

AMINOPYRALID-IT'S DÉJÀ VU ALL OVER AGAIN!

Chlopyralid was a nasty compost surprise, meet the new, improved version!

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Background

Aminopyralid is an auxinic herbicide that will cause damage to sensitive broadleaf plants such as tomato, beans and peas; these plants will usually not die, but will produce no or few, low quality fruit. Effects of aminopyralid residues in dairy organic matter (manure, composted manure, silage) applied to broadleaf crops on farms and gardens in Whatcom County have been seen in 2009 and 2010.

What is aminopyralid?

Aminopyralid is a broadleaf herbicide registered for use on grassland and rangeland. It is registered under several product names to control many broadleaf weeds, including invasive and noxious weeds, on grass crops as rangeland, permanent grass pastures, as well as non-cropland areas.

Why is aminopyralid used?

It has long-lasting effects against target weeds when applied at low rates. Aminopyralid has low toxicity to humans and animals.

How did aminopyralid get into the compost/manure/topsoil mix?

Aminopyralid was likely used to control weeds on forage and hay grassland, which was then fed to dairy cattle. Aminopyralid does not harm livestock and is rapidly excreted in urine and manure. Unfortunately, aminopyralid breaks down slowly or not at all in the digestive system of a cow or in the composting process, instead remaining viable through the process.

Dairy manure is a significant component of compost in many areas and manure solids are distributed throughout the region as an organic soil amendment. It is often used in "topsoil" mixes, such as "3-way" or "5-way" mixes, for use in home gardens and landscapes.

What can aminopyralid do to my crops?

Residues of aminopyralid can cause damage to sensitive plants at levels as low as 1 part per billion. Some plant species are more sensitive than others, but all broadleaf plants are considered sensitive. Damage includes cupped leaves, twisted stems, distorted apical growing points, and reduced fruit set (see pictures www.whatcom.wsu.edu)

Is produce grown in aminopyralid contaminated soil safe to eat?

According to Dow AgroSciences, "If aminopyralid has been introduced into your soil, and plants are showing symptoms of herbicide damage consistent with aminopyralid, but produce a harvestable yield, these inadvertent aminopyralid residues are at a level low enough that you can eat the produce from the garden. Produce from the garden cannot be sold."

How do I know if my compost is safe?

Before planting in soil that contains organic dairy matter, perform a bioassay. The bioassay should be performed before the organic matter is applied to the farm or garden, but can also be done after the organic material has been added.

Plant seeds of plants with known susceptibility, such as peas, beans or tomatoes, in small pots with a mix of suspicious material and peat-based potting mix. For instructions, see the publication at www.puyallup.wsu.edu/soilmgmt/Pubs/CloBioassay.pdf.

What can I do if my organic matter contains herbicide residue?

Aminopyralid is slowly broken down by microorganisms commonly found in soil. If organic matter is found to contain herbicide residues, it should be incorporated into the soil and irrigated heavily; a second and third mixing with the soil may speed the decomposition of the material. An additional bioassay should be performed before planting a new broadleaf plant into the material.

Other options may be to 1) plant a cover crop (such as winter wheat), then remove the plants to either burn them or shred and apply them to a non-sensitive area, 2) plant crops that have a higher tolerance to aminopyralid, or 3) remove the organic material that was applied and spread it on a non-sensitive crop area, such as grassland.

What is being done to reduce the impact of this issue?

WSU Extension is working with WSDA and other organizations to determine the best way to use remaining dairy derived organic matter containing aminopyralid residue. Residues may remain in the soil, plant tissue, and dairy waste for another year or more; the farming and gardening communities need to work together to fully understand this issue and take steps to manage it. ♡

Watch Your Mail!

The Tilth Producers Directory is coming this spring! Keep an eye out for a brochure in your mailbox this January. Members are not automatically listed, but must reply to "opt in" and return the form to be listed.

Thank You, Sandy & Sponsors!

A big thank you to all our Silent Auction donors. We raised more than \$6,000, receiving donations from over 100 businesses and organizations across the state! A Special Thank You goes to Sandy Bradley who auctioned off multiple vacation stays at her home in Guanajuato, Mexico raised \$4,500 all by herself! Many thanks to all who participated and made this year's Auctions a huge success!

Just for Farmers!

The WA Department of Revenue created a web page just for farmers: dor.wa.gov/farmers. One location to go for updated information on taxes, incentives, rules and other changes that affect farm-based businesses.