

From Hawai'i and other islands of the American Pacific (Guam, and the Commonwealth of the Northern Mariana Islands), these are points of concern regarding possible changes to carbaryl registrations:

1. Sweet Potatoes

In Hawai'i, carbaryl is the only insecticide sweet potato farmers can use to reduce sweet potato weevil populations to levels below economic thresholds, and is important for their pest management strategy. Carbaryl 4L is the product used. Even with its application, farmers can experience 10 to 20 percent crop loss due to sweet potato weevil damage. Without using carbaryl, fields have been observed with 50-80 percent damage. Fields with this much damage are a total loss to farmers.

Carbaryl is not applied on a regular schedule. Farmers respond to crop damage and to amounts caught in monitoring traps. There are rarely more than 5 applications per crop per year.

Sweet potato farmers also use carbaryl as a preplant cutting dip for control of sweet potato weevil. Thus, 1 dip per crop.

2. Golf Courses

Golf courses use carbaryl because it is one of the few remaining insecticides that are not restricted. Assuming that there are no changes that would apply the Worker Protection Standard to golfers or to golf course workers (except those who work in areas set aside for plant production) the proposed 14-day REI would not preclude use of carbaryl on golf courses. Workers need to enter the treated areas (greens and tees) within a 14-day period for mowing and cup changing. These are necessary daily activities which would probably preclude the use of any pesticide with a 14-day REI if golf course workers are regulated under the WPS.

Carbaryl is also used on golf courses on Guam and quite likely in the Northern Marianas as well. Golf courses in Hawai'i, Guam and the Northern Marianas are open for play year-round; some courses are open 365 days a year, closing only in the event of inclement weather or certain holidays.

3. Cut Flowers

Carbaryl is one of the main broad spectrum insecticides used. The REI of 12 days for cut flowers is unrealistic. Even if they are not harvesting, growers and workers enter the treated area for a number of reasons. A 12-day REI would make the use of carbaryl very difficult. There are a number of pesticide alternatives for most insects found on cut flowers. No information on the practicality, efficacy or impacts of growers changing to the alternatives was provided.

4. Small Farms

Many of the farms in Hawai'i and the American entities in the Pacific Ocean (Guam, American Samoa and the Commonwealth of the Northern Mariana Islands) are small farms. Carbaryl is probably the most commonly used pesticide in the Northern Marianas. Carbaryl is used on these farms because it is affordable, effective, less toxic than some alternatives, and it is not a restricted-use pesticide.

The small farmers of Hawai'i often sell their produce in farmers' markets. They hand harvest and harvest frequently and they need short PHIs and REIs, particularly for fruiting vegetables, leafy vegetables and cucurbits. Longer REIs and PHIs could be a problem for these farmers. Additionally, some of these farmers would require training to use unfamiliar alternatives because many are not proficient in English.

In Hawai'i, some alternatives to carbaryl are prohibitively expensive, especially for small farmers. In the other Pacific island entities, there may be no legal alternatives at all. Illegal alternatives are very likely more harmful than carbaryl to applicators and to the environment.

5. General

The responders represented interests in vegetable farming, golf courses, landscape, small farms and Pacific island grower communities. All but one of them indicated that an important reason that carbaryl is used is that it is not restricted. Restricting carbaryl would, for many pest control purposes, have the same effect as a cancellation. The responder for the cut flower growers did not mention this concern.

Removal or severe limitations on the use of carbaryl could also result in resistance problems if growers must switch to the only remaining insecticide for their situation.

The Pacific islands are vulnerable to invasive species. Concern was expressed about retaining carbaryl as a tool to protect crops against introduced insects.

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