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USDA LAUNCHES NEW BIOTECHNOLOGY WEB SITE

WASHINGTON, Oct. 29, 1999 -- The U.S. Department of Agriculture today unveiled a new Internet web page which provides easy public access to the Department's vast amount of material on agricultural biotechnology issues.

The new site offers answers to some of the most frequently asked biotechnological questions along with recent speeches by Secretary Glickman on agricultural biotechnology. The site also includes pages on biotechnology and trade, regulations, and research. It will be updated regularly as new reports and information are released by USDA. Links to many of the other government agencies involved in biotechnology are provided.

The new biotechnology web site can be accessed at http://www.aphis.usda.gov/biotechnology/

JAPAN EXPLORES DIFFERENT SOURCES FOR GM-FREE CORN

Japanese food processors are looking to Europe for corn free of GM organisms. Japan's GM labeling requirements go into effect April 2001. Corn from Europe is viewed as being generally GM-free, and is being sought by Japan as an alternative to US corn.

Japan is the world's largest corn importer, heavily dependent on the United States, which produces the world's largest supply of corn. The United States accounts for 88% of Japanese corn imports, compared to only 2% from Europe. For now, even if corn imports from Europe increase, the quantity available from Europe is not sufficient to meet Japan's needs. Some Japanese grain traders will be contracting with US farmers to produce GM-free corn. Traders also note that it is unlikely that Japan

> Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating. Cooperative Extension programs are available to all without discrimination.



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will turn to China or Argentina for corn, due to lack of quality and availability of GM-free corn, respectively.

A. Takada, "Japan Corn - Europe May Benefit From GM Label Plan," REUTERS, September 2, 1999.

WHEAT REPORT

Like our neighbors to the Southeast, Kansas, the new wheat crop has not had much moisture. Normally this lack of moisture would cause significant problems but so far all reports are saying that the wheat looks in excellent shape.

Normally a lack of surface moisture would cause a slow and uneven wheat emergence. This has not been the case. Little dry-land root rot has been noted. The fungus that causes dry-land root rot attacks the subcrown internode between the crown and the first roots. It can kill seedlings that don't have crown roots by severing the subcrown internode. It can also invade the crown and cause crown rot. Seed treatments such as Dividend XL and Raxil-thiram can partially control common root rot if used at the higher rates. But higher rates are expensive.

The warm, dry weather is also conducive to the spread of wheat streak mosaic virus. As volunteer wheat plants come under moisture stress, the wheat curl mites (vectors of wheat streak mosaic virus) are forced to migrate and move to adjacent wheat fields. Another part of this problem this fall has been the build up of both the mite vector and wheat streak in dry land corn. As the corn matures the mites move to new wheat.

Leaf rust and symptoms of barley yellow dwarf are also showing up in early-planted fields. So far there does not appear to be much damage. Leaf rust can only survive in green leaf tissue, so it needs a mild winter to survive until spring in Kansas and Oklahoma, then moves into eastern Colorado.

Greenbugs were fairly common earlier, causing clusters of small (1/16 in) dark brown spots. If the aphid colony is present, it is easy to diagnose greenbug injury. When the greenbugs are gone, the injury could be confused with speckled leaf blotch.

Oat bird cherry aphids are the main vectors of barley yellow dwarf virus. The long warm fall has allowed them to survive and multiply. Any field with a large aphid population is a candidate for barley yellow dwarf next spring. Gaucho insecticide seed treatment can partially protect against aphid-borne barley yellow dwarf, but it is expensive. Fortunately, recent snow and cold weather will help to mitigate this problem somewhat. There will be critical need to get out early next spring and scout the fields. (Brown)

KANSAS STATE UNIVERSITY STARTS NEW AG BIOTECH NEWSLETTER

Bob Bowden and his associates at K State have started a new ag biotech newsletter that is great for keeping up on some of the developments in the biotech policy and politics debate. There is science too! In their first issue, just recently sent, they gave a statement of purpose as "This newsletter is intended to keep you informed of current issues in agricultural biotechnology and to connect you with useful resources for agricultural biotechnology. Our purpose is to promote unbiased, science-based decisions on biotechnology issues.

If you are interested in this new newsletter contact Bob Bowden (rbowden@ksu.edu), Phil Sloderbeck (psloderb@oz.oznet.ksu.edu), Mike Smith (msmith@oznet.ksu.edu), or Randy Higgins (rhiggins@oznet.ksu.edu). The newsletter will be issued on an irregular basis as needed.

A couple of samples from their first issue:

"Bt Corn Impact on Monarch Butterflies Reassessed"

Last spring, Cornell University researcher John Losey reported that pollen from genetically engineered Bt corn plants appeared to pose a risk to monarch butterfly caterpillars feeding on nearby milkweed plants. However, the risk is probably less than suggested by initial studies, according to several researchers at a symposium in early November.

According to the Washington Post, (http://www.washingtonpost.com/wp-srv/national/feed/a15118-1999nov3.htm), a researcher at the University of Guelph in Ontario found that 90 percent of corn pollen grains travel less than five yards from the field. Virtually all the pollen travels less than ten yards. Researcher Mark Sears also reported that at least 500 pollen grains per square centimeter were required to injure monarch caterpillars.

Researcher John Pleasants, from Iowa State University, had similar results. He found that under some conditions, monarch caterpillars on milkweed plants in cornfields could be adversely affected. However, monarchs feeding more than a yard from a cornfield are probably safe. University of Nebraska entomologist John Foster concluded that the risk of Bt corn pollen was insignificant compared to the normal mowing of milkweeds in meadows and roadsides. The greatest threat to monarchs is probably habit destruction in the mountains of Mexico where the butterflies spend the winter. [Sloderbeck]"

"Bt Corn Has Reduced Levels of Mycotoxins"

Researchers at Iowa State University recently reported on the web site of the American Phytopathological Association (www.scisoc.org) that corn hybrids carrying the Bt gene have a bonus in addition to control of corn earworm and corn borer larvae. Researchers have long known that insect injury can lead to greater invasion of stalks and ears by fungi like Fusarium and Aspergillus. These fungi not only reduce grain quality, but they also contaminate grain with mycotoxins. Fusarium produces fumonisins, which are a group of mycotoxins that can be fatal to horses and pigs. There is some evidence that fumonisins are also human carcinogens. Aspergillus flavus produces aflatoxin, a known potent human carcinogen. "Fusarium ear rot and fumonisin levels in MON810 and BT11 hybrids were uniformly low (usually less than 10% of the concentrations in the non-Bt hybrids)", according to Gary Munkvold and Richard Hellmich. "Field studies also have shown reduced kernel infection by A. flavus and lower aflatoxin concentrations in BT11 and MON810 hybrids compared with their non-Bt counterparts. However, these reductions have been less dramatic than those seen for fumonisins." [Bowden]

They are also including a directory of K-State biotechnology projects and personnel, links to useful biotechnology web sites, and a glossary of biotechnology terms. The URL is http://www.oznet.ksu.edu/pr_biotech/. This is a great opportunity to get up-to-date information on the biotech debate from a top-flight source. I urge you to explore it. (Brown)

ANNUAL TURF MEETINGS SCHEDULED FOR DECEMBER 7-9, 1999

The 46th Rocky Mountain Regional Turfgrass Conference and Trade Show will be December 7-9 at Currigan Hall in Denver. This program is the premier turf program in the Rocky Mountain area and each year gets bigger and better.

Along with the re-certification workshops on Tuesday December 7, there are many sessions that also provide opportunities for re-certification credits. Some of the topics include:

- native plants-fad or fabulous
- using soil testing to develop a turf fertility program
- > everything you need to know about irrigation fittings and gluing pipe
- > turfgrass ornamental disease and diagnosis
- wetland planning and construction
- pesticides and their families
- golf course remodeling

It is now past time for early bird registration which was November 12. To receive an application or for more information contact the Rocky Mountain Regional Turfgrass Association (RMRTA) at (303) 770-2220 or email <u>rmrta@gwami.com</u>. (Brown)

ANNUAL CROP MANAGEMENT CLINIC SCHEDULED FOR JANUARY 4-6, 2000

The Crop Management Clinic for 2000 will be on Integrated Pest Management (IPM). This program will set the stage for the 3rd cycle of Colorado State University Cooperative Extension Crop Management Clinic that has become popular during the last 10 years.

The principals and techniques of IPM that will be covered will be the basis of subsequent yearly clinics on Corn, Wheat, Beans, Potatoes, Alfalfa, etc that will sequentially take place over the next multi-year cycle of Crop Management Clinics. The clinic is divided into 3 main sections, Principals of IPM, Practices of IPM and IPM and the Future.

As in prior years, the registration cost (\$150) for the 3-day clinic includes tuition, course notes with a reference collection, beverage breaks, and lunch on Wednesday. This fee will honor all registration postmarked and paid by December 1, 1999. Late registration will be \$200 and no single day registrations will be accepted.

For further information about program content, contact Frank Peairs at (970) 491-5945 or e-mail at fbpeairs@lamar.colostate.edu or contact Bruce Bosley at (970) 867-2493 or e-mail dbbosley@coop.ext.colostate.edu.

Registration forms can be obtained at your local Cooperative Extension office or by contacting the CSU Office of Conference Services via e-mail at ocsreg@lamar.colostate.edu or phone (970) 491-7501 or FAX (970) 491-3568.

We look forward to seeing you there. (Brown)

WORKER PROTECTION STANDARD

Do not forget that workers and pesticide handlers must be trained under the Worker Protection Standard (WPS) every five years. It has been about five years since WPS was passed, and the Farmworker Health and Safety Institute reports that agriculture is performing poorly. Based on a recent survey, WPS compliance on pesticide exposure prevention is below 50%. Expect greater enforcement of WPS. Failure to comply with WPS could mean substantial liability (law suits) for the operation. (McDonald)

NEED USDA INFORMATION?

The newly updated directory, "How To Get Information from USDA," is located at: <u>http://www.usda.gov/news/howto/howto.htm</u> (McDonald)

POLICY PAPER ON ROLE OF USE-RELATED INFORMATION PUBLISHED

On July 14, 1999, EPA published a Federal Register notice announcing the availability of a draft document for public comment- The Role of Use-Related Information in Pesticide Risk Assessment and Risk Management. This paper is being released for a 60-day public comment period, as part of a process developed in conjunction with the Tolerance Reassessment Advisory Committee (TRAC) to ensure that EPA s policies related to implementing the Food Quality Protection Act (FQPA) are transparent and open to public participation. The paper announced in this notice summarizes the types of use-related information used by EPA in risk assessment and risk management, where the data come from, and how the Agency employs these data.

The Federal Register notice includes questions on which EPA is particularly seeking comment. The paper is available through the OPP Docket and on the Internet at: www.epa.gov/pesticides/trac/science/.

Comments can be submitted in person, by mail, or electronically as described in the Federal Register notices. The Federal Register notice is available electronically at <u>www.epa.gov/fedrgstr</u>. (McDonald)

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Where trade names are used, no discrimination is intended, and no endorsement by the Cooperative Extension Service is implied.

Sincerely,

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