



Hort Notes

An educational newsletter with research-based information for businesses and individuals involved in selling, planning, designing, servicing, and enjoying landscapes and gardens.

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Current Monitoring Checklist:

PLANT PHENOLOGY: BETWEEN 2400 - 2800 GROWING DEGREE DAYS

http://www.umassgreeninfo.org/fact_sheets/ipmtools/2400_2999_GDD.html

Label Changes for Product Containing the Herbicide Clopyralid

In the past couple of years there has been growing concern about the occurrence of clopyralid residues in compost that was derived from grass clipping and yard waste. While continuing to investigate the issue, the manufacturers of clopyralid have requested a label change that will discontinue the use of clopyralid products on residential turf. Products affected by this labeling change include, but are not limited to, Lontrel™, Confront™, Momentum™, Millennium Ultra™, Trupower™, Chaser Ultra™, Battleship, Proscape with Confront™, Strike Three Ultra™, and Preen & Green for Lawns™. The following text has been selected from a larger Dow AgroSciences news release dated July 26, 2002.

Randy Prostack

UMass Extension Educator - Landscape, Nursery and Urban Forestry

Dow AgroSciences Discontinues U.S. Residential Turf Uses of Herbicide Clopyralid

A widely used herbicide for control of invasive, noxious and other hard-to-control weeds will no longer be used on U.S. residential lawns, as a result of an action taken to address regulatory concerns by the product's primary manufacturer, Dow AgroSciences LLC.

Clopyralid products will continue to be used on golf courses and certain other forms of nonresidential turf. However, Dow AgroSciences has petitioned the U.S. Environmental Protection Agency to delete residential turf uses from the clopyralid product label. Additionally, under the amended label professional applicators will now be required to notify property

managers not to compost clippings from treated grass. Farm, ranch, [ornamental landscape, nursery and forestry uses will be unaffected.

"The decision to discontinue residential turf use of the herbicide was made to address regulatory concerns about the potential for damage to sensitive plants from clopyralid residues in compost," said Dow AgroSciences vice president for urban pest control products Elin Miller. "This action is based on a few isolated reports of plant damage, not on concerns about human health."

A premium herbicide, clopyralid controls noxious and invasive weeds at very low rates. The product breaks down readily in the natural soil environment but appears to degrade more slowly in compost. While herbicides containing clopyralid are only active on a few families of plants, there have been reports of residues in compost damaging sensitive plants. Few instances have been established, and in those cases that have been documented, primarily in Washington State, the residues were tied to programs promoting composting of grass clippings from residential lawns.

Label directions for products from Dow AgroSciences containing the active ingredient clopyralid warn against using compost containing treated material. However, inadvertent composting of clopyralid- treated grass clippings (e.g., via curbside pickup) may be a factor in residential use.

"We see amending the clopyralid product label to discontinue residential turf use as a prudent step while gathering data to better understand the many ways that the composting industry processes compost and the breakdown of our product in these materials," Miller said. "Considerable research is now underway that will help shed light on this issue."

Questions from You

Q. Does the chemical used to kill roots in sewer lines cause any harm to the actual tree?

A. The chemical commonly used to kill roots in sewer lines is copper sulfate. Roots are killed when they come in contact with the copper, but very little of the copper is actually taken in by the roots and the copper advances only a short distance into the root system. So, it is unlikely that copper sulfate applied to sewer lines or septic systems to kill tree roots causes any harm to the tree from which the roots originate.

Copper is commonly used in containers in nursery production to prevent roots from becoming pot-bound or forming masses of circling roots. Copper treated containers have been in use for many years and continue to be used more and more. There is no conclusive evidence that trees or shrubs grown in these pots are adversely affected.

Q. We have a number of used plastic pots and flats that we would like to recycle. Are there any

markets for these plastic containers?

A. Accumulation of used plastic containers as well as plastic film is a big problem in the nursery industry. Washing and sterilizing used pots often requires more work and expense than buying new containers. Plastic films such as those used to cover hoop houses have a useful life of only a few years. In the end, there accumulates a lot of plastic material, much of which can be recycled.

Fortunately, there are a number of recycling companies around the country that accept nursery plastics. The American Plastics Council provides access to a database of companies that buy and sell recycled plastics. The web site address for the American Plastics Council is: www.plasticsresource.com The web site provides a great deal of useful information about the recycling of plastics in addition to the database of recycling companies.

*Q. Japanese knotweed (*Polygonum cuspidatum*) is one of the more difficult weeds we are asked to control. What suggestions do you have for getting rid of it?*

A. It requires a great deal of persistence to completely eradicate an established stand of Japanese knotweed. One approach is to apply glyphosate to the plants. The most effective applications are made in late summer when the plants are in bloom. (Note: They are now in bloom.) READ AND FOLLOW LABEL DIRECTIONS on the glyphosate product you are using. The glyphosate may be applied directly to the knotweed foliage. However, if the knotweed is intermingled with desirable vegetation, cut down the stems of knotweed and then brush the glyphosate solution on the cut surfaces of the stems.

Where clients refuse the use of herbicides, some control may be had by repeatedly cutting down the stems of Japanese knotweed over the course of the growing season. If this does not kill the weed, it will at least slow its spread.

Q. What are bioherbicides?

A. The term “bioherbicides” refers to the relatively recent introduction of a number of weed control products that are derived from natural materials as opposed to synthesized chemicals. One product that has received a great deal of attention lately is corn gluten meal, a by-product of corn syrup processing. It is promoted as a pre-emergent herbicide, but contains 10% nitrogen, so its use must take into consideration the effect of the application a considerable amount of nitrogen. Corn gluten hydrosylate has been shown to be more effective, and at half the application rate, than the corn gluten meal from which it is derived.

Another class of bioherbicide is made from pelargonic acid, a fatty acid found in plants and animals. Sold under such trade names as Weed Eraser™ and Scythe™, it works by altering plant pH and disrupting cell walls. Still another group of bioherbicides is one in which the main ingredient is acetic acid (vinegar) along with eugenol, orange oil and other natural materials. Trade names for products of this group include: Nature’s Glory™, Burnout™, and Bioganic™.

All of these bioherbicides are “burn down” products; that is, they kill weeds by contact rather than

being translocated throughout the plant. They are not very selective and their effectiveness is variable.

Ron Kujawski
UMass Extension Educator, retired

Stockbridge School Events

Perhaps you know of someone who is interested in a career in the green industries. Why don't you invite them to visit the Stockbridge School, the "small school with big opportunities?" The Stockbridge School offers five majors within the green industries. After two years of study, students receive an associate of science degree and are well-prepared for exciting job opportunities in arboriculture, horticulture, crop production, landscape contracting, and turfgrass management. All curricula include a required internship. Stockbridge School is located at UMass-Amherst, which affords students the advantages of being at a larger institution while participating in smaller classes. Stockbridge is well known in industry circles and job placement is high for Stockbridge students. There are more jobs available than there are graduates to fill them!

The Stockbridge School will sponsor its annual **Stockbridge School Field Day on Friday, October 4, 2002** to acquaint prospective students with Stockbridge programs. Arboriculture students will showcase their climbing skills. Representatives from Shelter Tree and Cleaves Company will be on hand with the latest in arboriculture equipment. Landscape Contracting students will demonstrate surveying techniques. Greenhouse tours will be conducted by Horticulture students and staff. A turfgrass restoration project will be underway. Interested prospective students are invited to visit campus that day.

Industry representatives, mark your calendars. The sixth annual **Stockbridge School Job Fair** will be held on **Tuesday, February 11, 2003** in the Campus Center at UMass Amherst. Companies are invited to send representatives to meet with Stockbridge students regarding employment opportunities. UMass students, recent Stockbridge alumni, and area high school students will also be invited to attend. Space for company representatives is limited and will be on a first-come, first-served basis. Make your reservations early. Applications will be available in the fall. For more information contact the Stockbridge School office at 413-545-2222 or stocky@fnr.umass.edu.

Individual visits to discuss Stockbridge programs and tour the UMass campus can also be arranged at any time. Simply call the Stockbridge School office or write to us at 115 Stockbridge Hall, University of Massachusetts, Amherst, MA 01003. You may also visit our web site at www.umass.edu/stockbridge.

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