

Postharvest Chemical Use

The 2006 Postharvest Chemical Use survey was conducted for 2005 crop oats and potatoes, marketed from August 1, 2005 to July 31, 2006. For oats, results refer to activities at off-farm storage and processing facilities after the crops were harvested. For potatoes, results also include reports from shippers and farms with storage facilities. Postharvest chemicals are important to these groups because they rely on them to control diseases, insects, rodents and other conditions that may reduce the quality of stored crops. The data is collected under the Food Quality Protection Act, and is largely used by the Food and Drug Administration and the Agricultural Marketing service to evaluate product use guidelines.

Aluminum phosphide and malathion were the top two chemicals used on oats in the United States, based on percent of volume treated. Aluminum phosphide is an insecticidal fumigant used to kill insects, insect larvae, and mites. Malathion is an insecticide.

In Wisconsin, 1.90 percent of oats stored were treated with insecticides. The insecticide, malathion, was used on 0.60 percent of oats in storage. Two other insecticides, cyfluthrin and methyl bromide, were used in the state, but there were not enough reports to set statewide estimates.

Chlorpropham, calcium hypochlorite, and naphthalene were the top three active ingredients used on potatoes, based on volume treated. Chlorpropham and naphthalene are growth regulators used to inhibit sprout growth on potatoes. Calcium hypochlorite is a sanitizer used to disinfect potatoes.

In Wisconsin, 61.1 percent of potatoes were treated with some type of chemical. Chlorpropham was used on 61.0 percent of potatoes, and naphthalene was used on 6.0 percent. (Totals do not add because the same potatoes may have been treated with more than one chemical.) Chlorine dioxide and a fungicide, thiabendazole (TZB), were also used on potatoes in Wisconsin, but too few businesses reported using these to establish a statewide rate.

Postharvest Chemical Applications Wisconsin, 2005-06 Marketing Year

Agricultural chemicals Common name	Area applied	Appli- cations	Rate per appli- cation	Total applied
	Percent	Number	Lbs/ 1,000 bu.	1,000 lbs.
OATS				
Insecticides:				
Malathion	0.6	1.0	0.41	1/
POTATOES				
Pesticides:				
Chlorpropham	61.0	1.0	0.001	24.9
Naphthalene	6.0	1.0	0.001	1.2

1/Total applied is less than 50 lbs.

Source: USDA/NASS, Wisconsin Field Office