

Carbofuran Use in Colorado and Wyoming

Date: March 24, 2006

To: [Rick Melnicoe](#)

CC: [Wilfred Burr](#)

From: [Sandra McDonald](#)

Subject: Re: Carbofuran Information request

Here is a summary of the Colorado / Wyoming comments

Carbofuran

We use Furadan for control of a wheat curl mite vectored virus - High Plains Disease in sweet corn grown for seed. It is the only insecticide that will work on this disease. Sweet corn grown for seed is a bit of a unique crop in that many of the inbreds used for hybrid seed production have little resistance to the virus, while many commercial hybrids have good resistance to HPD. Furadan is used as a planting time side dress treatment as labeled for use against corn rootworm. There are no alternatives. Losses to HPD can approach 100% in untreated field margins, and are often in excess of 10% throughout the field in some varieties. Indirect losses can be 50% or more when male rows are affected, and pollination in the seed rows is affected.

At the present time, about 50% of the 800+ acres of this high value crop is treated in Delta and Montrose Counties. The need for treatment is determined by the particular inbreds grown, the proximity to fall planted wheat, and the amount of winter annual grasses in the area. The loss of Furadan would have a significant impact on sweet corn production in western Colorado. Most of the seed for western Colorado commercial sweet corn production - a \$7,000,000+ crop in the area, is produced locally. Shortages of seed from High Plains Disease in the seed crop could be devastating to the sweet corn industry.

Wheat has a label for planting time in-furrow injection for control of aphids, grasshoppers and wheat curl mites. The only alternative (ineffective for wheat curl mite) for this use is disulfoton, which is being dropped by the manufacturer. I am not sure how the neonicotinoid seed treatments would fit in here, but I don't think they have either grasshopper or mite activity. Carbofuran is not used much but could be quite beneficial in big grasshopper years and in high risk aphid or mite situations.

The other use of Furadan that is not well known is for management of alfalfa stem nematode in alfalfa grown for hay. Several of the more intense hay growers use the 2 pt/a rate of Furadan early in the season for controlling nematodes and increasing yield in alfalfa stands which are managed for high yield. My guess is that it is used on less than 5% of the alfalfa acreage in the Tri River Area. There is no chemical alternative to Furadan for stem nematode control.

Grapes are the only fruit crop listed in the attachment. We do not use carbofuran (Furadan) on any fruit crops (including grapes) in Colorado. And we have no recommendation in our Grape Pest Management Guide to do so.

barley - Used little, if any

oats - used little if any

sorghum - a potentially important product where chinch bugs occur, but these are not a problem for us

sunflower - the best material we have for sunflower stem weevil control.

Pyrethroids are less effective in reducing larval infestation and lodging, but it is unknown if carbofuran is economically superior.

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