United States Department of Agriculture

# WA Potato Postharvest Chemical Usage Release

National Agricultural Statistics Service

Washington Field Office
PO Box 609 · Olympia, WA 98507-0609 · (360) 902-1940 · Fax (360) 902-2091 · www.nass.usda.gov

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Contact: Chris Messer (360) 902-1940
nass-wa@nass.usda.gov

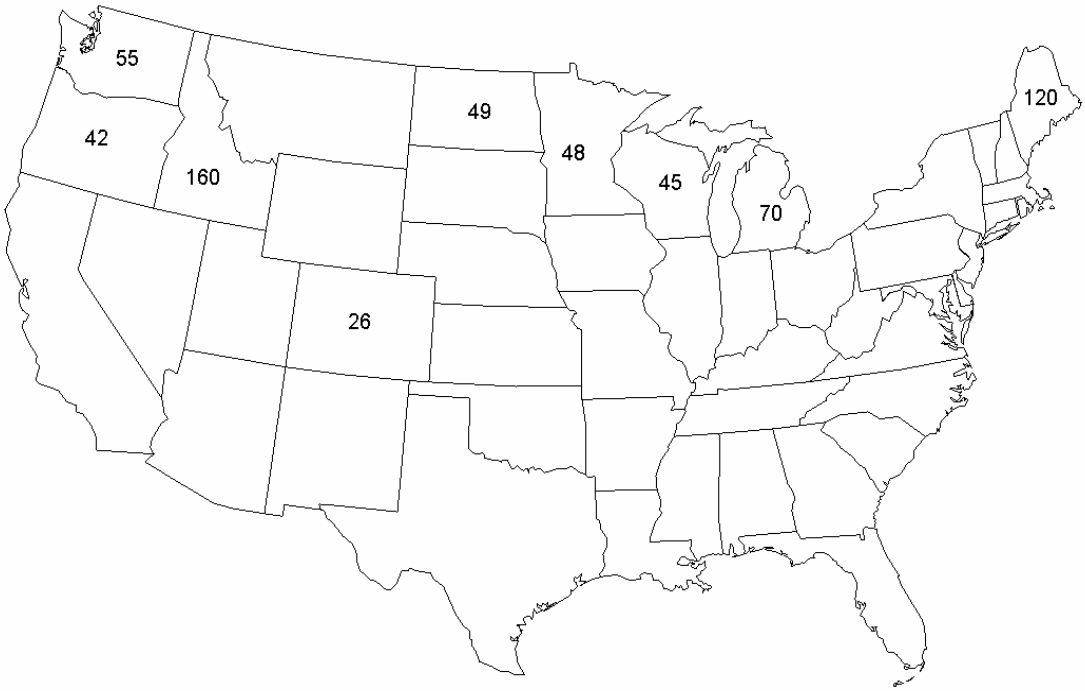
## WASHINGTON'S
## POTATO POSTHARVEST CHEMICAL USAGE

**Potato Overview:** The agricultural chemical use estimates in this report are based on data compiled from the 2006 Potato Postharvest Chemical Use Survey, which was conducted July through October 2006. The Postharvest Survey was conducted for potatoes marketed from August 1, 2005 to July 31, 2006 which covers the 2005 crop. All results refer to pesticide applications and integrated pest management at off-farm warehouses, shippers, and processors and farms with storage facilities. Results also include postharvest treatments on potatoes intended for non-human consumption such as seed use.

There were 615 warehouse, shipper, processor, and grower reports summarized across 9 States. The data shown in this release is excerpted from the U.S. release. The U.S. map below shows the number of summarized reports by State. To view the complete report, go to the website: www.nass.usda.gov/Publications/Reports_By_Date/2007/March_2007.asp

Number of Usable Potatoes Postharvest Reports

2005-06 Marketing Year



**Potatoes: Postharvest Chemical Applications,**
**Pacific Northwest, 2005-06 Marketing Year**

| Agricultural Chemical | Volume Treated | Appli-cations | Rate per Application | Rate per Mkt. Year | Total Applied |
|---|---|---|---|---|---|
| | *Percent* | *Number* | *Pounds per Cwt.* | *Pounds per Cwt.* | *1,000 Lbs* |
| Calcium hypochlorite | | | | | |
| Idaho | 14.4 | 1.0 | * | * | 4.2 |
| United States | 5.4 | 1.0 | * | * | 4.2 |
| Chlorine dioxide | | | | | |
| Idaho | 4.5 | 1.0 | * | * | 0.1 |
| United States | 2.9 | 1.0 | * | * | 0.1 |
| Chlorpropham | | | | | |
| Idaho | 50.6 | 1.1 | 0.001 | 0.001 | 74.7 |
| Oregon | 56.5 | 1.0 | * | * | 6.8 |
| Washington | 41.8 | 1.1 | * | * | 18.0 |
| United States | 47.5 | 1.1 | 0.001 | 0.001 | 168.1 |
| Fludioxinil | | | | | |
| United States | 0.1 | 1.0 | * | * | 1/ |
| Hydrogen peroxide | | | | | |
| Idaho | 6.0 | 1.1 | * | * | 0.7 |
| United States | 3.0 | 1.1 | * | * | 0.8 |
| Napthalene | | | | | |
| Idaho | 7.6 | 1.0 | 0.001 | 0.001 | 7.1 |
| Washington | 1.5 | 1.0 | * | * | 0.3 |
| United States | 5.0 | 1.0 | * | * | 10.7 |
| Sodium hypochlorite | | | | | |
| United States | 0.3 | 1.3 | * | * | 1/ |
| Thiabendazole (TBZ) | | | | | |
| United States | 0.6 | 1.0 | * | * | 0.3 |

* Rate applied less than 0.0005 pounds.

1/ Total applies less than 50 pounds.

Operations in the following States applied the listed chemicals to potatoes after harvest. However, there were insufficient number of reports to publish State level usage data. **Idaho:** chlorine, peroxyacetic acid, phosphorus acid, pseudo-syring ESC-10, sodium hypochlorite, and thiabendazole (TBZ). **Oregon:** chlorine dioxide, naphthalene, and thiabendazole (TBZ). **Washington:** bacillus subtilis, chlorine dioxide, and hydrogen peroxide (dioxide).

**Potatoes: Postharvest Chemical Applications,**
**Percent Treated and Total Applied,**
**Program States, 2005-06 Marketing Year 1/**

| State | Volume Handled | Percent Treated and Total Applied | | | | | |
|---|---|---|---|---|---|---|---|
| | | Insecticide | | Fungicide | | Other Chemical | |
| | *1,000 Cwt.* | *Percent* | *1,000 Lbs.* | *Percent* | *1,000 Lbs.* | *Percent* | *1,000 Lbs.* |
| ID | 165,139 | | | 0.6 | 1.0 | 58.8 | 86.9 |
| OR | 30,610 | | | * | * | 67.0 | 7.1 |
| WA | 126,779 | | | * | * | 43.9 | 18.4 |
| Program States 2/ | 444,876 | * | * | 0.8 | 2.3 | 52.6 | 184.1 |

* Insufficient reports to publish data.

1/ Blank cells represent no data reported for the item.

2/ States include: CO, ID, ND, ME, MI, MN, OR, WA, and WI.

**Potatoes: Pest Management Practices,**
**Percent of Operations Utilizing Practice,**
**Program States, 2005-06 Marketing Year 1/**

| Practice | State | | | |
|---|---|---|---|---|
| | ID | OR | WA | Nine States 2/ |
| | *Percent* | *Percent* | *Percent* | *Percent* |
| Mechanical Devices: | | | | |
| Aeration controller | 74 | 76 | 43 | 57 |
| Re-circulation fumigation device | 25 | 31 | 32 | 17 |
| Cleaning Activities: | | | | |
| Clean aeration ducts | 78 | 95 | 73 | 77 |
| Clean and disinfect potato warehouses | 87 | 100 | 76 | 88 |
| Clean and sanitize packing/processing facilities | 79 | 93 | 71 | 81 |
| Control vegetation | 97 | 100 | 81 | 92 |
| Pick up spilled potatoes/clean surrounding areas | 96 | 100 | 79 | 92 |
| Use pest/rodent control measures | 56 | 45 | 69 | 68 |
| Other activities | | | | * |

* Less than 0.5 %.
1/ Blank cells represent no data reported for the item.
2/ Nine States include: CO, ID, ND, ME, MI, MN, OR, WA and WI.

**Potatoes: Pest Management Practices,**
**Percent of Operations Utilizing Practice,**
**Program States, 2005-06 Marketing Year 1/ 2/**

| Practice | State | | | |
|---|---|---|---|---|
| | ID | OR | WA | Nine States 3/ |
| | *Percent* | *Percent* | *Percent* | *Percent* |
| Inspected for insects: | | | | |
| Automatically | 2 | | 9 | 3 |
| Hourly | * | | | * |
| Daily | 18 | 21 | 15 | 22 |
| Twice a week | 14 | 7 | 13 | 10 |
| Weekly | 39 | 17 | 40 | 31 |
| Other | 4 | 24 | 2 | 5 |
| Do not monitor | 22 | 31 | 21 | 29 |
| Measured Potato Temperature and/or Humidity: | | | | |
| Automatically | 7 | 19 | 33 | 16 |
| Hourly | 1 | | 3 | 1 |
| Daily | 65 | 45 | 36 | 54 |
| Twice a week | 14 | 10 | 8 | 11 |
| Weekly | 10 | 17 | 11 | 11 |
| Other | * | 7 | | 1 |
| Do not monitor | 3 | 2 | 9 | 7 |

* Less than 0.5%.
1/ Numbers for each type of structure may not add to 100 due to rounding.
2/ Blank cells represent no data reported for the item.
3/ Nine States include: CO, ID, ND, ME, MI, MN, OR, WA and WI.

## Pesticide Classes, Common Names, and Trade Names

The following is a list of the pesticide classes, common names, and trade names of active ingredients in this publication. The classes are Insecticide(I), Fungicides (F), and Other chemicals (O). This list is provided as an aid in reviewing pesticide data. Pre-mixes are not cataloged. The list is not complete for all pesticides used on postharvest commodities and NASS does not mean to promote the use of any specific trade name.

| Classes | Common Names | Trade Names |
|---|---|---|
| I | Aluminum phosphide | Aluminum Phosphide 55%, Gastoxin Fumigation Tablets, Fumitoxin Tablets (55%) Fumitoxin Pellets, Phostoxin Pellets, Weevil-Cide 60% Pellets |
| F | Bacillus subtillis | Seranade Max, Serenada ASO |
| O | Calcium hypochlorite | HTH 300 Gram Tablets, Calcium Hypochlorite |
| O | Chlorine | Drench-Chlor |
| O | Chlorine dioxide | Oxine, OxyFresh, Purogene |
| O | Chlorpropham | IVI Sprout Block CIPC 98%,CIPC 7A, Decco 270 Aerosol Decco 271 Aerosol, Decco 276 EC, Pin Nip 98.6, Sprout Nip 7A, Sprout Nip EC, Spud Nip-4, CIPC 2 EC, CIPC 98A, Pin Nip EC 2 EC, Shelf Life 2EC, IVI Sprout Block 2 EC, Pin Nip Technical Chlorpropham |
| I | Cyfluthrin | Tempo SC Ultra |
| F | Fludioxonil | Maxim MZ, Maxim 4FS |
| O | Hydrogen peroxide | OxiDate, Tsunami 100 aka Oxy-15, StorOx |
| I | Imidacloprid | Tops-MZ-Gaucho |
| I | Malathion | Malathion 57 EC, 6% Grain Protector, Malathion Spray |
| F | Mancozeb | Mancozeb 6% Firbark, Maxim MZ, Tops-Mz-Gaucho |
| I | Methoprene | Dicaon II |
| I | Methyl bromide | Meth-O-Gas 100, Methyl Bromide 100 |
| O | Napthalene | 1,4SHIP RTU Aerosol, 1,4Sight, Amplify Sprout Inhibitor |
| O | Peroxyacetic acid | Tsunami 100 aka Oxy-15 |
| F | Phosphorous acid | Phostrol |
| F | Pseudo syring ESC-10 | Bio-Save 10 LP |
| I | Silicon dioxide | Diatomaceous Earth Insecticide |
| O | Sodium hypochlorite | Agclor 310, Bleach, All Liquid Bleach, Sodium Hypochlorite Sanitizer, Chlorguard II Chlorinating Solution |
| F | Thiabendazole (TBZ) | Decco Salt No.19, Mertect 340-F |
| F | Thiophanate-methyl | Tops-MZ-Gaucho |