

**Misbranded / Adulterated Pesticide,
Pesticide Residues Found in Organic Insecticides,
Nationwide Voluntary Recall**

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Four organic insecticides were recently found to be contaminated with several synthetic insecticides by the Oregon Department of Agriculture (ODA). ODA is now working to identify the source of contamination for these insecticides. All found contaminants are insecticides, and **their presence in treated plant products could lead to unknown health effects for consumers and major economic losses for organic and other growers.**



All of these insecticides are available for sale in Arizona. If organic growers used these adulterated organic insecticides, they could end up with illegal residues on their agricultural products, potentially preventing them from marketing their production.



The ODA issued a stoppage of sale and distribution in Oregon on 6/28/17 for Azatrol Hydro Botanical Insecticide® and Azatrol EC Insecticide® (both under EPA Reg. No. 2217-836) manufactured by PBI-Gordon. The manufacturer has since issued a nation-wide voluntary recall of both of their adulterated insecticides. On 7/24/17, the Oregon Department of Agriculture issued a stoppage of sale and distribution of Neemix® 4.5 (EPA Reg. No. 70051-9) manufactured by Certis USA, LLC and Azatin O® (EPA Reg. No. 70051-9-59807) manufactured by OHP, Inc.



These insecticides list azadirachtin as the only active ingredient. For Neemix 4.5 and Azatin O, azadirachtin makes up 4.5% of the mixture. For both Azatrol insecticides, azadirachtin makes up 1.2% of the mixture. **Azadirachtin is derived from neem seeds.** All four of these insecticides are listed for organic use by the Organic Materials Review Institute (OMRI).

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Organic insecticides recently found to be tainted with contaminants, including two involved in a voluntary nationwide recall.

| Insecticide (EPA Registration No.) | Contaminants (conc. ppm) |
|--|--|
| Neemix 4.5 (70051-9) | Bifenthrin (0.045) and fenpropathrin (0.20) |
| Azatin O (70051-9-59807) | Bifenthrin (0.64), fenpropathrin (0.10), and lambda-cyhalothrin (0.046) |
| Azatrol Hydro* (2217-836) * Recalled product | Permethrin (2.0-200), bifenthrin (0.37-1.1), chlorpyrifos (0.15-2.0), cypermethrin (12), and cyfluthrin (0.42) |
| Azatrol EC* (2217-836) * Recalled product | Permethrin (1.0) bifenthrin (0.27), and cyfluthrin (0.10) |

The pre-harvest interval (PHI) for these insecticides is zero days for multiple fruits and vegetables. Both Azatin O and Neemix 4.5 are also approved for use on tobacco in numerous states with a zero day PHI, including Arizona. **While potential health effects from eating or smoking tainted materials have not been evaluated, unforeseen and serious health effects could exist.**

These insecticides available for sale in Arizona could be contaminated. If you are purchasing an insecticide with the active ingredient azadirachtin, make sure to check the EPA Reg. No. to reduce the likelihood of buying an adulterated product. If you are a grower or Pest Control Advisor (PCA) please inform your distributors about the contamination findings. If you see Azatrol Hydro or Azatrol EC for sale, please share this information with the distributor so they can participate in the recall. If you have either of these insecticides already in your possession with the EPA Reg. No. listed, contact your distributor or the manufacturer.

Questions regarding Oregon Department of Agriculture enforcement activity should be directed to: Dale Mitchell, ODA Enforcement, dmitchell@oda.state.or.us, (503) 986-4646

Additional Resources:

Azatrol Hydro Botanical Insecticide and Azatrol EC Insecticide stoppage of sale and distribution notice.

<http://www.oregon.gov/ODA/programs/Pesticides/Documents/CannabisPesticideAdvisories/Azatrol.pdf>

Azatin O Biological Insecticide stoppage of sale and distribution notice.

<http://www.oregon.gov/ODA/programs/Pesticides/Documents/CannabisPesticideAdvisories/Azatin.pdf>

Neemix 4.5 Insect Growth Regulator Biological Insecticide stoppage of sale and distribution notice.

<http://www.oregon.gov/ODA/programs/Pesticides/Documents/CannabisPesticideAdvisories/Neemix.pdf>

PBI-Gordon nationwide voluntary recall letter to partners (page 3).

<https://agr.wa.gov/pestfert/pesticides/docs/AzatrolConditionalReleaseStopSalePBIgordonltrtodistributors-2017-07-28.pdf>

For a downloadable pdf of this document go to:

https://cals.arizona.edu/crops/cotton/files/Adulterated_azadirachtin_products_vf.pdf