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UT Extension
W166

Accent™ Herbicide for Weed Control in Sweet Corn

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The convenient control of perennial and annual grass weeds in fresh market sweet corn has been difficult for a number of years due to the lack of available postemergence herbicide options. Accent™ herbicide has been labeled for use in processing sweet corn for a number of years but was not cleared for fresh market use until fall 2006. One concern with Accent™ use is that a small number of sweet corn hybrids could have low tolerance to nicosulfuron, the active ingredient (Figure 1). Additionally, delayed applications of the herbicide or applications with improperly calibrated spray equipment could result in ear pinching or plant death in extreme cases. The product label directs users to check local lists for tolerant hybrids and DuPont™ assumes no liability for ear damage. The University of Tennessee has conducted limited screening work and a list of hybrids that were tolerant under testing conditions is shown in Table 1. This list will be updated periodically as additional hybrids are screened for tolerance.

Accent ™ Use:

Accent ™ may be sprayed as a broadcast or post directed application to tolerant cultivars at 0.5 to 0.66 oz product/Acre. Broadcast applications should be made before corn is 12 inches tall or has five leaf collars. Post-directed applications should be made before corn reaches a height of 18 inches or has six leaf collars. All applications should contain either crop oil concentrate at 1.0 percent v/v or non ionic surfactant at 0.25 percent v/v for improved weed control.

Labeled Postemergence Tank Mixes Options to Control Broadleaf Weeds:

- Callisto™ @ 1.5 to 3 ounces product per acre(can reduce Accent™ rate to 0.5 oz. product/Acre)
- Atrazine up to 2 lbs. ai/Acre (Do not exceed 2 lbs. ai/Acre for the season)
- Clarity™ @ 2-4 ounces/Acre

Sprayer Calibration

Sprayer calibration is very important for the correct use of this product on sweet corn. Mixing the proper rate based on sprayer output will ensure the dose will not affect the sweet corn. **When sprayer output is not certain, it is strongly recommended that a post-directed application be used, directing spray away from the whorl and leaves towards the base of the plants or into row middles.**

Figure 1. 'Merit' hybrid (center row) injured with broadcast application of Accent™. West Tennessee Research & Education Center; June 2003.

Table 1. List of Accent™-Tolerant and Sensitive Sweet Corn[1]

Tolerant Cultivar	Description [2]	Sensitive Cultivar	Description
Absolute	se; bicolor	Merit	su-1; yellow
Ambrosia	se; bicolor		
Attribute GSS 0966	Bt; sh2; yellow		
Attribute BSS 0977	Bt; sh2; bicolor		
Bodacious	se; yellow		
Bonus	su; yellow		
Golden Queen	su; yellow		
Honey Select	triple sweet; yellow		
Incredible	se; yellow		
Peaches n Cream	se; bicolor		
Providence	triple sweet; bicolor		
Saturn	sh2; bicolor		
Silver King	se; white		
Silver Queen	su; white		
Sweet G90	se; bicolor		
277A	processing corn		
WHT 2801	processing corn		

[1] Applied as a broadcast application of nicosulfuron at 0.66 oz/Acre + 1 percent v/v crop oil concentrate up to 12-inch corn

[2] su= normal or sugary type; kernels contain starch with some sugar; sugar converts readily to starch so must be eaten quickly after harvest
se= sugar enhanced; kernels contain starch and more sugar than su types
sh2= supersweet; kernels contain sugar with very little starch; slow conversion of sugars to starch so shelf life is 7-10 days if properly cooled
sy or tripplesweet = 75% se and 25% sh2

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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