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# SHORT SUBJECTS AND TIMELY TIPS FOR PESTICIDE USERS

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#### BIOLOGICAL CONTROL, IPM, AND EXOTIC PESTS PEST CONTROL

### BIOLOGICAL CONTROL INITIATIVES AGAINST PURPLE LOOSESTRIFE IN CANADA

(Source: Pest Management News, Vol. 11, Issue 3-4, 1999)

Purple loosestrife (*Lythrum salicaria* L., Lythraceae) was introduced into North America in the early 1800's. Today purple loosestrife can be found in every Canadian Province. As a result, provincial coalitions made up of numerous stakeholder groups have been formed in Alberta, Manitoba and Saskatchewan. "Current purple loosestrife management efforts are focused on the introduction and establishment of four biological control agents." *Galerucella calmariensis* L. (Coleoptera: Chrysomelidae) and *G. pusilla* Duftschmid, leaf-eating beetles approved for introduction in Canada and the Unites States in 1992, *Hylobius transversovittatus* Goeze

(Coleoptera: Curculionidae), a root-mining weevil and *Nanophyes marmoratus* Goeze, a flower-feeding weevil. To date, Canada is reporting that the biological control effort has been a large success. For a copy of the article contact Pat Skyler, (916) 454-0817 or cpskyler@fs.fed.us. For additional information -

CONTACT: CORY LINDGREN (MANITOBA) (204) 467-3269

#### THE FORT KNOX OF EXOTIC WEED DISEASES

(Source: Agricultural Research Magazine, Vol. 48, No. 5, May 2000)

In Frederick, MD there are five greenhouses that "are home to an unruly tangle of noxious weeds." The greenhouses are part of a "microbial containment (quarantine) facility operated by the Agricultural Research Service Foreign Disease-Weed Science Research Unit in Frederick. The greenhouses are the "first stop in a national campaign to reunite exotic weeds like yellow starthistle and Russian knapweed with their homeland's natural enemies." The approach – classical biological control – involves importing the exotic weed's natural enemy from abroad, then releasing it in regions that are being overrun by its host. For a copy of the article contact Pat Skyler (916) 454-0817, email: pskyler@fs.fed.us

For additional information -

CONTACT: DOUGLAS LUSTER, WILLIAM BRUCKART or NORMAN SCHAAD (MD)

(301) 619-7340

### REGULATORY

## CHLORPYRIFOS REVISED RISK ASSESSMENT AND AGREEMENT WITH REGISTRANTS

(Source: US EPA, Revised Risk Assessment and Agreement with Registrants, June 2000)

"EPA has released its revised risk assessment and announced an agreement with registrants to eliminate and phase out certain uses of the organophosphate pesticide clorpyrifos. Also known as Dursban, Lorsban, and other trade names, chlorpyrifos is one of the most widely-used insecticides in the U.S., both in agriculture and in and around the home." For additional information on the chlorpyrifos decision contact EPA's Office of Pesticide Programs (703) 305-5017 or visit their website at <www.epa.gov/pesticides/announcement6800.htm>.

For a copy of the Revised Risk Assessment and Agreement with Registrants –

CONTACT: PAT SKYLER (CA) (916) 454-0817 pskyler@fs.fed.us

## NEW BIOCHEMICAL PESTICIDE REGISTERED AS AN ALTERNATIVE TO METHYL BROMIDE

(Source: EPA Press Release, Wahington, DC, 5/18/2000)

"EPA registered a new biochemical pesticide, the Harpin protein (Trade Name MESSENGERTM) on April 19, as an alternative to conventional, synthetic pesticides such as methyl bromide. This biochemical pesticide is registered for use on field crops, trees, turf, and ornamentals to control a wide variety of fungal, bacteria, and viral pathogens as well as several insect pests. Unlike most pesticides, the Harpin protein does not act directly on the target pest. Instead, it activates a natural defense mechanism in the host plant, called systematic acquired resistance that makes the plant resistant to a wide range of fungal, bacterial and viral diseases. The Harpin protein also protects against certain nematodes and fungal diseases that have few effective controls except methyl bromide, a broad-spectrum pesticide that is believed to contribute to stratospheric ozone depletion and have adverse effects on human health. The Harpin protein is non-toxic and not expected to pose risks to human health or the environment. Because the product is applied at low rates and degrades rapidly in the field, no residues are expected on treated crops. In addition, studies demonstrate no toxicity to humans and no adverse effects on many species of wildlife (e.g., birds, fish, honeybees, aquatic invertebrates, non-target plants and algae). During its experimental use stage, the Harpin protein was used on tomatoes as a component of Integrated Pest Management programs, thereby decreasing the use of conventional pesticides by 70 percent while outperforming them in effectiveness. EDEN Biosciences Corp. of Bothell, Wash., was granted registrations for both the Harpin protein and MESSENGERTM (the only product containing this protein as an active ingredient)." For more information visit EPA's website <a href="http://www.epa.gov/pesticides/biopesticides/">http://www.epa.gov/pesticides/biopesticides/</a>

# EPA DEVELOPS NEW FACT SHEETS ON MOSQUITO CONTROL PESTICIDES

(Source: EPA's Office of Pesticide Programs, 05/18/00)

EPA recently announced the release of new consumer fact sheets that address the role pesticides play in mosquito control programs. The factsheets provide answers to basic questions about EPA's role in supporting state and local mosquito control programs, risks and benefits of pesticides used in mosquito control and how pesticides are used in combination with mosquito prevention techniques. The titles include: Questions and Answers: Pesticides and Mosquito Control; For Your Information: Larvicides for Mosquito Control; For Your Information: Synthetic Pyrethroids for Mosquito Control; For Your Information: Naled for Mosquito Control; For Your Information: Malathion for Mosquito Control. These documents are available on EPA's website at: http://www.epa.gov/pesticides/factsheets/skeeters.htm or for a copy of any or all of these fact sheets —

CONTACT: PAT SKYLER (CA) (916) 454-0817 pskyler@fs.fed.us

### EPA ANNOUNCES RECALL OF TWO PESTICIDE PRODUCTS SOLD IN FAULTY PULL 'N SPRAY CONTAINERS

(Source: EPA Press Release, Washington, DC, 5/30/00)

"EPA is announcing a voluntary consumer product safety recall for two faulty Pull N' Spray home pesticide products. This alert only affects products sold in Pull 'N Spray containers; the problem is with the faulty container, not with the pesticide itself." The products involved are: Monsanto Corporation's Roundup<sup>R</sup> Ready-To-Use Weed and Grass Killer and Scott's Company's Ortho<sup>R</sup> Ready-To-Use Home DefenseTM Indoor and Outdoor Insect Killer5. They are both sold in 1.33-gallon plastic containers and have a t-handle pump and application wand. For a copy of the press release contact Pat Skyler (916) 454-0817, pskyler@fs.fed.us - for additional information visit <a href="http://www.epa.gov/pesticides">http://www.epa.gov/pesticides</a> or -

CONTACT: MANUFACTURERS' CONSUMER HELPLINE 1-(800) 225-2883

#### **HUMAN HEALTH**

#### LYME DISEASE

The Occupational Safety and Health Administration (OSHA) is urging lyme disease precautions in their recently published Hazard Information Bulletin dated May 23, 2000. The bulletin is intended to aid employers in implementing an effective program to reduce the risk of Lyme disease in outdoor workers. A copy of the May 23<sup>rd</sup> OSH Hazard Information Bulletin can be found at <a href="http://www.osha-slc.gov/dts/hib/index.html">http://www.osha-slc.gov/dts/hib/index.html</a> or -

CONTACT: PAT SKYLER (CA) (916) 454-0817 pskyler@fs.fed.us

#### **MISCELLANEOUS**

#### TANOAK/OAK DECLINE - MARIN COUNTY, CALIFORNIA

The County of Marin in California has passed a Resolution requesting the governor to proclaim a state of local emergency for tanoak/oak decline in Marin, Sonoma, Santa Cruz, Santa Clara and Monterey counties. The California Department of Forestry and the USDA Forest Service, in cooperation with the Wildlife Conservation Society, are providing funds for a road survey that will determine the incidence and severity of tanoak/oak decline statewide. For a copy of the resolution contact Pat Skyler (916) 454-0817, email: pskyler@fs.fed.us - For additional information -

CONTACT: NICOLE PALKOVSKY (CA) (415) 499-3041 npalkovsky@marin.org

#### NEW FARM SPRAYER USES HALF THE PESTICIDE

(Source: *Agnet*, May 31, 2000)

Ohio State University (OSU) researchers have invented a new farm sprayer that uses half the pesticide of a conventional sprayer. "Scientists at OSU's Ohio Agricultural Research and Development Center (OARDC) say the 'Spray less' double-nozzle sprayer – designed to be retrofitted to hydraulic sprayers – slashes pesticide rates by 50 percent to 75 percent and increases pesticide effectiveness without increasing spray drift."

Leading the research was OSU entomologist Robin Taylor and Andrew Chapple (formerly with OARCD). Co-researchers were Frank Hall and Roger Downer of the OARCD lab. For more information on the research visit <a href="http://www.oardc.ohio-state.edu/lpcat/Dblenozl.htm">http://www.oardc.ohio-state.edu/lpcat/Dblenozl.htm</a> or for a copy of the article –

CONTACT: PAT SKYLER (CA) (916) 454-0817 pskyler@fs.fed.us

#### MODEL PREDICTS UNDERGROUND FLOW

(Source: Agricultural Research Magazine, Vol. 48, No. 5, May 2000)

HYDRUS is a state-of-the-art computer model which allows researchers, engineers, extension specialists and students worldwide to better understand how water and chemicals move through the soil. The model is the result of a CRADA (Cooperative Research and Development Agreement) between the George E. Brown, Jr., Salinity Laboratory (ARS) in Riverside, CA and the Colorado School of Mines' International Ground Water Modeling Center, Golden, CO. "The model allows users to simulate, in one or two dimensions, water moving from the soil surface to and into groundwater." It can also be used to visualize how chemicals would be transported in different soils. For additional information or for a demonstration version of the model –

CONTACT: RIEN van GENUCHTEN (CA) (909) 369-4847

### **PUBLICATIONS**

McConnell, T.J., E.W. Johnson, and B. Burns. 2000. A guide to conducting aerial sketchmapping surveys. FHTET 00-01. Forest Health Technology Enterprise Team, Ft. Collins, CO. For a copy of this report —

CONTACT: Georgia Haynes (CO) (970) 295-5839 ghaynes@fs.fed.us

Due to numerous requests from federal agencies *Roadside Use of Native Plants*, which has been out of print since the first of the year, is now available from Island Press, 1-(800) 828-1302, Fax (707) 983-6414.

Biological Control of Insect Pests in Forested Ecosystems: A Manual for Foresters, Christmas Tree Growers and Landscapers by McCullough, D.G., Katovich, S.A., Mahr, D.L., Neumann, D.D., Sadof, D.S., and Raupp, M.J. "is a valuable source of information for anybody interested in biological control in forested ecosystems. For a copy of the book review contact Pat Skyler (916) 454-0817, email: pskyler@fs.fed.us or for ordering information –

CONTACT: MICHIGAN STATE UNIVERSITY (MI) (517) 355-0240

How Herbicides Work: Biology to Application, by Linda Hall, Hugh Beckie, and Tom Wolf, includes chapters on soil-applied herbicides, amino acid biosynthesis inhibitors, ACCase inhibitors and auxinic herbicides. In spring 1999 a second edition was released that added five new chapters on photosynthetic inhibitors, herbicide resistance and application aspects: dose transfer, adjuvants and spray drift. For more information –

CONTACT: HUGH BECKIE (SK) (306) 956-7251 BeckieH@em.agr.ca

#### **UPCOMING EVENTS**

- 9-12 July 2000. **2000 American Society of Agricultural Engineers Annual International Meeting**, Midwest Express Center, Milwaukee, Wisconsin. Contact: Brenda West, (616) 428-6327, email: west@asae.org or visit their website at <a href="http://asae.org">http://asae.org</a>>
- 11-12 July 2000. **California Conference on Biological Control II**, Riverside, CA. For additional information, Phone (909) 787-7292, or visit their website at <a href="http://www.biocontrol.ucr.edu/CCBCII.html">http://www.biocontrol.ucr.edu/CCBCII.html</a>
- 12-13 July. **National Spray Model and Application Technology Working Group Meeting,** Milwaukee, WI. Contact: Harold Thistle (304) 285-1574, email: hthistle@fs.fed.us or Pat Skyler (916) 454-0817, email: pskyler@fs.fed.us
- 16-19 July 2000. **The Insect Toxicology 2000: Insects in a Toxic Environment**, an international conference emphasizing mechanisms and selectivity, Clark Kerr Campus, Berkeley, CA. Contact: John Casida or Gary Quistad (510) 642-5424, ectl@nature.berkeley.edu
- 31 July 3 August 2000. **The Southern Forest Insect Work Conference**, Raddison Hotel, Memphis, TN. Contact: John L. Foltz (352) 392-1901, ext. 130, foltz@ufl.edu or visit their website at <a href="http://www.sfiwc.org">http://www.sfiwc.org</a>
- 14-18 August 2000. **Western International Forest Disease Work Conference**, Kohala Coast, Hawaii. Contact: Jerry Beatty, Phone (503) 668-1474, email: jbeatty/r6pnw\_mthood@fs.fed.us or visit their website at <a href="http://www.fs.fed.us/foresthealth/technology/wif">http://www.fs.fed.us/foresthealth/technology/wif</a>
- 25-28 September 2000. **North Central Forest Pest Workshop**, Rhinelander, WI. Workshop theme is "Implementation of forest pest management to protect the diverse values that our forests provide." Contact: Kyoko Shimizu (715) 365-8934, email: shimik@dnr.state.wi.us

16-20 November 2000. **2000 Society of American Foresters National Convention**, Washington Hilton & Towers, Washington, DC. Visit their website at <a href="http://www.safnet.org/calendar/future.html">http://www.safnet.org/calendar/future.html</a>>

2-5 August **2001**. **The Practice of Biological Control: Importation and Management of Natural Enemies in the New Millennium,** Bozeman, MT. For additional information contact: Tim Kring (501) 575-3186.

### **CALL FOR ARTICLES**

Please forward to me all articles, meeting announcements, publications, reports, or other items of interest that you would like included in the next issue of *Short Subjects & Timely Tips for Pesticide Users*. Please include the name, State, and telephone number of the individual who can be contacted for further information:

CONTACT: PAT SKYLER (CA) (916) 454-0817/Fax (916) 454-0820 Email: pskyler@fs.fed.us

The Washington Office, Forest Health Protection, Forest Health Technology Enterprise Team sponsors, compiles, edits, and distributes this informal newsletter as a means of providing current information to forestry pesticide users. Comments, questions, and items of input are welcome and may be sent to Pat Skyler, Editor, USDA Forest Service, Remote Sensing Lab, 1920 20<sup>th</sup> Street, Sacramento, CA 95814, or by E-mail: cpskyler@fs.fed.us>. Reference to a commercial product or source in this newsletter does not constitute endorsement by the USDA Forest Service. Information should be verified by contacting the original source of information as neither the editor nor the USDA Forest Service guarantees the accuracy of the information provided in this newsletter. Pesticides can be injurious to humans, domestic animals, desirable plants, and fish or wildlife if they are not handled or applied properly. Use all pesticides in accordance with label precautions.