Look What’s Out There in Integrated Pest Management

New Pasture herbicides

A few new herbicides have been registered for use in pasture this year. Carfentrazone (trade-name “Aim” marketed by FMC) is effective for controlling several annual broadleaf weeds, but it is weak on established perennials. It has no restrictions on haying and grazing.

Two other herbicides, based on a new chemical (aminopyralid from Dow AgroSciences), are now available for use in pastures. Their trade names are “Milestone” (aminopyralid) and “ForeFront R&P” (aminopyralid + 2,4-D). The active ingredient is expected to provide good control of horsenettle and other difficult-to-control broadleaves in pastures. Unlike Grazon P+D, aminopyralid is not a restricted-use herbicide. Since these compounds have had limited testing, their usefulness for weed control in West Virginia pastures is still unknown.

Roundup Ready alfalfa

Roundup Ready alfalfa has been registered by the Environmental Protection Agency (EPA) and should be available for the 2006 growing season in West Virginia. Research trials have shown promising results in the Northeast.

As with any Roundup Ready crop, this genetically modified crop, being tolerant to the herbicide glyphosate, utilizes glyphosate as the sole weed management tool. It provides a simple and effective weed control program. A possible disadvantage of this program is that the forage’s fiber content may be reduced as a result of limited grass composition. While such a species composition may not be ideal for livestock forage, it may be desirable for a specialty forage where a pure stand of alfalfa is preferred.

The “stewardship factor” involved in raising herbicide-tolerant crops should also be considered. Using the same herbicide or herbicides repeatedly for weed control may hasten the development of herbicide-resistant weeds. Depending upon the alfalfa stand’s thickness, replanting may have to be done every four or five years. Herbicides like paraquat and dicamba can control Roundup Ready alfalfa for management purposes. With the technology fee included, the cost of a Roundup Ready alfalfa program is expected to be competitive with conventional programs.

Star-of-Bethlehem control

Star-of-Bethlehem (Ornithogalum umbellatum) is a perennial weed that resembles wild garlic. This weed, which is known to be toxic to livestock, can grow in fields during winter months when most plants are dormant. It does not possess the characteristic odor of wild garlic, but it can be identified by its slender, succulent leaves that have a prominent whitish midrib with round hollow leaves.

This weed may bloom in April and complete its life cycle by May. Although uncommon in West Virginia pastures, this weed needs to be kept at bay. Star-of-Bethlehem was detected at a farm in Milam (Hardy County) in spring 2005. We
evaluated herbicides registered for broadleaf weed control in West Virginia pastures to see if they would control Star-of-Bethlehem. Our results indicated that Star-of-Bethlehem was controlled by paraquat (Gramoxone at 1.33 pints per acre) or glyphosate (Roundup WeatherMax at 3 quarts per acre) when applied along with 1% methylated seed oil (MSO). Regrowth in 2006 is yet to be monitored. Virginia researchers have obtained good control with higher rates of paraquat but poor control with glyphosate. They also reported good results with the new pasture herbicide, carfentrazone.

We also observed that using selective herbicides in April to control broadleaf weeds in the pasture resulted in a much more uniform and vigorous grass stand eight weeks after treatment. Should you have questions, please see comments section below).

**National Pesticide Use Database Website**

The Crop Protection Research Institute of the CropLife Foundation announced the release of the National Pesticide Use Database: 2002 (NPUD2002); this information is courtesy of Kent Smith of USDA. The database, press release, methodology and data summary report, and other supporting documents are posted at [www.croplifefoundation.org/Documents/PUD/NPUD%202002/Press%20Release.pdf](http://www.croplifefoundation.org/Documents/PUD/NPUD%202002/Press%20Release.pdf).

NPUD2002 contains national use data for fungicides and herbicides for 2002 (other pesticide groups will be released over the next six months; fumigant, insecticide, and plant growth regulator data to be released in July 2006). This database is the only national, comprehensive, and publicly available source of pesticide use data for the United States.

This database and its' accompanying report: Pesticide Use in 2002: Fungicides & Herbicides is free and available on the web on the CropLife Foundation website at: [www.croplifefoundation.org/cpri_npwd2002.htm](http://www.croplifefoundation.org/cpri_npwd2002.htm). It is suggested that one review the report prior to accessing the database. For further information, contact Nathan Reigner at: nreigner@croplifefoundation.org

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**Funding Opportunity**

- The U.S. Environmental Protection Agency announced that funds are available to support community-based partnerships to reduce toxic risks in local communities.

EPA will award about $2.7 million in cooperative agreements in two levels through the Community Action for a Renewed Environment (CARE) program. Level I cooperative agreements will help establish community-based partnerships and set priorities for reducing toxic risks in a community. EPA anticipates awarding eight to 10 cooperative agreements under Level I, ranging from $75,000 to $100,000.

Level II cooperative agreements are for communities that already have a broad-based collaborative partnership, have identified risk reduction priorities and are ready to implement risk reduction strategies. EPA expects to award six to eight cooperative agreements, ranging from $150,000 to $300,000.

A range of community groups may apply for funding, including county and local governments, tribes, non-profit organizations and universities. EPA will conduct two conference calls, Feb. 21 and 24, for prospective applicants to ask questions about the application process.

The CARE program, which began in 2005, helps to build broad-based local partnerships for reducing risks from toxic pollutants that come from numerous sources. For additional information about CARE, projects awarded in 2005, or how to apply for the cooperative agreements, visit EPA's Web site at: [http://www.epa.gov/care](http://www.epa.gov/care) (USEPA, News for Release: Friday, Feb. 10, 2006).
Agricultural and Environmental News

- In accordance with the Clean Air Act and Montreal Protocol, EPA finalized a rule exempting methyl bromide production and import for 2006 critical uses (USEPA, News, Feb.2, 2006). Contact: John Millett, 202-564-4355 / millett.john@epa.gov

- The U.S. Environmental Protection Agency (EPA) announced more than 100 Stop Sale Orders nationwide to importers and distributors of unregistered pesticides manufactured by RepelleX Lawn and Garden Products, a Canadian company. EPA has determined that three RepelleX products claiming to contain "quarternary ammonium salts" (correct spelling: quaternary) are pesticides and subject to registration requirements under Section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The products are: RepelleX 14-2-2 ML2 Fertilizer Tablets, RepelleX Deer Repellent Concentrate, and Bulb Saver Concentrate (USEPA, News, Jan.26, 2006).

- Under new rules announced by EPA, all third-party intentional dosing research on pesticides involving children and pregnant women intended for submission to EPA is banned, and EPA will neither conduct nor support any intentional dosing studies that involve pregnant women or children for all substances EPA regulates. These final new rules also establish stringent enforceable ethical safeguards to protect individuals who volunteer to participate in third-party intentional dosing research (USEPA, News, Jan.26, 2006). Contact: Enesta Jones, 202-564-4355 / jones.enesta@epa.gov.

Comment Section
If there are any comments from the information presented, please let us know by sending an e-mail to: jbanieck@wvu.edu

March 7, 2006
Turf and Ornamental Workshop. Ramada Inn, Morgantown, WV. Further information is available at: http://www.wvu.edu/~agexten/temp/06LawnWrksp.pdf

March 27-29, 2006
41st Annual Vegetation Management Association Meeting, Stonewall Jackson Resort, Roanoke, WV. Complete information is available online at: http://www.wvu.edu/~agexten/temp/VMAssocmtg06.pdf
April 4-6, 2006
The Fifth National IPM Symposium, "Delivering on a Promise," will be held in St. Louis, MO at the Adams Mark Hotel. The deadline for Poster Abstract submission is December 16th, 2005. More information is at:
http://www.ipmcenters.org/ipmsymposiumv/

May 6-9, 2006
All Things Organic, Chicago, IL
http://www.organicexpo.com%20/

May 14-17, 2006
5th Natural Resource Extension Professionals Conference, Park City, UT.
http://www.anrep2006.org/Home2.cfm?homeextra=yes

August 7-9, 2006
http://www.dce.ksu.edu/dce/conf/ag&environment/

August 15-17, 2006
North Central SARE's National Conference on Sustainable Agriculture, Oconomowoc, WI.

October 4-7, 2006
Natural Products Expo East, Baltimore, MD.
http://www.expoeast.com/