 days of harvest. |
| Southern peas | bentazon <i>Basagran</i> 4 lb/gal | 0.75 to 1 lb ai 1.5 to 2 pt | Cocklebur. | Postemergence after at least three nodes have devel- oped on peas. | Some yellowing, bronzing or speckling of leaves may occur. Do not apply more than 1 pound per acre of bentazon in one season. Use low rate for 2- to 6- leaf-stage cocklebur and high rate for 6- to 10-leaf- stage cocklebur. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbe- na, chickweed. | Immediately after planting. | Apply to weed-free soil. Thorough agitation required. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|------------------------------|--|--|--|---|--|
| Southern peas (continued) | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |
| | imazethapyr <i>Pursuit DG</i> | 0.063 lb ai 1.44 oz | Annual broadleaves and grasses. | Preplant incorporated or at planting. | Pursuit DG may be tank-mixed with a registered grass herbicide. |
| | metolachlor <i>Dual Magnum</i> <i>Dual II Magnum</i> | 0.95 to 1.91 lb ai 1 to 2 pt/A 1 to 2 pt/A | Annual grasses and some small-seeded broadleaf weeds. | Preplant incorporate or at planting. | If preplant incorporated, incorporate in top 2 inches of soil within 14 days before planting. |
| | pendimethalin <i>Prowl 3.3EC</i> | 0.5 to 1.5 lb ai 1.2 to 3.6 pt | Annual grasses and some small-seeded broadleaf weeds. | Preplant incorporated up to 60 days before planting. | Do not apply preemergence to southern peas as injury may occur. If stand failure occurs, any crop registered for Prowl 3.3EC preplant incorporated may be replanted, but do not work soil deeper than herbicide incorporation zone. |
| | quizalofop <i>Assure II 0.88 EC</i> | 0.04 to 0.08 lb ai 6 to 16 oz | Emerged annual and perennial grasses. | Post. | Do not apply within 30 days of harvest. Add 1 gallon of crop oil concentrate or 1 quart of nonionic surfactant per 100 gallons of spray mix. Crop oil concentrate may cause leaf speckling under hot and humid conditions. |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 30 days of harvest of dry or 15 days of harvest of succulent peas. |
| | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, purslane. | 1 to 3 weeks before planting. | Apply and incorporate before planting. |
| Squash | bensulide <i>Prefar 4E</i> | 4 to 6 lb ai 4 to 6 qt | Annual grasses. | Before planting. | Apply and incorporate before planting. Has 18-month restriction on crops not labeled. |
| | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses | Post. | Add crop oil concentrate at 1% by volume of finished spray. Do not exceed 8 ounces per acre per application or 32 ounces per acre per season. Do not apply within 14 days of harvest. |
| | clomazone <i>Command 3ME</i> | 0.25 to 0.5 lb ai 0.67 to 1.33 pt | Annual grasses and some broadleaf weeds, but poor pigweed control. | Before seeding or just before transplanting or to row middles between plastic covered rows. | Place seed below treated zone. Use lower rates on coarse soils, higher rates on fine soils. Do not apply within 1,200 feet of towns or housing developments, commercial fruit/nut/vegetable production, commercial greenhouses, or nurseries. Do not apply within 45 days of harvest. Temporary yellowing may occur. |

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|-----------------------|--|--|---|-----------------------------------|--|
| Squash (continued) | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, chickweed. | When plants have 4-5 true leaves. | Apply to weed-free soil. Thorough agitation is required. |
| | ethalfluralin + clomazone <i>Strategy</i> | 0.4 to 1.2 lb ai 0.13 to 0.38 lb ai 2 to 4 to 6 pt | Annual grasses plus some broadleaf weeds. | Before weeds emerge. | Apply after seeding but before crop emergence or as a banded spray between row middles after crop emergence or transplanting. Use low rate on coarse, middle rate on medium, and high rate on fine-textured soils. Do not incorporate. Do not broadcast over transplants. Do not apply within 45 days of harvest. Do not apply more than once per season. Do not apply under plastic mulch or crop covers. |
| | halosulfuron <i>Sandea</i> | 0.38 to 0.75 oz ai 0.5 to 1 oz | Purple nutsedge, pigweed, ragweed, smartweed, plus others. | Row middles only. | Apply to row middles only, taking precautions to avoid contacting vegetable foliage or minimizing deposits on plastic mulch. Always add nonionic surfactant at 1 quart per 100 gallons of spray solution. Do not exceed 2 ounces per acre per 12-month period. Do not apply over the top of plastic mulch or apply to crops treated with soil-applied organophosphate insecticides. Do not apply an organophosphate insecticide 21 days before or until 3 days after a Sandea application. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |
| | sethoxydim <i>Poast</i> 1.5 lb/gal | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 14 days of harvest. |
| Sweet corn | alachlor <i>Lasso 4EC</i> | 2 to 3 lb ai 2 to 3 qt | Most annual grasses, signalgrass, and seedling johnson-grass. | At planting. | Poor control of most large-seeded broadleaf weeds. |
| | atrazine <i>4L</i> <i>90% DF</i> | 2 lb ai 2 qt 2.2 lb | Annual grasses, pig weed, purslane, morningglory. | Immediately after planting. | Atrazine gives better results where soil moisture is not limited. Provides poor control of signalgrass. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---------------------------|---|--|---|--|---|
| Sweet corn (continued) | bentazon <i>Basagran</i> 4 lb/gal | 0.75 to 1 lb ai 1.5 to 2 pt | Cocklebur, tall morningglory, and other broadleaf weeds. | Postemergence, as directed spray, after corn is at least 12 inches tall. | Do not apply overtop or injury may occur. Do not apply within 3 weeks before tasseling. Add 2 pints of nonionic surfactant per 100 gallons of spray. |
| | carfentrazone <i>Aim</i> | 0.008 lb ai 0.33 oz | Cocklebur, ragweed, pigweed, smartweed, and prickly sida. | Preplant. | Sweet corn can be treated anytime between 30 days before planting until corn has eight collars. Apply to postemerged weeds only. Add 1 quart of nonionic surfactant per 100 gallons of spray solution. |
| | dimethenamid <i>Outlook</i> | 0.75 to 1.5 lb ai 1 to 2 pt | Annual grasses and small-seeded, broadleaf weeds. | Immediately after planting. | May be tank mixed with atrazine. |
| | dimethenamid + atrazine <i>Guardsman</i> | 0.7 to 1.3 + 0.8 to 1.5 lb ai 2.5 to 4.5 pt | Annual grasses and broadleaf weeds. | Soil applied before or after planting or early postemergence. | Do not harvest within 50 days after treatment. Do not exceed 2.5 pounds of active ingredient atrazine total per acre per year. Do not apply over the top of corn in liquid fertilizer as injury may occur. Do not apply over the top of corn more than 8 inches tall. |
| | glyphosate 4 lb/gal 5.5 lb/gal | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Before crop emergence or for spot treatments after crop and weed emergence. Avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| | halosulfuron <i>Permit</i> | 0.5 oz ai 0.67 oz | Nutsedge, cocklebur, pigweed, ragweed, and smartweed. | Post. | Apply over the top or with drop nozzles anytime between spike and layby. All cultivars have not been tested for tolerance. Check with seed supplier for tolerance. Do not apply to 'Jubilee' sweet corn. Do not make more than two applications per year or exceed 0.67 ounce per application. Do not apply to sweet corn previously treated with a soil applied organophosphate insecticide or apply an organophosphate insecticide within 7 days before or 3 days following Sempra application. Always add nonionic surfactant at 1 quart per 100 gallons of spray solution. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|---------------------------|--|---|--|--|--|
| Sweet corn (continued) | metolachlor <i>Dual Magnum</i> <i>Dual II Magnum</i> | 0.95 to 1.91 lb ai 1 to 2 pt/A 1 to 2 pt/A | Annual grasses and some small-seeded broadleaf weeds. | Preplant incorporate or at planting. | If preplant incorporated, incorporate in top 2 inches of soil within 14 days before planting. |
| | metolachlor + atrazine <i>Bicep II</i> or <i>Bicep II Magnum</i> | 0.95 to 1.91 lb ai + 1 to 2 lb ai 1.5 to 3 qt 1.3 to 2.6 qt | Annual grasses and broadleaf weeds. | Soil applied before or after planting or postemergence broadcast or directed spray. | Do not exceed 2.4 quarts as soil-applied treatment if soils contain less than 3% organic matter. Do not exceed 2.5 pounds of active ingredient atrazine total per acre per year. Do not apply over the top of corn in liquid fertilizer as injury may occur. Do not graze or feed treated forage within 30 days after application. Do not apply over the top of corn more than 8 inches tall. |
| | nicosulfuron <i>Accent 75 DF</i> | 0.5 oz ai 0.67 oz | Johnsongrass and other annual weeds. | Postemergence, after sweet corn emergence up to 12-inch sweet corn or up to and including five leaf collars. | For corn 12 to 18 inches, apply with drop nozzles. Do not apply to sweet corn taller than 18 inches or with six or more leaf collars. Do not exceed one application per year. Some sweet corn varieties may be less tolerant than others. |
| | pendimethalin + atrazine <i>Prowl 3.3EC</i> (several) 4L or 90DF | 0.5 to 1.5 lb ai 1.2 to 3.6 pt 2 lb ai 2 qt or 2.2 lb | Annual grasses and broadleaf weeds. | Early postemergence from spike to 4-leaf corn but before weeds exceed 1 inch tall. | Do not apply (1) Prowl 3.3EC alone or with other products, (2) preplant incorporated, (3) Prowl 3.3EC + atrazine in liquid fertilizer. |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.18 lb/ai 1 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply over the top of corn. Do not apply within 30 days of harvest. Do not apply more than 1 pint per acre. Direct spray to lower 10 inches of corn stalks. |
| Sweet potato | clethodim <i>Select</i> | 0.09 to 0.26 lb ai 6 to 16 oz | Annual and perennial grasses. | Post. | Add crop oil concentrate at 1% by volume of finished spray. Do not exceed 32 ounces per acre per season or apply within 30 days of harvest. |
| | clomazone <i>Command 3 ME</i> | 0.48 to 1.25 lb ai 1.33 to 3.33 pt | Annual grasses and certain broadleaf weeds. | Immediately prior to or after transplanting. | Do not apply within 95 days of harvest. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbenas, and chickweed. | At transplanting or up to 6 weeks after transplanting. | Apply to weed-free soil. Thorough agitation is required. |
| | fluzifop-p <i>Fusilade DX</i> 1 lb/gal | 0.094 to 0.25 lb ai 6 to 12 oz | Grasses. | After grass emergence. | Add either crop oil concentrate at 1% or nonionic surfactant at 0.25%. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|-------------------------------|---|--|---|--|--|
| Sweet potatoes (continued) | flumioxazin <i>Valor SX</i> | 0.032 to 0.08 lb ai 1 to 2.5 oz | Certain broadleaf weeds. | 2 to 5 days prior to transplanting. | Do not apply over the top of sweet potatoes. Do not use greenhouse-grown transplants. Tank-mix with Command only if applied pretransplant. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before crop emergence. | Rate should be adjusted to weed species present. At time of application avoid contact with desirable plants. For spot applications, use a 2% by volume solution. |
| | metolachlor <i>Dual Magnum</i> <i>7.62 EC</i> | 0.95 to 1 lb ai 1 to 1.33 pt | Annual and yellow nutsedge, annual grasses, and some broadleaf weeds. | Posttransplant to slips and pre-emergence to weeds. | Use only on field-grown 'Beauregard' transplants. There is a risk of injury to transplants if heavy rainfall occurs shortly after application. Do not apply so that the herbicide is allowed to be concentrated over the transplant row. Do not incorporate after application. Do not apply in irrigation water. Make only one application to sweet potatoes per growing season. NOTE (State Table 24c) |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.09 to 0.18 lb ai 0.5 to 1 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 30 days of harvest. |
| | Tomato | clethodim <i>Select</i> | 0.09 to 0.13 lb ai 6 to 8 oz | Annual and perennial grasses. | After grasses emerge. |
| | DCPA <i>Dacthal W-75</i> | 4.5 to 10.5 lb ai 6 to 14 lb | Germinating grasses, purslane, wild verbena, and chickweed. | 4-6 weeks after transplanting or direct-seeded plants at 4 to 6 inches height. | Apply to weed-free soil. Thorough agitation is required. |
| | glyphosate <i>4 lb/gal</i> <i>5.5 lb/gal</i> | 0.375 to 1.125 lb ae 16 to 48 oz 11 to 32 oz | Annuals at lower rates; perennials at higher rates. | Before planting. | Allow 3 days between treatment and planting. For spot applications, use a 2% by volume solution. |
| | halosulfuron <i>Sandea 75 DF</i> | 0.024 to 0.036 lb ai 0.5 to 0.75 oz | Nutsedges and some broadleaf weeds. | Pre. | Use on transplant tomatoes only. Apply under plastic mulch for nutsedge suppression. Sandea is more effective when applied to emerged nutsedges. Wait at least 7 days before transplanting into treated areas. |
| | | 0.024 to 0.036 lb ai 0.5 to 0.75 oz | | Post. | Use on transplant tomatoes only. Apply to transplants that are established and actively growing. Do not apply sooner than 14 days after transplanting. |

Vegetable Crops, Continued

| Crop | Herbicide | Broadcast rate per acre | Weeds controlled | Time of application | Limitations, remarks |
|-----------------------|---|--|--|--|---|
| Tomato (continued) | halosulfuron <i>Sandea 75 DF</i> | 0.38 to 0.768 oz ai 0.5 to 1 oz | Nutsedges. | Apply in row middles before vining on emerged 4- to 8-inch nutsedges. | Use on transplant and direct-seeded tomatoes. Avoid contact with tomato foliage or minimize deposition on plastic mulch. Do not exceed 2 ounces per acre per 12-month period. Do not apply to tomatoes treated with a soil-applied organophosphate insecticide. Do not apply an organophosphate insecticide 21 days before or until 3 days after a Sandea application. |
| | metolachlor <i>Dual Magnum 7.62 EC</i> | 0.95 to 1.91 lb ai 1 to 2 pt | Annual grasses and some broadleaf weeds. | Preplant post-directed. | In plasticulture, apply to preformed beds prior to applying plastic mulch. Postdirect to transplants after first settling rain or irrigation event. |
| | metribuzin 4 lb/gal or 75% DF | 0.5 to 1 lb ai 1 to 2 pt or 0.67 to 1.33 lb | Most small-seeded annuals. | Postemergence when tomatoes have 5 to 6 leaves and before weeds are more than 1 inch tall. | Apply specified dosage in single or multiple applications in a minimum of 20 gallons of water and 14 days between applications. Do not treat seeded or transplanted tomatoes until plants have reached the 5- to 6-leaf stage or until transplants have recovered from transplant shock and new growth is evident. Do not apply within 3 days after periods of cool, wet, or cloudy weather or crop injury will occur. Do not apply within 24 hours of other pesticide applications. |
| | paraquat <i>Gramoxone Inteon</i> 2 lb/gal | 0.69 to 1.4 lb ai 2 to 4 pt | Emerged annuals. Top kill of perennials. | Before crop emergence. | Weeds emerging after application will not be controlled. Add 2 pints of nonionic surfactant to each 100 gallons of spray. |
| | sethoxydim <i>Poast 1.5 lb/gal</i> | 0.09 to 0.27 lb ai 0.5 to 1.5 pt | Grasses. | After grass emergence. | Use 2 pints of crop oil concentrate per acre. Do not apply within 20 days of harvest. |
| | trifluralin <i>Treflan 4EC</i> | 0.5 to 0.75 lb ai 1 to 1.5 pt | Grasses, pigweed, and purslane. | Before transplanting. | Incorporate 1 to 1.5 inches. |