

Weed Control in Eggplant¹

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Eggplant are present in the field in some area of Florida every month of the year. Shipments of eggplant from Florida are recorded and summarized in every month except August.

The great majority of eggplant in Florida is grown on plastic mulch. As with pepper and tomato, production of eggplant on mulch increases yield, reduces inputs of fertilizer and helps to control weeds.

Although the production methods for eggplant are very similar to production methods for tomato and pepper, the herbicides labeled for eggplant are much more limited than herbicides for the other crops.

Before purchasing a herbicide for use in eggplant, check to see if the material is labeled for eggplant in that formulation and for the use and timing intended.

Due to the limited labeling situation, growers should plan a weed control program that integrates cultural, mechanical, and chemical methods to fit their weed problems and production practices.

Cultural control methods include the use of mulches and cover crops in off season to keep the undesirable weed species under control, as well as the

use of grasses in row middles as windbreaks, and along the perimeter of the fields to keep many undesirable broadleaf weeds under control.

Mechanical control includes disking, plowing and cultivating the fields either off-season or during the crop to reduce weeds in between the rows or in spray alleys, around buildings and pumps and in equipment parking areas.

Several herbicides are labeled for use in areas around buildings, along fence rows and along ditches and berms.

Before using these herbicides, make sure that they will not drift onto the crop, or if applied to the irrigation water, will not harm the eggplant.

In the crop use only labeled herbicides and use those herbicides in the proper formulation.

To avoid confusion between formulations, suggested rates listed in Table 1 are stated in pounds active ingredient per acre (lb ai/acre).

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Table 1. Chemical weed controls: eggplant.

Herbicide	Labeled crops	Time of application to crop	Rate (lbs. AI./Acre)	
			Mineral	Muck
Bensulide (Prefar 4E)	Eggplant	Preplant incorporate Preemergence	5 - 6.0	----
Remarks: Preplant incorporate using power driven cultivators or apply preemergence and incorporate with irrigation. Controls many grass weeds. Provides fair to good control of lambsquarter, purslane and amaranths. May be applied under polyethylene mulch.				
Carfentrazone (Aim)	Eggplant	Preplant Directed-Hooded Row-middles	0.031	0.031
Remarks: Aim may be applied as a preplant burndown treatment and /or as a post-directed hooded application to row middles for the burndown of emerged broadleaf weeds. May be tank mixed with other registered herbicides. May be applied at up to 2 oz (0.031 lb ai). Use a quality spray adjuvant such as crop oil concentrate (coc) or non-ionic surfactant at recommended rates.				
Clethodim (Select) (Arrow) (Select Max)	Eggplant	Postemergence	0.1 - 0.25	0.1 - 0.25
Remarks: Use Select for the control of annual and perennial grasses. Use a crop-oil concentrate at 1% v/v in the finished spray volume. Do not apply more than 8 fl. oz. product/A per application. Do not apply within 20 days of harvest. Rates for Select Max range from 9-16 fl oz/A with the use of a non ionic surfactant.				
DCPA (Dacthal W-75) (Dacthal 6F)	Eggplant	Posttransplanting after crop establishment	6.0 - 8.0	----
Remarks: Controls germinating annuals. Apply to moist, weed-free soil 4 to 6 weeks after transplanting when crop is growing rapidly. May be applied to row middles after crop establishment. Note label precautions about planting non-registered crops within 8 months.				
Flumioxazin (Chateau)	Fruiting Vegetables Eggplant	Directed Row-middles	0.125	
Remarks: Chateau may be applied up to 4 oz product/application to row middles of raised plastic-mulched beds that are at least 4 inches higher than the treated row middle and the mulched bed must be a minimum of a 24-inch bed width. Do not apply after crops are transplanted/seeded. All applications must be made with shielded or hooded equipment. For control of emerged weeds, a burn down herbicide may be tank-mixed. Label is a Third-Party registration (TPR, Inc.). Use without a signed authorization and waiver of liability is a misuse of the product.				
Glyphosate (Roundup, Durango, Touchdown, Glyphomax)	Eggplant	Chemical fallow Preplant, pre emergence, Pre transplant	0.3 - 1.0	----
Remarks: Roundup, Glyphomax and Touchdown have several formulations. Check the label of each for specific labeling directions.				
Halosulfuron (Sanda)	Eggplant	Row middles	0.024 - 0.048	----

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Herbicide	Labeled crops	Time of application to crop	Rate (lbs. AI./Acre)	
			Mineral	Muck
<p>Remarks: Sandea may be applied between rows as a directed shielded application for the control of nutsedge and other listed weeds. Avoid contact of the herbicide to the planted crop. Applications may be made at 1/2 to 1 oz. product/A. Do not use more than 2 oz per crop cycle. Use a non-ionic surfactant in the spray mix</p>				
Lactofen (Cobra)	Fruiting Vegetables	Row middles	0.25-0.5	----
<p>Remarks: Third Party label for use pre-transplant or post transplant shielded or hooded to row middles. Apply 16 to 32 fluid oz per acre. A minimum of 24 fl oz is required for residual control. Add a COC or non-ionic surfactant for control of emerged weeds. 1 pre and 1 post application may be made per growing season. Cobra contacting green foliage or fruit can cause excessive injury. Drift of Cobra treated soil particles onto plants can cause contact injury. Do not apply within 30 days of harvest. The supplemental label must be in the possession of the user at the time of application.</p>				
Napropamide (Devrinol 50-DF)	Eggplant (transplanted)	Preplant	1.0 - 2.0	----
<p>Remarks: Apply to weed-free soil surface. May be applied to transplant crop only. Incorporate the same day as applied, to a depth of 1 to 2 inches.</p>				
Paraquat (Gramoxone Inteon) (Firestorm)	Eggplant	Preplant Preemergence	0.5 - 1.0	----
<p>Remarks: Apply as a band treatment over the crop row or as a broadcast treatment before, during or after planting, but before the emergence of the crop. Weeds emerging after the application will not be controlled. Crop plants emerged at the time of application will be killed. Use a nonsurfactant in the spray mixture.</p>				
Paraquat (Gramoxone Inteon)	Eggplant	Directed Shielded Row middles	0.5	----
<p>Remarks: For control of emerged weeds in crop row middles. Do not exceed 30 psi nozzle pressure or spray under conditions which could cause draft. Do not apply more than 3 applications per season. Add a non-ionic surfactant or crop-oil to spray mixture.</p>				
Pelorgonic acid (Scythe)	Fruiting vegetable (Eggplant)	Preplant Preemergence Direct-shielded	3 - 10% v/v	----
<p>Remarks: Product is a contact nonselective, foliar applied herbicide. It does not have residual activity. May be tank mixed with soil residual herbicides. Consult label for rates.</p>				
Sethoxydim (Poast)	Eggplant	Postemergence	0.188 - 0.28	0.188 - 0.28
<p>Remarks: Controls actively growing grass weeds. A total of 4.5 pts. product per acre may be applied in one season. Do not apply within 20 days of harvest. Apply in 5 to 20 gals. of water adding 2 pts. of crop oil concentrate per acre. Unsatisfactory results may occur if applied to grasses under stress. Use 0.188 lb. ai. (1 pt.) to seedling grasses and up to 0.28 lb. ai. (1.5 pts.) to perennial grasses emerging from rhizomes, etc. Consult label for grass species and growth stage for best control.</p>				