

Eggplant

Planting

Choose well-drained, moderately fertile, sandy loam soils. Seeds germinate best at soil temperatures of 75–90°F. Set medium-sized, vigorous 6- to 8-week-old plants outside about June 1, or after danger of frost and chilling. Before transplanting, harden the plants by holding them at 60–65°F for a few days or place them in covered beds outside the greenhouse. To lessen the shock from transplanting, use a starter solution high in phosphorus.

Rows: 24–48 inches.

Plants in row: 18–30 inches apart. Use 2.0 oz seed/a. (1.0 oz produces 2,500 plants.)

Lime and fertilizer

Lime: Use dolomitic limestone to maintain a pH of 6.6–6.9.

Fertilizer rates: Apply 60–100 lb N/a, 60 lb P₂O₅/a, and 60 lb K₂O/a. Take credits for previous legume crops and manure.

Application: Broadcast and work in before planting.

Nitrogen: On sandy soils, use the higher nitrogen rate and split the recommendation into two or more applications during the season, preferably at 2–3 week intervals.

Disease control in eggplant

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Alternaria blight, anthracnose, and Phomopsis fruit rot	boscalid	2.5–3.5 oz Endura	0	Do not make more than 6 applications of Endura per season. Do not apply more than 21.0 oz Endura/a per season.
	cyprodinil + fludioxonil	11.0–14.0 oz Switch 62.5WG	0	Do not apply more than 56.0 oz/a product per plot of land per year. After 2 applications, alternate with another fungicide with a different mode of action for 2 applications.
	difenoconazole + cyprodinil	16.0–20.0 fl oz Inspire Super	0	Begin applications prior to disease development. Do not apply more than 47.0 fl oz/a Inspire Super per season.
	fenamidone	<i>Alternaria</i> : 5.5–8.2 fl oz Reason 500 SC	14	Do not apply more than 24.6 fl oz/a per year. Do not apply more than one time before alternating to an effective fungicide with a different mode of action.
	fixed copper	2.0 lb Champion 77WP 1.33 pt Champ Formula 2 Flowable 2.0 lb Kocide 77WP, DF 1.5 lb Kocide 2000 DF 0.75–1.5 lb Kocide 3000	0	Rotate with crops other than eggplant, tomato, or pepper; use disease-free seed; and grow resistant varieties. Florida Market and Florida Beauty are resistant to Phomopsis fruit rot, though they are very late for Wisconsin. Begin applications prior to disease onset.
			0	
0				
0				
fluoxastrobin	3.8–5.7 fl oz Evito 480 SC <i>Alternaria</i> : 2.0–5.7 fl oz Aftershock	3	For optimum results, apply preventively. Alternate every application with an effective fungicide of a different mode of action. Do not apply to fruiting vegetables grown in the greenhouse. Maximum of 4 applications/a per year.	

(continued)

Disease control in eggplant (continued)

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Alternaria blight, anthracnose, and Phomopsis fruit rot (cont.)	fluxapyroxad + pyraclostrobin	4.0–8.0 fl oz Priaxor	7	Do not use more than 24.0 fl oz/a per year. Do not apply more than three times/a per year. See label for specific tank-mix restrictions, which include no tank mixes with EC (emulsifiable concentrates) or solvent-based formulations.
	penthiopyrad	10.0–24.0 fl oz Fontelis (24.0 fl oz rate for anthracnose suppression)	0	Do not exceed 72.0 fl oz/a per year. Labeled for use on greenhouse-grown fruiting vegetables. See label for rate and application details.
	pyraclostrobin	8.0–12.0 oz Cabrio EG	0	Begin application prior to disease onset. Use higher rate and shorter interval when disease pressure is high.
	tebuconazole	8.0 fl oz Tebuzol 3.6F, Toledo, Willowood Teb 3.6SC	7	Only controls early blight (Alternaria). Follow resistance management guidelines.
	trifloxystrobin	<i>Alternaria</i> : 2.0–3.0 oz Flint <i>Anthracnose</i> : 3.0–4.0 oz Flint	3	Do not apply more than 16.0 oz/a per season. Alternate fungicide modes of action. Tank mix with a protective fungicide.
Anthracnose	azoxystrobin	6.0–15.5 fl oz Aframe, AzoxyStar, Equation, Quadris Flowable, Satori, Willowood Azoxy 2SC	0	Equation, Quadris, and Satori, and Cabrio belong to the Group 11 (strobilurin) category of fungicides. Do not exceed 1 application of a strobilurin product before alternating with a fungicide having a different mode of action.
	azoxystrobin + difenoconazole	8.0–14.0 fl oz Quadris Top	0	Do not exceed 4 applications of strobilurin fungicides per crop per acre per year. Do not exceed 1.92 qt/a Equation, Quadris, or Satori, or 96.0 oz/a Cabrio per season.
	chlorothalonil	1.5 pt Echo 720, Equus 720 SST	3	Begin application when disease is anticipated.
		1.4 lb Bravo Ultrex	3	Do not use more than 10.9 lb Bravo Ultrex/a per year.
		1.5 pt Bravo Weather Stik	3	Do not apply more than 12.0 pt/a per season.
	chlorothalonil + cymoxanil	2.0–2.44 pt Ariston	3	Apply when conditions favor disease.
flutriafol	14.0 fl oz Topguard	0	For management of Anthracnose and Cercospora. Follow resistance management guidelines.	
Phytophthora blight, ripe rot	ametoctradin + dimethomorph	14.0 fl oz Zampro	4	Do not apply more than 42.0 fl oz per season. Begin application prior to disease development.
	cyazofamid	2.75 fl oz Ranman	0	Should be tank mixed with a surfactant when disease is severe. Do not apply more than 16.5 fl oz/a per year.
	dimethomorph	6.0 oz Forum	0	Disease suppression only. Tank mix 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 make more than 5 applications per season or apply more than 32.0 oz/a per season. (Formerly Acrobat.)

(continued)

Eggplant

Hops

Horse radish

Leafy greens

Melon

Mint

Onion

Disease control in eggplant *(continued)*

Disease	Active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Phytophthora blight, ripe rot <i>(cont.)</i>	fenamidone	8.2 fl oz Reason 500 SC	14	Do not apply more than 24.6 fl oz/a per year. Do not apply more than one time before alternating to an effective fungicide with a different mode of action.
	fluazinam	1.0–1.5 pt Omega 500F	30	Initial application may be made as a soil drench at transplanting at 1.5 pt/a. Do not apply more than 9.0 pt/a per growing season.
	fluopicolide	3.0–4.0 fl oz Presidio	2	Tank mix with another fungicide having different mode of action must be used for resistance management.
	mandipropamid	8.0 fl oz Revus	1	Begin management with an initial treatment at transplanting with a fungicide registered for this use. Apply Revus as a foliar application with a copper-containing fungicide at first sign of disease.
	oxathiapiprolin	2.0–4.8 fl oz Orondis Opti A, Orondis Ultra A	0	Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. Do not exceed 4.8 fl oz/a per treatment, or 19.2 fl oz/a per year. Begin foliar applications prior to disease development and continue on a 5- to 14-day interval. Do not use foliar Orondis Ultra A if you have already used Orondis Gold 200 soil treatments.
	pyraclostrobin	8.0–16.0 oz Cabrio EG	0	Begin application prior to disease onset. Use higher rate and shorter interval when disease pressure is high.
	trifloxystrobin	4.0 oz Flint	3	Do not apply more than 16.0 oz/a per season. Alternate fungicide modes of action.
Seed rot and damping-off	azoxystrobin	<i>Rhizoctonia seedling rot:</i> 0.4–0.8 fl oz Quadris Flowable/1,000 ft row	—	See general information on labels for soilborne and seedling disease control.
	mefenoxam	1.0–2.0 pt Ridomil Gold SL	—	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 fl oz/100 lb seed Allegiance FL, Metalaxyl 265 ST		—	Follow manufacturer's directions. Do not use treated seed for feed or food.	
Verticillium wilt	metam-sodium	Vapam HL, Metam, Sectagon 42		Use long rotations with non-susceptible crops and eradicate weeds. Plant in well-drained soils. Steam sterilization can also be used.

Insect control in eggplant

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Aphids	acetamiprid	0.8–1.2 oz Assail 70WP 2.0–4.0 oz Assail 30 SG	7 7	Begin treatment when thresholds are reached. Apply every 7 days as needed. Do not exceed 0.375 lb ai/a per season.
	0.06–0.15 lb bifenthrin + imidacloprid	3.9–9.85 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.
	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.
	0.088–0.133 lb cyantraniliprole (<i>foliar</i>)	13.5–20.5 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.
	0.045–0.268 lb dinotefuran	<i>foliar</i> : 1.0–4.0 oz Venom 70SG <i>soil</i> : 5.0–6.0 oz Venom 70SG	1 21	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.
	0.05–0.18 lb dinotefuran (<i>foliar</i>)	2.0–7.0 oz Scorpion 35SL	1	Can repeat at 7-day intervals. Do not apply more than 10.5 oz per year. Use only one application method.
	0.23–0.27 lb dinotefuran (<i>soil</i>)	9.0–10.5 oz Scorpion 35SL	21	Do not apply more than 21.0 oz per year. Use only one application method.
	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.
	0.01–0.015 lb gamma-cyhalothrin	2.56–3.84 oz *Proaxis	5	For suppression of aphids only. Apply every 5 days as needed. Do not apply more than 2.88 pt/a (0.18 lb ai/a) per season.
	0.25–0.38 lb imidacloprid	7.0–10.5 fl oz Admire Pro 3.75 fl oz Provado 1.6	21 0	Systemic at planting. Foliar spray. Do not exceed 18.75 fl oz/a Provado per season.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Do not exceed 0.18 lb ai/a per season. Reapply at intervals of 5 or more days.
	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed 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 growing season. For suppression only.
	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.
	0.63–1.0 lb malathion	several formulations	3	
0.225–0.90 lb methomyl	0.25–1.0 lb *Lannate SP 0.75–3.0 pt *Lannate LV	5	Do not exceed 4.5 lb ai/a per season.	

*Restricted-use pesticide.

(continued)

Eggplant

Hops

Horse radish

Leafy greens

Melon

Mint

Onion

Insect control in eggplant *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Aphids <i>(cont.)</i>	pymetrozine	2.75 oz Fulfill WDG	14	Treat when aphids first appear. Controls potato and green peach aphids. May repeat application in 7 days. Do not exceed 5.5 oz/a per season or 2 applications per crop.
	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.
Colorado potato beetle	<i>When plants are smaller than 6 inches, treat if you find two small larvae or one large larvae or adult per plant. For plants taller than 6 inches, treat if you find four small larvae or two large larvae or adults per plant.</i>			
	0.009–0.019 lb abamectin	8.0–16.0 fl oz *Agri-Mek 0.15EC	7	Begin treatments at thresholds. Use high rates for resistance management.
	acetamiprid	0.16–1.1 oz Assail 70WP	7	Begin treatment when thresholds are reached. Apply every 7 days as needed. Do not exceed 0.375 lb ai/a per season.
		1.5–2.5 oz Assail 30 SG	7	
	<i>Bacillus thuringiensis subsp. tenebrionis</i>	1.0–3.0 qt Novador	0	Make initial spray when small larvae are first observed.
	0.033–0.10 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.
	0.08–0.15 lb bifenthrin + imidacloprid	5.1–9.85 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.
	0.5–2.0 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.
	0.065–0.130 lb cyantraniliprole (<i>drip, chemigation, or soil injection only</i>)	5.0–10.0 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 (<i>foliar</i>)	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.
	0.045–0.268 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 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	

*Restricted-use pesticide.

(continued)

Insect control in eggplant *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Colorado potato beetle <i>(cont.)</i>	0.05–0.18 lb dinotefuran (foliar)	2.0–7.0 oz Scorpion 35SL	1	Can repeat at 7-day intervals. Do not apply more than 10.5 oz per year. Use only one application method.
	0.23–0.27 lb dinotefuran (soil)	9.0–10.5 oz Scorpion 35SL	21	Do not apply more than 21.0 oz per year. Use only one application method.
	0.03–0.05 lb esfenvalerate	5.8–9.6 fl oz *Asana XL	7	Do not exceed 0.35 lb ai/a per 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.
	0.25–0.38 lb imidacloprid	7.0–10.5 fl oz Admire Pro	21	Systemic at planting.
		3.75 fl oz Provado 1.6	0	Foliar spray.
	imidacloprid + beta-cyfluthrin	3.8–4.1 fl oz *Leverage 360	7	Minimum interval between applications is 7 days and maximum allowable crop use per season is 15.4 fl oz/a.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Do not exceed 0.18 lb ai/a per season. Reapply at intervals of 5 or more days.
	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed 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 growing 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.
	0.1–0.2 lb permethrin	*Ambush, *Pounce	3	Apply no more than 2 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 6 applications per year.
	spinosad	3.0–10.0 fl oz Entrust SC	1	Use higher rate for larger insects. Do not exceed 0.45 lb ai/a per season. Do not use a buffering agent. Spray thoroughly for control.
	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	2.24–4.0 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.	
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.	
European corn borer	beta-cyfluthrin	1.6–2.8 fl oz *Baythroid XL	0	Maximum Baythroid XL allowed per 7-day interval is 2.8 fl oz/a and season total allowed per crop season is 16.8 fl oz/a.
	0.08–0.15 lb bifenthrin + imidacloprid	5.1–9.85 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.

*Restricted-use pesticide.

(continued)

Eggplant

Hops

Horseradish

Leafy greens

Melon

Mint

Onion

Insect control in eggplant *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
European corn borer <i>(cont.)</i>	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 <i>(drip, chemigation, or soil injection only)</i>	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 <i>(foliar)</i>	7.0–13.5 fl oz Exirel	1	Minimum application interval between foliar sprays is 5 days.
Hops	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.
	0.03–0.045 lb flubendiamide	2.0–3.0 oz Synapse WG	1	Do not exceed 3.0 oz/a (0.045 lb ai/a) in a 7-day period or 9.0 oz/a per season.
	imidacloprid + beta-cyfluthrin	3.8–4.1 fl oz *Leverage 360	7	Minimum interval between applications is 7 days and maximum allowable crop use per season is 15.4 fl oz/a.
	0.065–0.11 lb indoxacarb	3.5–6.0 oz Avaunt	7	Do not exceed 0.26 lb ai/a per season.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Do not exceed 0.18 lb ai/a per season. Reapply at intervals of 5 or more days.
Horseradish	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed 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 growing 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.
	0.063–0.25 lb methoxyfenozide	4.0–16.0 fl oz Intrepid 2F	1	Will not control Colorado potato beetle. Do not exceed 64.0 fl oz/a per season. Use higher rate with higher populations or when spray coverage is difficult. See label for use restrictions in some Wisconsin counties.
Leafy greens	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 6 applications per year.
	spinosad	3.0–10.0 fl oz Entrust SC	1	Use higher rate for larger insects. Do not exceed 0.45 lb ai/a per season. Do not use a buffering agent. Spray thoroughly for control.
	0.014–0.025 lb zeta-cypermethrin	2.24–4.0 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.
Melon	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.
	Flea beetles <i>(striped, spotted)</i>	<i>When eggplants are less than 3 inches tall, treat if you find two beetles per plant. At a plant height of 3–6 inches, treat if there are four beetles per plant. For plants taller than 6 inches, treat if you find eight or more beetles per plant.</i>		
Mint	beta-cyfluthrin	2.8 fl oz *Baythroid XL	0	Maximum Baythroid XL allowed per 7-day interval is 2.8 fl oz/a and season total allowed per crop season is 16.8 fl oz/a.
	0.033–0.10 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.

*Restricted-use pesticide.

(continued)

Insect control in eggplant *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Flea beetles <i>(cont.)</i>	0.08–0.15 lb bifenthrin + imidacloprid	5.1–9.85 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.
	0.5–1.0 lb carbaryl	2.0 lb Sevin 50WP 1.25 lb Sevin 80S 1 qt Sevin XLR Plus	3	See label for rate.
	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.
	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.
	0.045–0.268 lb dinotefuran	<i>foliar</i> : 1.0–4.0 oz Venom 70SG <i>soil</i> : 5.0–6.0 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 12.0 oz/a per season using soil applications. See product label for application directions.
			21	
	0.05–0.18 lb dinotefuran (<i>foliar</i>)	2.0–7.0 oz Scorpion 35SL	1	Can repeat at 7-day intervals. Do not apply more than 10.5 oz per year. Use only one application method.
	0.23–0.27 lb dinotefuran (<i>soil</i>)	9.0–10.5 oz Scorpion 35SL	21	Do not apply more than 21.0 oz per year. Use only one application method.
	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.
			21	
	imidacloprid	7.0–10.5 fl oz Admire Pro	21	Systemic at planting.
	imidacloprid + beta-cyfluthrin	4.1 fl oz *Leverage 360	7	Minimum interval between applications is 7 days and maximum allowable crop use per season is 15.4 fl oz/a.
	0.02–0.03 lb lambda-cyhalothrin	1.28–1.92 fl oz *Warrior II	4	Do not exceed 0.18 lb ai/a per season. Reapply at intervals of 5 or more days.
	lambda-cyhalothrin + chlorantraniliprole	6.0–9.0 fl oz *Voliam Xpress	5	Do not exceed 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 growing season. For suppression only.
	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.
0.1–0.2 lb permethrin	*Ambush, *Pounce	3	Apply no more than 2.0 lb ai/a per season.	
		0		
		30		
thiamethoxam	2.0–3.0 oz Actara 25WDG 5.0–11.0 fl oz Platinum 2SC 1.66–3.67 oz Platinum 75SG	30	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.	
		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.	

*Restricted-use pesticide.

(continued)

Eggplant

Hops

Horse radish

Leafy greens

Melon

Mint

Onion

Insect control in eggplant *(continued)*

Insect	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Flea beetles (<i>cont.</i>)	0.014–0.025 lb zeta-cypermethrin	2.24–4.0 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.
	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.

*Restricted-use pesticide.

Weed control in eggplant

Weed	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
Annual weeds	<i>transplants only:</i> 1.0–2.0 lb napropamide	2.0–4.0 lb Devrinol DF-XT 2.0–4.0 qt Devrinol 2-XT		Apply to weed-free soil before transplanting. Incorporate 1–2 inches. Use the lower rate on coarse, sandy soils. Carryover the following year may affect sensitive crops, especially small grains.
	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 eggplant. Do not apply postemergence over the top of eggplant 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 before transplanting or as a directed spray to the soil between rows after transplanting. Tolerance of eggplant to trifluralin is marginal. 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. Incorporate within 24 hours. See label for plantback restrictions. Ineffective on peat and muck soils.
Annual grasses	5.0–6.0 lb bensulide	5.0–6.0 qt Prefar 4E		Apply before planting and incorporate 1–2 inches deep to avoid loss due to volatilization. Use on mineral soils only.
Annual grasses and some broad-leaves	4.5–10.5 lb DCPA	6.0–14.0 lb Dacthal W-75 6.0–14.0 pt Dacthal FL		Make preemergence applications to weed-free soil 4–6 weeks after transplanting or to crop seedlings that are 4–6 inches tall. Use only on soils with 5% or less organic matter.
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 eggplant 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 increase potential for and severity of crop injury. Consult label for additional usage information and other precautions.

*Restricted-use pesticide.

(*continued*)

Weed control in eggplant *(continued)*

Weed	Rate/a of active ingredient	Rate/a of commercial product	Days to harvest	Remarks and suggestions
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. Contact with the crop 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	20	Make postemergence applications to actively growing grasses within the size ranges indicated on the label. Check the label for early and rescue treatment rates as well as additional precautions and restrictions. Do not exceed 4.5 pt/a Poast per season. Always add 2.0 pt/a crop oil concentrate.

*Restricted-use pesticide.

