HS196

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Weed Control in Strawberry [1]

William M. Stall[2]

Strawberries are produced in Florida on the annual hill system instead of the matted row system as in the more northern states. Because the production scheme is more closely related to other vegetables in Florida instead of the more perennial fruit crops, the strawberry is handled as a vegetable.

Over 5000 acres of strawberries are grown in Florida each year. The production season is spread over 6 to 7 months and as a result, the weed species present in the field change during that time. No herbicide could be expected to suppress weeds for the total strawberry production season. A combination of weed control methods is needed.

The use of broad spectrum fumigants at rates that will control weeds, used in combination of plastic mulch greatly enhances weed control as well as control of nematodes and soil born diseases. Weeds can grow in the plant holes. Hand weeding along with herbicides can assist in alleviating this problem.

Weeds growing in the non-mulched bed middles may be controlled by cultivation and herbicides.

A hay or straw mulch placed between the plastic beds also can assist in weed control as well as help in keeping soil from splashing up on the bed during rains, irrigation and harvest traffic. One should take care not to bring in more problem weed seeds with the straw mulch.

Herbicides must be applied at exactly the correct rate and time to selectively control weed growth (Table 1). Obtain consistent results by reading the herbicide label and other information about the proper application and timing of each herbicide. Herbicides applied to the row middles incorrectly may be absorbed by strawberry roots growing in the row middles, or the herbicide may move laterally under the plant bed with the soil water.

Read and follow the label.

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2. William M. Stall, professor, Horticultural Sciences Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

Table 1. Chemical weed controls: strawberries.

Herbicide	Labeled crops	Time of application to crop	Rate (lbs. AI./Acre)	
			Mineral	Muck
Aciflurofen (Ultra Blazer)	Strawberry	Directed-shielded Row-middles	0.375	----
Remarks: Ultra Blazer is for selective postemergence control of certain broadleaf weeds. May be applied a 1.5 pts/a as a directed shielded spray between mulched beds. Do not allow contact with strawberry plants. Do not apply more than 3 pts per season.				
Carfentrazone (Aim)	Strawberry	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 burn-down 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)	Strawberry	Postemergence	0.1-0.125	----
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 4 days of harvest.				
Napropamide (Devrinol 50 DF) (Devrinol)	Strawberries	Row middles Pretransplant Incorporate	2.0-4.0	----
Remarks: Controls annual grasses and annual broadleaf weeds. Mechanically incorporate or irrigate in to a depth of 2 to 4 inches. Does not control established weeds. Do not apply from bloom to harvest.				
Oxyfluorfen (Goal 2XL)(Goaltender)	Strawberry	Fallow bed prior to transplanting Mulch culture	0.25-0.5	----
Remarks: Must have a 30-day treatment to planting interval. Mulch may be put down any time during this period. Apply as a preemergence broadcast or banded treatment to pre-formed beds as a fallow bed application.				
Paraquat (Gramoxone Inteon) (Firestorm)	Strawberry	Postemergence directed spray	0.47	----
Remarks: Postemergence directed spray. For control of emerged annual broadleaf weeds and grasses and for top kill and suppression of emerged perennial weeds between the rows after crop emergence or establishment. Apply 1 1/2 pts Gramoxone Extra per sprayed acre in a minimum of 20 gals. spray mix. Use shields to prevent spray contact with crop plants. Use a non-ionic surfactant. **Do not** apply more than 3 times per crop season. **Do not** apply within 3 days of harvest.				
Paraquat (Gramoxone Inteon)	Strawberry	Post Harvest Desiccation	0.5	
Remarks: Special Local Needs (24c) Label for desiccation of strawberry plants following harvest. Add a non-ionic surfactant or crop oil concentrated to the spray mix. Do not apply more than 3 times.				
Pelargonic Acid (Scythe)	Strawberry	Preplant Directed-shielded	3-10% v/v	----
Remarks: Product is a contact, nonselective, foliar herbicide. It has no residual control. May be tank mixed with soil residual herbicides. Consult label for rates.				
Terbacil (Sinbar)	Strawberry	Pretransplant	0.2	----
Remarks: Make a once-per-year application of 4 oz. of Sinbar per acre after bedding but prior to transplanting. Note - a 110 day phi is on label. Check rotational crop limitations.				