

Pepper

Pea

Pepper

Potato

Pumpkin & squash

Sweet corn

Table beet

Tomato

Planting

Transplants

Rows: 18–36 inches.

Plants in row: 18–24 inches. Use 24 lb/a seed (1 oz produces 215 plants).

Set transplants May 20–June 1 in the southern half of Wisconsin and 7–10 days later in the northern counties after danger of frost is past. Plants stop growing below 55°F. Poor fruit set may occur below 60°F or above 75°F.

Transplants should be 6–8 weeks old, vigorous, slightly hardened (held at 60–65°F several days), stocky, dark green, and without disease or insect injury. Handle

transplants carefully. Use a starter solution high in nitrogen and phosphorus as transplants are set out.

Irrigation

Irrigation is essential on sandy soils and may help on heavier soils during prolonged dry periods. Approximately 1.0–1.5 inches of water is needed every 5–7 days. If maximum daily temperatures exceed 85°F, more frequent irrigation may be necessary.

Lime and fertilizer

Lime: Use dolomitic limestone to maintain a pH of 6.0 on mineral soils and 5.6 on organic soils.

Fertilizer rates: Apply P_2O_5 and K_2O according to soil test recommendations. Use annual nitrogen, P_2O_5 , and K_2O recommendations in the table below. Take credits for previous legume crops and manure.

Application: Broadcast recommended fertilizer and plow or disk under before setting transplants.

Nitrogen: Apply preplant or sidedress. Split nitrogen into two or 3 applications, especially on sandy soils.

Annual nitrogen, phosphate, and potash recommendations for peppers

Nitrogen		Phosphate and potash		
Organic matter (%)	Amount to apply (lb/a)	Yield goal (t/a)	Amount P_2O_5 to apply* (lb/a)	Amount K_2O to apply* (lb/a)
<2	100	8–10	10	50
2.0–9.9	80			
10–20	60			
>20	30			

*Amounts shown are for optimum (O) soil test levels. Apply 50% of this rate if soil test is high (H) and omit if soil test is excessively high (EH). If soil test is low (L) or very low (VL), increase rates according to soil test recommendations.

Disease control in pepper

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Anthracnose (<i>Colletotrichum</i> spp.)	azoxystrobin	6.0–15.5 fl oz Aframe, AzoxyStar, Equation, Quadris, Satori, Willowood Azoxy 25C	0	Do not apply more than 61.5 fl oz/a per season. Do not make more than 1 application without alternating to a fungicide with a different mode of action.
	azoxystrobin + difenoconazole	8.0–14.0 fl oz Quadris Top	0	Do not apply more than 55.3 fl oz/a per season. Do not make more than 2 consecutive applications before alternating to a fungicide with a different mode of action.
	chlorothalonil	1.5 pt Bravo Weather Stik, Chloronil 720, Echo 720, Equus 720	3	Do not apply more than 12.0 pt/a per season.
	chlorothalonil + cymoxanil	2.0–2.44 pt Ariston	3	Initiate application prior to disease onset and apply at 7-day intervals or as disease pressure dictates.
	difenoconazole + cyprodinil	16.0–20.0 fl oz Inspire Super	0	Apply no more than a total of 47.0 fl oz product/a per year. Follow resistance management guidelines.
	flutriafol	14.0 fl oz Topguard	0	Do not make more than 4 applications per field per year.
	fluxapyroxad + pyraclostrobin	4.0–8.0 fl oz Priaxor	7	See label and follow instructions for limitations in tank mixing to avoid crop injury. Do not apply more than 24.0 fl oz/a per season.
	mancozeb	1.6–3.2 lb Manzate Pro-Stick 3.0 lb Koverall	7	Minimum re-treatment interval is 7 days.
	mancozeb + copper hydroxide	2.0–3.0 lb ManKocide	7	Do not apply more than 39.0 lb/a per year.
	penthiopyrad	24.0 fl oz Fontelis	0	Make no more than 2 sequential applications before switching to a fungicide with a different mode of action.
	pyraclostrobin	8.0–12.0 oz Cabrio	0	Do not apply more than 96.0 fl oz/a per season. The use of adjuvants may enhance efficacy of this product. Do not make more than 1 application before alternating to a fungicide with a different mode of action.
	trifloxystrobin	3.0–4.0 oz Flint 3.0–3.8 fl oz Gem	3	Follow resistance management guidelines as per labels.
	Bacterial spot	<i>Plant cultivars with resistance to bacterial spot. Several cultivars have field tolerance to races of the pathogen. A hot water seed treatment will help prevent bacterial spot. Place the seed in a mesh bag and dip it into water heated to 122°F; treat for 25 minutes. Immediately transfer the bag to cold water to cool the seed. There will be some reduction in the germination rate of treated seed. You may wish to sow additional seed to compensate.</i>		
copper ammonium complex	1.5–3.0 qt Copper-Count-N	0	Spray every 7 days.	
copper hydroxide	1.3–2.0 pt Champ Formula 2	0		
	2.6–4.0 pt Kocide LF 2.4F	0		
	0.75–1.25 lb Kocide 3000	0		
	1.5–2.25 lb Kocide 2000 DF	0		
	2.0–3.0 lb Champion 77WP, Kocide DF	0		
copper sulfate	0.75–2.0 lb Cuprofix Ultra 40 Disperss	0		
streptomycin sulfate	200 ppm solution of 21.2% streptomycin sulfate		Spray every 4–5 days in the plant bed, but do not use after transplanting.	

(continued)

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Disease control in pepper *(continued)*

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Botrytis leaf mold (<i>Botrytis cinerea</i>)	chlorothalonil	1.5 pt Bravo Weather Stik, Chloronil 720	3	Do not apply more than 12.0 pt/a per season.
	Cercospora leaf spot (<i>Cercospora</i> spp.)	chlorothalonil	1.5 pt Bravo Weather Stik, Chloronil 720	3
Damping-off, crown rot	azoxystrobin	0.10–0.38 fl oz/100 lb seed Dynasty	—	Not for feed or food.
	fludioxonil	0.08–0.16 fl oz/100 lb seed Dyna-Shield, Maxim 4FS, Spirato 480 FS	—	Follow manufacturer's directions. Not for feed or food.
	mefenoxam	1.0 pt Ridomil Gold SL 2.0 pt Ultra Flourish	—	Preplant-incorporated application or surface application at planting. Preplant to top 2 inches of soil.
		0.085–0.64 fl oz Apron XL/ 100 lb seed	—	Follow manufacturer's directions. Do not use treated seed for feed or food.
	metalaxyl	4.0–8.0 pt MetaStar 2E AG	—	Preplant-incorporated application or surface application at planting. Preplant to top 2 inches of soil.
	0.75–1.5 fl oz/100 lb seed Acquire 0.7 fl oz/100 lb seed Sebring 2.65 ST 0.75 fl oz/100 lb seed Allegiance FL, Metalaxyl 265 ST	—	Follow manufacturer's directions. Do not use treated seed for feed or food.	
Phytophthora blight, ripe rot	propamocarb hydrochloride	1.2 pt Previcur Flex	5	Do not apply more than 6.0 pt/a per season. Can be applied to lower portions of plants and soil by directed nozzles. Can be applied through drip irrigation or transplant water.
	ametoctradin + dimethomorph	14.0 fl oz Zampro	4	Do not apply more than 42.0 fl oz/a per season. Do not make more than 3 applications per season.
	cyazofamid	2.75 fl oz Ranman	0	Do not make more than 6 applications/a per year. Do not apply more than 16.5 fl oz/a per year.
	cymoxanil + famoxadone	8.0–10.0 oz Tanos 50DF	3	Disease suppression only. Do not make more than 1 application of Tanos before alternating with a fungicide having a different mode of action. Do not exceed 72.0 oz/a Tanos per season.
	dimethomorph	6.0 oz Forum	0	Disease suppression only. Tank mix Forum with another fungicide active against Phytophthora blight and having a different mode of activity. Do not make more than 2 sequential applications of Forum before alternating to another effective fungicide. Do not exceed 5 applications per season or 30.0 oz/a per season.
	fenamidone	8.2 fl oz Reason 500 SC	14	Do not apply more than 24.6 fl oz/a per year. Do not make more than 1 application before alternating to a fungicide with a different mode of action (non-Group 11, non-strobilurin).
	fluazinam	1.0–1.5 pt Omega 500F	30	Do not apply more than 9.0 pt/a per year. Can be applied through drip irrigation.

(continued)

Disease control in pepper *(continued)*

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Phytophthora blight, ripe rot <i>(cont.)</i>	fluopicolide	3.0–4.0 fl oz Presidio	2	Tank mix this product with another labeled non-Group 43 fungicide.
	mancozeb + copper hydroxide	2.0–3.0 lb ManKocide	7	Do not apply more than 39.0 lb/a per year.
	mandipropamid	8.0 fl oz Revus	1	Apply as a foliar spray in a mixture with a copper-based fungicide. Alternate with another effective non-Group 40 fungicide.
	oxathiapiprolin	<i>foliar:</i> 2.0–4.8 fl oz Orondis Opti A, Orondis Ultra A <i>soil, at-plant:</i> 2.4–19.2 fl oz Orondis Gold 200	0	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Do not exceed 19.2 fl oz/a per year. Begin foliar applications prior to disease development. Do not use Orondis Ultra A as a foliar application if you have already used Orondis Gold 200 on the soil at time of planting.
	phosphorous acid salts	1.0–3.0 qt/100 gal water Fosphite, Rampart 1.0–4.0 qt/20 gal water K-Phite	0	Apply prior to disease onset and do not apply at less than 3-day intervals.
	potassium phosphite	6.0 pt ProPhyt	0	Drench application is also registered at 4.0 pt/100 gal water to transplants.
Powdery mildew <i>(Leveillula taurica)</i>	chlorothalonil	1.5 pt Bravo Weather Stik, Chloronil 720	3	Do not apply more than 12.0 pt/a per season.
Virus diseases (alfalfa mosaic, cucumber mosaic, tobacco mosaic, potato viruses X & Y, tobacco etch)	<i>Be sure transplants are free from virus infections. Plant peppers far from potatoes, tomatoes, squash, cucumbers, melons, alfalfa. Eliminate all perennial weed hosts within 150 ft of field. Plant varieties resistant to tobacco mosaic virus.</i>			

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Insect control in pepper

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
European corn borer	<i>Treat when eggs or larvae are observed OR when female European corn borer moths in nearby blacklight traps exceed four per night on three consecutive nights when peppers are forming. Repeat applications at 5- to 7-day intervals while moth flights continue or until harvest.</i>			
	0.24–0.97 lb acephate	0.25–1.0 lb Orthene 97	7	Sweet bell peppers only. Do not exceed 2.66 lb ai/a per season.
	0.5–1.0 lb acephate	12.0–16.0 oz Acephate 97UP	7	Sweet bell peppers only. Do not apply more than 2.66 lb/a of formulated product per season.
	alpha-cypermethrin	2.2–3.8 fl oz *Fastac	1	Apply when pests reach or exceed established thresholds. Do not apply more than 11.4 fl oz of Fastac per acre per crop season.
	<i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i>	1.0–2.0 lb Lepinox WDG	0	Treat early instar larvae before noticeable feeding damage occurs. Repeat as needed.
	0.0125–0.022 lb beta-cyfluthrin	1.6–2.8 fl oz *Baythroid XL	7	Do not use when peppers are grown for seed. Ground applications only. Do not exceed 16.8 fl oz/a Baythroid XL per season. Allow 7 days between applications.
	0.033–0.1 lb bifenthrin	2.1–6.4 fl oz *Brigade 2EC	7	Apply every 7 days as needed. Do not exceed 12.8 fl oz/a (0.2 lb ai/a) per season.
	1.0–2.0 lb carbaryl	Sevin	3	Several formulations; see label for rate.
	chlorantraniliprole	3.5–7.5 fl oz Coragen	1	Do not make more than 4 applications per crop season and allow at least 3 days between applications. Do not apply more than 15.4 fl oz/a Coragen per season.
	0.130 lb cyantraniliprole (drip, chemigation, or soil injection only)	10.0 fl oz Verimark	1	Do not apply more than 13.5 fl oz/a Verimark per crop per season. Do not apply more than 0.4 lb ai/a cyantraniliprole-containing products per crop whether applied as soil or foliar applications. The pH of the application solution should be adjusted to between pH 4 and 6.
	0.045–0.088 lb cyantraniliprole (foliar)	7.0–13.5 fl oz Exirel	1	Minimum application interval between foliar sprays is 5 days.
	0.018–0.028 lb deltamethrin	1.5–2.4 fl oz *Delta Gold	1	Apply every 5 days as needed. Do not exceed 14.4 fl oz/a.
	0.03–0.05 lb esfenvalerate	5.8–9.6 fl oz *Asana L	7	Do not exceed 0.35 lb ai/season.
	0.03–0.045 lb flubendiamide	2.0–3.0 oz Synapse WG	1	Do not exceed 3.0 oz (0.045 lb ai/a) in a 7-day period or 9.0 oz/a per season.
	flubendiamide + buprofezin	12.0–17.0 fl oz Vetica	1	Do not apply more than 38.0 fl oz/a per season and allow at least 7 days between applications. Do not make more than 3 applications per crop season.
	0.01–0.015 lb gamma-cyhalothrin	2.56–3.84 oz *Proaxis	5	Apply every 5 days as needed. Do not apply more than 2.88 pt/a (0.18 lb ai/a) per season.
	imidacloprid + beta-cyfluthrin	3.8–4.1 fl oz *Leverage 360	7	Do not apply more than 12.8 fl oz/a per season and allow at least 7 days between applications.
	0.065 lb indoxacarb	3.5 oz Avaunt 30DG	3	Wait at least 5 days between applications. Do not exceed 24.0 oz/a Avaunt (0.44 lb ai/a) per crop.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Reapply at intervals of 5 days or more. Do not exceed 0.18 lb ai/a per year.
	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed a total of 31.0 fl oz/a of Voliam Xpress or 0.36 lb ai/a of products containing lambda-cyhalothrin or 0.2 lb ai/a of products containing chlorantraniliprole per season.

*Restricted-use pesticide.

(continued)

Insect control in pepper *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
European corn borer <i>(cont.)</i>	lambda-cyhalothrin + thiamethoxam	4.0–4.5 fl oz *Endigo ZC	5	Apply when pests reach or exceed established thresholds. Do not apply more than 19.0 fl oz/a Endigo ZC per crop season and allow at least 5 days between applications.
	0.06–0.16 lb methoxyfenozide	<i>early season:</i> 4.0–8.0 fl oz Intrepid 2F <i>mid- to late season:</i> 8.0–16.0 fl oz Intrepid 2F	1	Will not control flea beetles. Do not exceed 64.0 fl oz/a per season. Use the higher rates with higher populations or when spray coverage is difficult. See label for use restrictions in some Wisconsin counties.
			1	
	0.1–0.2 lb permethrin	*Ambush, *Pounce	3	Sweet bell peppers only. See label for rate. Do not exceed 1.6 lb ai/a per season.
	0.039–0.078 lb spinetoram	5.0–10.0 oz Radiant SC	1	Do not apply more than 34.0 oz/a Radiant (0.266 lb ai/a) per crop and do not exceed 4 applications per year.
	spinosad	3.0–6.0 fl oz Entrust SC	1	Use higher rate for larger insects. Apply adequate spray to get good coverage for best control. Do not exceed 0.45 lb ai/a per season. Do not use a buffering agent.
	0.09–0.12 lb tebufenozide	6.0–16.0 fl oz Confirm 2F	7	Apply at first sign of feeding or when populations exceed threshold levels. Do not exceed 64.0 fl oz per season. There is a 1–12 month plantback restriction depending on the crop.
	zeta-cypermethrin	2.24–4.0 oz *Mustang Max	1	Apply every 7 days as needed. Use higher rate for heavy infestations. Do not exceed 24.0 oz/a Mustang Maxx per season.
0.04–0.1 lb zeta-cypermethrin + bifenthrin	4.0–10.3 fl oz *Hero	7	Do not apply more than 0.266 lb ai/a per season. Wait at least 7 days between applications.	
Green peach aphid	0.24–0.97 lb acephate	0.25–1.0 lb Orthene 97	7	Sweet bell peppers only: Do not exceed 2.66 lb ai/a per season. Non-bell peppers: Do not exceed 1.33 lb ai/a per season.
	acetamiprid	0.8–1.2 oz Assail 70WP 2.0–4.0 oz Assail 30 SG	7	Begin treatment when thresholds are reached. Apply every 7 days as needed. Do not exceed 0.3 lb ai/a per season.
			7	
	alpha-cypermethrin	3.2–3.8 fl oz *Fastac	1	Apply when pests reach or exceed established thresholds. Do not apply more than 11.4 fl oz of Fastac per acre per crop season.
	0.033–0.1 lb bifenthrin	2.1–6.4 fl oz *Brigade 2EC	7	Apply every 7 days as needed. Do not exceed 0.2 lb ai/a per season.
	0.06–0.15 lb bifenthrin + imidacloprid	3.8–9.8 fl oz *Brigadier	7	Do not apply more than 25.6 fl oz/a (0.4 lb ai/a) per season. No more than 0.2 lb ai/a bifenthrin and 0.24 lb ai/a imidacloprid are allowed per season.
	clothianidin	<i>foliar:</i> 3.0–4.0 fl oz Belay	21	Do not apply more than 12.0 fl oz/a per season and allow at least 7 days between applications.
<i>soil:</i> 9.0–12.0 fl oz Belay		—	Do not apply more than 12.0 fl oz/a per season. Apply as a narrow band centered on the plant row; as an in-furrow spray at planting; as a sidedress to both sides of the row; as a transplant water drench; or as chemigation into root zone through drip, trickle or micro-sprinkler, or similar equipment.	

*Restricted-use pesticide.

(continued)

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Insect control in pepper *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Green peach aphid <i>(cont.)</i>	0.088–0.176 lb cyantraniliprole (<i>soil</i>)	6.75–13.5 fl oz Verimark	1	Do not apply more than 13.5 fl oz/a Verimark per crop per season. Do not apply more than 0.4 lb ai/a cyantraniliprole-containing products per crop whether applied as soil or foliar applications. The pH of the application solution should be adjusted to between pH 4 and 6. Minimum application interval between foliar sprays is 5 days.
	0.088–0.133 lb cyantraniliprole (<i>foliar</i>)	13.5–20.5 fl oz Exirel	1	
	0.018–0.028 lb deltamethrin	1.5–2.4 fl oz *Delta Gold	1	Apply every 5 days as needed. Do not exceed 14.4 fl oz/a.
	0.25–0.33 lb dimethoate	0.5–0.66 pt Dimethoate EC	0	
	0.045–0.268 lb dinotefuran	<i>foliar</i> : 1.0–4.0 oz Venom 70SG	1	Do not follow soil applications with foliar application of any other neonicotinoid insecticide. Use only one application method. Do not apply more than 6.0 oz/a per year using foliar applications, or 12.0 oz/a per season using soil applications. See product label for application directions.
		<i>soil</i> : 5.0–6.0 oz Venom 70SG	21	
	0.062–0.089 lb flonicamid	2.0–2.8 oz Beleaf SG	0	Begin applications before aphid populations build. Do not exceed 2.8 oz/a Beleaf per application and do not apply more than 8.4 oz/a (0.267 lb ai/a) per season.
	flupyradifurone	<i>foliar</i> : 7.0–12.0 fl oz Sivanto	1	Apply when pests reach or exceed established thresholds. Do not apply more than 28.0 fl oz of Sivanto per acre per crop season.
		<i>soil</i> : 21.0–28.0 fl oz Sivanto	45	
	0.01–0.015 lb gamma-cyhalothrin	2.56–3.84 oz *Proaxis	5	Apply every 5 days as needed. Do not apply more than 2.88 pt/a (0.18 lb ai/a) per season.
	imidacloprid	7.0–14.0 fl oz Admire Pro	21	Systemic at planting. Do not exceed 32.0 fl oz/a Admire per season.
	0.05 lb imidacloprid	3.75 fl oz Provado 1.6	0	Foliar spray. Do not exceed 18.75 fl oz/a Provado per season.
	imidacloprid + beta-cyfluthrin	3.8–4.1 fl oz *Leverage 360	7	Do not apply more than 12.8 fl oz/a per season and allow at least 7 days between applications.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Reapply at intervals of 5 days or more. Do not exceed 0.18 lb ai/a per year.
	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed a total of 31.0 fl oz/a of Voliam Xpress or 0.36 lb ai/a of products containing lambda-cyhalothrin or 0.2 lb ai/a of products containing chlorantraniliprole per season.
	lambda-cyhalothrin + thiamethoxam	4.0–4.5 fl oz *Endigo ZC	5	Apply when pests reach or exceed established thresholds. Do not apply more than 19.0 fl oz/a Endigo ZC per crop season and allow at least 5 days between applications.
	0.625–1.5 lb malathion	several formulations	3	
	0.225–0.45 lb methomyl	0.75–1.5 pt *Lannate LV 0.25–0.5 lb *Lannate SP	3	
	0.5–1.0 lb oxamyl	2.0–4.0 pt *Vydate L	7	Sweet bell peppers only. Repeat at 1- to 2-week intervals or as needed.
	pymetrozine	2.75 oz Fulfill 50WDG	14	May be used on bell, chili, cooking, and pimento peppers. Controls melon and green peach aphids. Treat when aphids first appear. May repeat in 7 days. Do not exceed 5.5 oz/a per season or more than 2 applications per crop.

*Restricted-use pesticide.

(continued)

Insect control in pepper *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Green peach aphid <i>(cont.)</i>	0.06–0.08 lb spirotetramat	4.0–5.0 fl oz Movento	1	Do not apply more than 10.0 fl oz/a (0.16 lb ai/a) per season.
	thiamethoxam	2.0–3.0 oz Actara 25WDG	0	Do not apply more than 11.0 oz of Actara 25WDG or Platinum 2SC and no more than 3.67 oz Platinum 75SG per acre per crop season and apply sufficient water volume after in-ground application to ensure incorporation into the seed zone. Actara is applied as a foliar spray.
		5.0–11.0 fl oz Platinum 2SC	30	
		1.66–3.67 oz Platinum 75SG	30	
	0.198–0.257 lb thiamethoxam + chlorantraniliprole	10.0–13.0 fl oz Durivo	30	Do not exceed a total of 13.0 fl oz/a Durivo (0.257 lb ai/a) per growing season. Do not exceed 0.172 lb ai/a of thiamethoxam-containing products or 0.2 lb ai/a of chlorantraniliprole-containing products per season.
zeta-cypermethrin	3.2–4.0 oz *Mustang Maxx	1	Apply every 7 days as needed. Use higher rate for heavy infestations. Do not exceed 24.0 oz/a Mustang Maxx per season.	

*Restricted-use pesticide.

Weed control in pepper

Weed	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
All weeds	<i>Even where you use herbicides, shallow cultivation will help control weeds. Cultivate as needed when weeds are less than 2–3 inches tall.</i>			
Annual weeds	0.25–1.0 lb clomazone	0.67–2.67 pt Command 3ME		Do not use on banana peppers. For suppression and control of annual grasses and broadleaves, make a single preemergent soil application before seeding or transplanting, or after seeding but prior to crop emergence. Place seed or roots of transplants below the chemical barrier when planting. Strictly follow all precautions and restrictions on the label to minimize offsite movement and carryover. Read and understand the vegetable disclaimer section of the label—the end user of this product assumes all liability for failure to perform and crop injury resulting from its use.
	1.0–2.0 lb napropamide	2.0–4.0 lb Devrinol DF-XT 2.0–4.0 qt Devrinol 2-XT		Apply before planting to weed-free soil surface. Incorporate 1–2 inches deep the same day. Can be applied to direct-seeded or transplanted peppers.
	0.48–1.43 lb pendimethalin	1.0–3.0 pt Prowl H ₂ O	70	Apply as a broadcast preplant-incorporated or as a broadcast surface application before transplanting, or as a post directed application to transplanted or established direct-seeded peppers. Do not apply postemergence over the top of or to pepper foliage. Rate varies by soil type. Do not exceed 3.0 pt/a per season or allow treated soil to come in contact with transplants.
	trifluralin	several manufacturers		Apply and incorporate prior to transplanting. Controls annual grasses and some broadleaf weeds, but is weak on wild mustard, smartweed, common ragweed, velvetleaf, and black nightshade. Rate varies with soil texture and organic matter. Follow recommended soil preparation, application, and incorporation procedures. Must be incorporated within 24 hours. See label for plantback restrictions. Ineffective on peat and muck soils.

*Restricted-use pesticide.

(continued)

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Weed control in pepper *(continued)*

Weed	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Annual grasses	5.0–6.0 lb bensulide	5.0–6.0 qt Prefar 4E		Apply preplant or preemergence. Follow application and applicable incorporation instructions on label. Use on mineral soils only.
Nutsedge and some broad-leaves	0.023–0.047 lb halosulfuron	0.5–1.0 oz Sandea	30	Sandea controls several broadleaf weeds and nutsedge. It will not control grasses. Sandea may be applied between rows of direct-seeded or transplanted peppers as a directed or shielded spray. Avoid contact of the spray with the crop. If plastic was used on the planted row, adjust equipment to keep application off the plastic. Do not apply more than 2.0 oz/a per crop cycle or 12-month period. Soil or foliar applications of organophosphate insecticides to Sandea-treated crops may cause severe crop injury. Consult label for additional usage information and other precautions.
Emerged weeds	glyphosate	several manufacturers and formulations		See manufacturer's label to assure that the formulation is labeled for this crop and for specific instructions. Some formulations require a wait of 3 days between application and planting. Crop contact will result in severe injury or death. If weeds have been mowed or tilled, do not treat until they have resumed active growth and reached the recommended stage on the label. Unless otherwise stated, allow 7 or more days before tilling treated fields. Do not tank mix with soil-residual herbicides unless otherwise specified.
	*paraquat	several manufacturers and formulations, not all are registered for this use		Prepare seedbed early to allow for maximum weed emergence. Application can be made as a banded or broadcast treatment before, during, or after planting but before crop emergence. In preplant and preemergence (to the crop) uses, do not apply to soils lacking clay minerals (i.e., muck, pure sand). Use the higher rate for heavy weed infestations. Seeding and transplanting should be performed with minimal soil disturbance. Up to three directed/shielded treatments may be made per season using precision equipment to prevent spray contact with the crop. Always add crop oil concentrate or non-ionic surfactant to spray mixture. Follow precautions on label.
Emerged grasses	0.068–0.12 lb clethodim	9.0–16.0 oz Select Max	20	Apply to actively growing grasses. Repeat treatments may be made at 14-day intervals up to the maximum annual use rate. Do not cultivate grasses within 7 days before or after application. Include appropriate surfactant as required by product label. Do not apply if rain is expected within 1 hour.
	0.094–0.125 lb clethodim	6.0–8.0 oz Select 2EC	20	
	0.094–0.28 lb sethoxydim	0.5–1.5 pt Poast	7	
				Make postemergence applications to actively growing grasses within the size ranges indicated on the label. Check the label for wild proso millet and rescue treatment rates. Do not apply more than 4.5 pt/a of Poast in one crop season. Always add 2.0 pt/a of crop oil concentrate. Do not treat bell peppers during hot, humid weather or unacceptable leaf injury may occur. Check the label for additional precautions and restrictions.

*Restricted-use pesticide.

Pea

Pepper

Potato

Pumpkin & squash

Sweet corn

Table beet

Tomato