

Plantback Restrictions for Herbicides Used in South Florida Sugarcane¹

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Although sugarcane is a relatively competitive crop, weed pressure can have a negative impact on yields. Consequently, most fields are treated with herbicides one or more times during the growing season. Regardless of whether a herbicide is primarily a pre- or postemergence product, some have the potential to persist in the soil for long periods of time. Ideally, herbicide applications would provide long term weed control during the growing season, but would dissipate to a safe level before the next crop is planted. In some situations, herbicides that persist in the soil for long periods of time can injure subsequently planted crops or these crops can accumulate illegal herbicide residues. The potential for rotational crop injury depends on complex interactions among herbicide characteristics, soil type, soil moisture and temperature, and the sensitivity of the rotational crops. Herbicides that persist in the soil usually have a section on the product label detailing specific rotational crop (plantback) restrictions. These restrictions indicate how much time must pass between herbicide application and the planting of a sensitive crop. The rotational crop restrictions on herbicide labels take

into account basic chemical properties of the herbicide, the persistence of the herbicide, typical environmental characteristics of the state or region, and the sensitivity of rotational crops.

This publication condenses rotational crop restrictions for herbicides registered for use in placeStateFlorida sugarcane into one table. When considering the application of herbicides, it is very important to understand the effects that a persistent herbicide may have on subsequent crops. Information on herbicide labels can be used to make better decisions about the crop sequence in a rotation, about which herbicides to use or avoid in a system, and about the rate and timing of herbicide applications. When planning weed control programs, the labels for all herbicides that will potentially be used in crop rotation should be studied along with this bulletin to prevent label violations, reduce economic losses due to herbicide carryover and avoid illegal herbicide residues.

1. This document is SS AGR 273, one of a series of the Agronomy Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date July 2007. Visit the EDIS Web Site at <http://edis.ifas.ufl.edu>.

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The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition. All chemicals should be used in accordance with directions on the manufacturer's label.

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Table 1. Minimum number of months following application of herbicides registered for use in sugarcane before it is safe to plant selected rotational crops.

Herbicides	Rotational Crops															
	Common name	Trade names*	Celery	Cilantro	Chines Cabbage	Corn, Field	Corn, Sweet	Lettuce ¹	Melon	Parsley	Pepper	Radish	Rice	Snap beans	Spinach	CityplaceSt. Augustine
Months after Application before planting																
2,4-D acid form.	Unison	1	1	1	0 ²	0 ²	1	1	1	1	1	0 ²	1	0 ²	0 ²	
2,4-D amine	many															
2,4-D/Dicamba	Brash, Weedmaster	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Ametryn	Evik	9	9	9	4	4	9	11	9	11	9	4	9	9	11	
Asulam	Asulam (many), Asulox, Asulox XP							none								
Atrazine	Aatrex, Atrazine (many generics)	12	12	12	12	12	12	12	12	12	12	9	12	12	12	12
Clomazone	Command 3ME	12	12	12	9	9	12	12	12	9	12	9	9	12	12	12
Dicamba	Banvel, Clarity, others	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³	4 ³
Diuron	Direx, Karmex, others	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Diuron/ Hexazinone	DuPont Velpar K-4 Max	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Flumioxazin	Valor SX	18 ⁴	18 ⁴	18 ⁴	9	18 ⁴	18 ⁴	18 ⁴	18 ⁴	18 ⁴	18 ⁴	9	18 ⁴	18 ⁴	18 ⁴	18 ⁴
Halosulfuron	Sandea	36	36	36	1	3	3 ⁵ or 18	2	36	4	3 ⁵ or 12	2	2	24	24	36
Halosulfuron/ Dicamba	StateplaceYukon	36	36	36	1	3	18	4	36	10	12	3	9	24	24	36
Metribuzin	Metri DF, Sencor, others	12	12	12	4	12	12	12	12	12	18	8	12	12	12	12
Paraquat	Gramoxone Max, Gramoxone Inteon						none									
Pendimethalin	Prowl H2O, others	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Trifluralin	Treflan, others	5	5	5	5	5	5	5	5	5	5	5	5	12-14 ⁶	5	5
Trifloxysulfuron	Envoke	18 ⁴	18 ⁴	18 ⁴	7	7	18 ⁴	18 ⁴	12 ⁴	12-18 ⁷	12 ⁴	7	18 ⁴	18 ⁴	18 ⁴	18 ⁴

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¹Lettuce includes iceberg, leaf types, endive, and escarole.

²Labeled crops may be planted within 29 days of application; however, under dry, cool conditions the possibility of crop injury exists (particularly in the first 14 days).

³The Banvel label does not list a minimum months before planting if normal harvest of the treated crop occurs.

⁴A bioassay should be performed prior to planting any of these crops.

⁵Can be planted 3 months after application of Sandea on muck soils only.

⁶Should not be planted for 12 months after a spring application or 14 months after a fall application

⁷12 months for transplanted bell peppers if a successful bioassay is conducted. 18 months for all other peppers.