# PEP-Talk, September/October, 2011

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# REVIEW SCHEDULES FOR PYRETHROIDS AND PYRETHRINS

EPA is reevaluating pyrethroids and pyrethrins as part of a registration review process. Pyrethrins are botanical insecticides made from chrysanthemum flower extracts and pyrethroids are synthetic insecticides whose chemical structures are adapted from pyrethrins so they act in a similar manner.

The reevaluation process started in 2010 and is scheduled to be completed in 2012. EPA has published the timeline for the products. It's available at: http://www.epa.gov/oppsrrd1/reevaluation/pyrethroids-pyrethrins.html. The website also contains information about actions that have been taken as a part of this process so far. (Source: EPA Office of Pesticide Programs)

#### OCTOBER DEADLINE LOOMS FOR NPDES PERMITS

October 31 is the deadline for pesticide applications for products registered under FIFRA to be required to have a National Pollution Discharge Elimination System (NPDES) permit under the Clean Water Act when applied to or near navigable waters. The requirement has been ordered by a federal court and the original implementation date was moved from April to October 31.

A bill was passed in the U.S. House of Representatives that would amend FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and the Federal Water Pollution Control Act (commonly known as the Clean Water Act) to clarify the use of pesticides in

or near navigable water and for other purposes. The bill is currently in committee in the Senate and will require a vote of 60 senators to bring it to the floor. More information is available at: http://www.govtrack.us/congress/bill.xpd?bill=h112-872.

(Sources: GovTrack.us and Ohio Mosquito Control newsletter)

## ARRESTS MADE FOR ILLEGAL PESTICIDE SALES IN CHINATOWN

Twelve arrests were made in New York's Chinatown for illegal distribution and sale of unregistered and misbranded pesticides that were sold out of multiple locations. The pesticides were packaged and labeled in a way that could be mistaken for cookies or cough medicine. One woman was hospitalized for ingesting a rodenticide she thought was medicine. The rodenticide product contained the active ingredient brodifacoum at 61 times the amount allowed by EPA.

The pesticides that were sold were not registered by EPA, and some contained chemicals not approved for commercial sale in the U. S. Many of the products were missing required label warnings and some labels were primarily written in Chinese.

The arrests were the result of a coordinated investigation by federal, state and city agencies. Undercover agents were able to purchase restricted use rodenticides that contained brofidacoum and bromadiolone as well as products with sodium fluoroacetate which is a restricted used product for coyote control. These products were packaged for consumers to use to control mice, rats, cockroaches and termites.

(Source: EPA Office of Pesticide Programs, September 20, 2011)

# SPECIAL ISSUE – PESTICIDE TOLERANCES

## WHAT ARE PESTICIDE TOLERANCES?

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) gives EPA the responsibility to regulate the pesticides that are used by growers to protect crops. As part of the registration process of these products, EPA sets a tolerance or maximum residue level of the pesticide that can remain in or on foods marketed in the U.S. The tolerances are set by EPA based on the potential risk to human health posed by that pesticide.

All potential routes of exposure are considered by EPA when establishing tolerances which includes food, water and home environments. The exposure through consumer's diets is also part of the registration and tolerance setting process. These tolerance considerations are reflected on the pesticide label through the crops and sites listed for use and the pre-harvest intervals for the individual crops.

(Sources: EPA Pesticide Fact Sheet: Pesticide Tolerances, Chemically Speaking, University of Florida Extension, July, 2011)

## PESTICIDE RESIDUE DATA REPORT

The Pesticide Data Program, conducted by USDA, provides data for EPA to utilize when evaluating tolerances for registered pesticides. The program measures actual residues present in food grown in various regions of the U.S. and overseas.

In the 2009 report, residues exceeding the tolerance level were only detected in 0.3 percent of all samples. Residues with no established tolerance were only found in 2.7 percent of the samples. In the finished water samples tested, no residue detections exceeded EPA Maximum Contamination Levels.

(Source: Pesticide Data Program, Annual Summary, Calendar Year 2009)

#### HOMEMADE PESTICIDES

FIFRA, the federal law that regulates pesticides, provides that EPA must have a registration process for any product that claims to essentially be a pesticide. A pesticide is defined as a substance that prevents, destroys, repells or mitigates any pest. A pest can be insects, mice and other animals, unwanted plants (weeds), fungi or microorganisms such as bacteria or viruses.

Scientific evaluation, human safety and occupational exposure are included with other items in the registration and tolerance process used by the EPA for pesticide products. There are specified products that are considered minimal risk and are exempted from registration. These products are listed on EPA's website at: http://www.epa.gov/oppbppd1/biopesticides/regtools/25b\_list.htm.

A concern about home remedies, or homemade pesticides, is that these unlabeled products have not been evaluated for human health risks. No tolerances have been established for crops and no occupational exposure has been studied. Some of these products could pose a significant health risk if misused. Health Canada addresses this risk in a fact sheet about homemade pesticides that is available at: http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/homemade-artisanaux-eng.php.

## DIRTY DOZEN REBUTTAL

A University of California-Davis (UC-Davis) study challenges the methodology used by the Environmental Working Group (EWG) to establish their claim that consumers can significantly lower their pesticide consumption by avoiding conventionally-grown varieties of 12 fruits and vegetables – which the EWG has called the "Dirty Dozen."

The UC-Davis study was conducted by their Department of Food Science and found that consumer exposure to the ten most common pesticides found on the list's commodities are well below levels to cause any biological effect. The study contends that there is no evidence that substituting organic forms of commodities on the EWG list will lead to measureable consumer health benefit. The UC-Davis Study is available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3135239/.

More information about scientific reviews of health effects of pesticide residues on food is available at: http://www.safefruitsandveggies.com/. (Source: Chemically Speaking, University of Florida Extension, August 2011)

## EPA DENIES REQUEST TO REVOKE TOLERANCES

The American Bird Conservancy (ABC) petitioned EPA to revoke tolerances for 13 active ingredients used in foreign countries on coffee, bananas and other fruits and

vegetables. Most of the commodities are imported from Mexico and Central America. The 13 active ingredients include diazinon, dithianon, diquat, naled, dimethoate, fenamiphos, mevinphos, methomyl, phorate, terbufos, dichlorvos (DDVP), cadusafos and cyproconazole.

The 13 active ingredients noted by the American Bird Conservancy do not have a corresponding registration in the U.S. The ABC asked for the tolerances to be revoked under the Endangered Species Act to protect migratory birds that may travel to these countries and feed in fields where these crops are grown.

The request denied by EPA primarily because the tolerances address food safety and not the protection of migratory or endangered birds. More information is available at: http://epa.gov/oppfead1/cb/csb\_page/updates/2011/revoke-tol.html. (Source: EPA Office of Pesticide Programs, Aug. 10, 2011, EPA Pesticide Fact Sheet: Pesticide Tolerances)

#### PESTICIDE CROP WATCH

Activist Group Seeks to Ban Atrazine

EPA is accepting comments on a petition from the group called Save the Frogs that is requesting the agency to ban the use and production of atrazine. Comments must be received by November 14. More information is available at:

http://www.gpo.gov/fdsys/pkg/FR-2011-09-14/html/2011-23516.htm.

(Source: EPA Office of Pesticide Programs News Release, Sept. 14, 1011)

#### UPCOMING EVENTS

More information about the following events is at: http://pested.osu.edu.

# OSU EXTENSION EDUCATOR INSERVICE

December 7 & 8, 2011, Ohio 4-H Center, Columbus OSU Campus

# 2012 OHIO COMMERCIAL PESTICIDE APPLICATOR RECERTIFICATION CONFERENCES

January 31, 2012, Kalahari Conference Center, Sandusky

February 8, 2012, John S, Knight Center, Akron

February 15, 2012, Dayton Convention Center

March 8, 2012, Columbus Convention Center

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