



Chemically Speaking

Pesticide Information Office / P. O. Box 110710 / Building 164 / Gainesville, Florida 32611-0710 / Tel. (352) 392-4721

October 2014

Table of Contents

	Page
GMO Wheat Woes	1
Anti-Foul Play	2
Trade Pact Chemical Dialogue.....	3
Fumigant Funk	4
Pesticide Registrations and Actions	5
Food Related Actions	5
Pesticide Potpourri	6

GMO Wheat Woes

Roughly a year after the discovery of Monsanto's unapproved wheat in a single Oregon field disrupted U.S. wheat export sales, the GMO wheat has been found in Montana, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) said in late September. An APHIS investigation into the Montana incident was initiated on July 14, said Bernadette Juarez, director of investigative and enforcement services for APHIS.

The wheat was found growing at a research facility for Montana State University in Huntley, Montana, where field trials of Monsanto's wheat were conducted between

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

2000 and 2003, she said in a news conference. After conclusion of field trials, crop developers like Monsanto are obligated to inform regulators of any "volunteers," or plants that grow on their own following a previous harvest, Juarez said. USDA officials said there are no health and safety concerns from Monsanto GMO wheat, and that they do not believe the wheat has entered commerce. The area where the wheat was found primarily produces sugar beets and barley, not wheat, Juarez said.

The varieties of wheat found in Montana and Oregon differ significantly, but both contain Monsanto's herbicide-tolerant trait. There is no currently approved genetically modified wheat.

The wheat in question was developed by Monsanto to withstand treatments of its Roundup weed killer, but the company never commercialized the wheat because international buyers threatened to boycott U.S. wheat if the product was introduced to the marketplace. Monsanto said in 2004 that it would end efforts to commercialize the wheat, and the grain was supposed to have been destroyed or stored securely.

Word of the wheat in Montana comes after last year's discovery by an Oregon farmer of the GMO wheat in his field. That discovery prompted South Korea and Japan to temporarily halt purchases of U.S. wheat due to fears of contamination. APHIS has stated that despite a "comprehensive" investigation, the agency has not determined how the biotech wheat came to grow in the farmer's field. No field trials were ever authorized on the Oregon farm. Juarez

said there would not be any penalties or disciplinary action against Monsanto for the Oregon incident.

However, several farmers have sued Monsanto accusing the company of failing to protect the market from contamination by its unapproved wheat. In that case, wheat industry groups will have some money coming their way under a pending settlement between Monsanto and wheat farmers. In September, soft white wheat growers involved in the lawsuit told a federal judge they'd reached a tentative deal with Monsanto. They recently asked the judge for more time to hammer out the details before dismissing the case. That motion mentioned that "the parties have agreed on an amount of money that will be donated to wheat-related industry groups but have not finalized exactly which groups will share this donation." Monsanto and the soft white wheat farmers were still negotiating in late October and the company has not yet reached a deal with non-soft white wheat growers. (*AGProfessional*, 9/26/14 & *Capital Press*, 9/30/14).

Anti-Foul Play

Four Hillsborough County residents and two corporations pleaded guilty in federal court in early October to unlawfully manufacturing and selling a marine coating containing a banned

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

pesticide harmful to sea life. New Nautical Coatings Inc. of Clearwater and company president David Norrie, under a plea agreement, will pay a fine of \$1.2 million for illegally manufacturing and selling Biocop Anti-Fouling Coating after its registration with the EPA was cancelled and its manufacture and sale outlawed in 2005.

The coating, meant to prevent the growth of marine plants and animals on boat bottoms, contained the pesticide tributyltin methacrylate, or TBT. The EPA has found TBT to have “significant harmful effect on marine life.” The pesticide is linked to immune system suppression and can cause female snails and bivalves to develop male characteristics. New Nautical was the last company in the United States to legally sell a product containing TBT before the EPA outlawed it.

A joint investigation by the EPA’s criminal investigation division and Office of the Inspector General, along with the Florida Fish & Wildlife Conservation Commission, determined that New Nautical Coatings and Sea Hawk Refinish Line, also of Clearwater, along with their officers, manufactured the illegal anti-fouling coating then changed the labeling to make it appear that it had been produced before the ban, said EPA spokeswoman Davina Marraccini.

The coating was then sold under the company name Sea Hawk Refinish Line to a boat yard in South Florida. The company received more than \$2 million from the sales,

according to the U.S. Attorney’s Office. Norrie, 46, faces up to five years in prison, up to three years of supervised release and a \$250,000 fine and one- to five-years probation. Sentencing is scheduled Dec. 5. Sea Hawk Refinish Line and three others - Erik Norrie, 42, Jason Revie, 44 and Tommy Craft, 46 - pleaded guilty to willfully conspiring to distribute and sell an unregistered pesticide. They face penalties of up to a year in prison, up to one year of supervised release and a \$100,000 fine. Sea Hawk Refinish Line Inc. could be fined up to \$200,000 and receive up to five-years probation. All are likely to receive less than the maximum sentences under federal sentencing guidelines. (*Tampa Bay Online*, 10/6/14).

Trade Pact Chemical Dialogue

The European Union is seeking to contain a new complaint that a trade deal with the United States would undermine Europe's protection against dangerous chemicals, eager to avoid another front of resistance to the world's biggest trade accord. More than a year into negotiations the European Commission is engaged in a public relations battle to defend plans to deepen the transatlantic trading relationship and create a market of some 800 million people encompassing almost half the world's economy.

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

In a letter, the EU's trade chief will tell activists that a free-trade pact between the top two trading blocs will not expose Europeans to harmful chemicals or force the EU to change its laws. Under EU rules, chemicals must be proved to be safe before they are used. In the United States, chemicals must be shown to be harmful to be banned.

Some European public safety and environmental groups say a trade deal with the United States would allow U.S. companies to import chemicals considered toxic or dangerous in Europe. "A possible agreement would under no circumstances result in the lowering of existing EU environmental and health standards with regard to chemicals," EU Trade Commissioner Karel De Gucht wrote, referring to the Transatlantic Trade and Investment Partnership, or TTIP, which is under negotiation. "TTIP will have no chilling effect on the implementation of existing EU chemicals regulations," the letter said.

Parties hope an EU-U.S. free-trade deal, which could generate \$100 billion a year for both the EU and the United States, can be clinched next year. One of the main economic gains is through streamlining regulation, but EU and U.S. rules on chemicals are an example of very different positions where another approach must be found. Negotiators said there was never any intention to adopt common regulations on chemicals, and officials were looking at practical ways for regulators to work together. Within the trade deal, the European Union aims only to better classify and label

chemicals, share data on chemicals more effectively and protect confidential business information to make systems more efficient and cut bureaucracy and costs. (*Reuters*, 10/3/14).

Fumigant Funk

Dozens of residents in Hillsborough County have hired a lawyer to fight against use of the product Paladin, a sulfur-containing soil fumigant that they think is causing them repeated bouts of bronchitis, shortness of breath, chemical burns in their noses, severe headaches and the need to use inhalers. The Florida Department of Health is investigating 30 cases that involve people who think they are sick as a result of the fumigant. So far, it has pinpointed 18 individuals thought to be suffering from fumigant-related illnesses and warrant further study.

Officials with Paladin's manufacturer, Arkema, mailed out a letter to residents in the area as a way for the company to ensure residents have "a clear line of communication" to get the facts about Paladin. Florida Department of Agriculture and Consumer Services officials told residents at a meeting in late September that there are no ill health effects associated with Paladin. However, dozens raised their hands to say they thought Paladin had caused them health issues. Now

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

department officials say they are questioning the manufacturer, investigating the complaints and at some point will meet again with residents.

Under 10 percent of the 100 or so strawberry farmers in Hillsborough County are using Paladin, and others have chosen to use other fumigants to kill pests and weeds in the soil, said Kenneth Parker, director of the strawberry growers group. Many use a pesticide called Pic-Clor 60, which has not drawn complaints from the public. Ronnie Young, who farms about 200 acres of strawberries and has used Paladin for two seasons, said he is skeptical of the health claims.

He and his family and some farmworkers live on the edge of the Paladin-treated fields, and nobody has suffered any ill effects, he said. “We ended up with Paladin because we were losing methyl bromide,” Young said. “It first came to our attention six or seven years ago, ... and we continued to monitor the research. It seems to be very effective, ... so when it became licensed and labeled for strawberry use, we put some out last year and again this year.”

Conditionally registered by the EPA in 2010, Paladin was first used by Hillsborough County farmers last year. The fumigant, which has a strong odor of garlic, or what some describe as smelling like the remains of a dead animal was noticed by area residents in the Dover area. However, tarping the treatments has provided substantial mitigation of the smell when used.

The EPA is evaluating data Arkema submitted in August, federal officials say. “The agency bases its decisions (to register Paladin for use) on sound science and is confident that DMDS (dimethyl disulfide) is safe when label directions are followed,” the EPA said in an email. “If new scientific information comes to light indicating that DMDS poses risks to human health or the environment that cannot be mitigated or managed through other measures, the agency will move quickly to take appropriate regulatory action.” (*Tampa Bay Online*, 10/13/14).

Pesticide Registrations and Actions

Food Related Actions

- The Florida Department of Agriculture and Consumer Services’ (FDACS) request for the use of Belay (clothianidin) under specific exemption of FIFRA Section 18 for the control of Asian citrus psyllid in citrus has been issued by the U.S. EPA. The current emergency exemption will expire at the end of October. (FDACS letter, 10/6/14).
- The FDACS’ request for the use of Transform (sulfoxaflor) under specific exemption of FIFRA Section 18 for the

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

control of sugarcane aphid in forage sorghum has been issued by the U.S. EPA. The current emergency exemption will expire at the end of December. (FDACS letter, 10/6/14).

Pesticide Potpourri

- Alfalfa hay exported to China from the U.S. is currently in quarantine due to the detection of GMO traits according to the USDA. This follows last year, when a Washington State grower's hay was rejected after it tested positive for GM traits. Chinese officials are preparing to implement more stringent testing thresholds to keep the GM alfalfa out of imports. According to a spokesperson, the USDA has been working with authorities and the U.S. alfalfa industry to find out why 'certified' alfalfa has GM traits and to come to an agreement. Stakeholders are frustrated by the lack of information and the slow progress related to changing GMO testing sensitivity in hay, says Harry Kreeft, plant pathologist and nematologist with Western Laboratories in Parma, ID who conducts GM and other testing for the industry: "Right now, everybody is absolutely grabbing at the dark," explains Kreeft, "We don't get any information from the USDA. We don't get any information from the Chinese side. Our customers have no clue what's going on." The current threshold of acceptance is 5% GMO by Chinese importers, but this could be tightened to 0.2%, and growers would be

hard pressed to meet these standards with unintended cross-pollination. (*GlobalResearch*, 10/3/14).

- Imposing a 25 percent tax on phosphorus, used as a fertilizer primarily on corn, could reduce soluble phosphorus (P) concentrations in Ohio watersheds by about 8 percent, according to an analysis led by Brent Sohngen, a professor at Ohio State University. Sohngen has studied the economics of conservation programs and nonpoint-source pollution, or pollution from diffuse sources such as farmland. Although water flows indicate that there have been more large rainfall events in the past 15 years than previously, and that these may have increased soluble phosphorus in the water, phosphorous pricing also impacted water P values greatly. Higher prices, both for corn and for phosphorus itself, appear to have the largest impact on water quality, Sohngen said. As a result of higher phosphorus prices in 2005 to 2010, farmers applied less phosphorus to the land, and up to a 20 percent reduction in phosphorus occurred in water relative to what it would have been. While Sohngen admits that imposing such a tax on phosphorus fertilizer is an idea farmers would understandably resist, he suggests they may prefer it over possible stringent regulations on phosphorus use. "A tax is less invasive, and farmers would still have a choice," he said. "They can pay the tax and apply as much phosphorus as they want, or not. "A few farmers will pay the tax and apply that phosphorus, but others will decide not to, and that will be just enough to make a difference." (*AGProfessional*, 9/30/14).

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

- Crop biotechnology has reduced the amount of chemical pesticide spraying worldwide by 474 million kilograms, or 9 percent, over the past 15 years, according to a report by PG Economics, a UK-based advisory and consultancy services provider specializing on plant biotechnology, agricultural production systems, agricultural markets and policy. The reduction is equivalent to the total amount of pesticide active ingredient applied to arable land in member countries of the European Union over a period of one-and-a-half crop years, the report noted. As a result, this has decreased the environmental impact associated with pesticide use on the area planted to biotech crops by 18.1 percent. The report also pointed out that crop biotechnology has contributed to significantly reducing the release of greenhouse emissions from agricultural practices due to the reduced use of fuel and additional soil carbon storage from reduced tillage with biotech crop varieties. In 2011, this was equivalent to removing 23 billion kilograms of carbon dioxide from the atmosphere or equal to removing 10.2 million cars from the road for one year. (*Inquirer*, 10/17/14).



Mark Mossler
Doctor of Plant Medicine
plantdoc@ufl.edu

Fred Fishel
Professor & Pesticide Coordinator
weeddr@ufl.edu

Linda Kubitz
Information & Publications Coordinator
llk@ufl.edu

POISON CENTER EMERGENCY TELEPHONE SERVICE: (800) 222-1222.

NATIONAL PESTICIDE INFORMATION CENTER (NPIC) NUMBER: (800) 858-7378

THE INFORMATION GIVEN HEREIN IS SUPPLIED WITH THE UNDERSTANDING THAT NO DISCRIMINATION IS INTENDED AND NO ENDORSEMENT BY THE FLORIDA COOPERATIVE EXTENSION SERVICE IS IMPLIED. PERMISSION IS GRANTED TO REPRODUCE FULL CONTEXT TO ANY ITEM IN CHEMICALLY SPEAKING. PASS IT ALONG WITH YOUR GOOD JUDGMENT.

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>

UF|IFAS

UNIVERSITY of FLORIDA

Institute of Food and Agricultural Sciences

Cooperative Extension Service

Pesticide Information Office

P.O. Box 110710

Gainesville, FL 32611-0710

Visit *Chemically Speaking* on the Web at: <http://pested.ifas.ufl.edu/newsletter.html>