



**SHORT SUBJECTS
AND TIMELY TIPS
FOR PESTICIDE USERS**

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REGULATORY

**PROTECTION OF STRATOSPHERIC OZONE: PROCESS FOR EXEMPTING
CRITICAL USES OF METHYL BROMIDE**

(Source: Federal Register: May 10, 2002, Vol. 67, No. 91, pp. 31798-31801)

“SUMMARY: EPA is soliciting applications for the Critical Use Exemption from the phaseout of methyl bromide. This application process offers users of methyl bromide the opportunity to provide technical and economic information to support a ‘critical use’ claim.”

“The Critical Use Exemption is designed to allow continued production and import of methyl bromide after the phaseout for those uses that have no technically and economically feasible

alternatives. Because Critical Use Exemptions are exemptions from the January 1, 2005 methyl bromide phaseout, they will become effective after that date.”

Applications for the Critical Use Exemption must be postmarked on or before September 9, 2002. For information on submitting applications contact: Bill Chism, (703) 308-8136 (technical information); David Widawsky (703) 308-8150 (economic information); and Amber Moreen (202) 564-9295 (regulatory information); or view a copy of the Federal Register document at <http://www.epa.gov/fedrgstr/EPA-AIR/2002/May/Day-10/a11738.htm>.

If you are unable to access the internet and would like a copy of the document –

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EPA STATEMENT AND GUIDANCE ON IRRIGATED AGRICULTURAL HERBICIDE USES

(Source: Jesus Cota, USDA Forest Service, April 4, 2002)

On Friday, March 29, 2002, EPA released a statement clarifying that it will use the regulatory and enforcement authority under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to prevent the misuse of herbicides in agricultural irrigation systems. The statement confirms that lawful application of aquatic herbicides to ensure flow in an irrigation canal in a manner consistent with a product label does not require a National Pollutant Discharge Elimination System (NPDES) permit under the Clean Water Act. When done according to instructions on the product’s label, the application of an aquatic herbicide to maintain an irrigation system is governed by FIFRA and is exempt from the requirement to obtain an NPDES permit.

For questions and/or additional information –

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CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION ACTS TO PROTECT COMPOST FROM HERBICIDES

(Source: California DPR News Release, March 27, 2002)

“Sacramento – The California Department of Pesticide Regulation Thursday will begin cancellation action against 15 herbicide products, citing their potential hazard to compost.” The products being targeted contain the herbicide clopyralid which is used to control broadleaf weeds in residential lawns in California. “Clopyralid is a low-toxicity chemical that poses little hazard to people, animals, and most vegetation. However, research has shown that even low levels of clopyralid in compost can damage some vegetables”. The DPR will not take action against clopyralid products intended for other areas, including farmland, rangeland and forests. For additional information contact Glenn Brank, California Department of Pesticide Regulation (916) 445-3974.

On March 27th, Dow AgroSciences issued a press release in response to the DPR’s announcement. In it, they indicated that “Clopyralid is important because it is particularly effective on hard-to-control invasive weeds such as yellow starthistle, which currently infests about 15 percent of California.” Dow indicated that they would be getting back to DPR in the near future with a more

detailed response to the announcement. For a copy of the press release (which lists the products affected) and/or a copy of Dow AgroSciences March 27th press release –

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REVISED RISK ASSESSMENTS AVAILABLE

EPA has posted the revised risk assessments for the triazine pesticide, atrazine on their website at http://www.epa.gov/oppsrrd1/cumulative/other_cum_assessments.htm. If you are unable to access the internet and would like to receive a copy of this document –

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HUMAN HEALTH

PREDICTING THE RISK OF LYME DISEASE: HABITAT SUITABILITY FOR *IXODES SCAPULARIS* IN THE NORTH CENTRAL UNITED STATES

(Marta Guerra, Edward Walker, Carl Jones, Susan Paskewitz, M. Roberto Cortinas, Ashley Stancil, Louisa Beck, Matthew Bobo, and Uriel Kitron)

(Source: *Emerging Infectious Diseases*, Vol. 8, No. 3, March 2002[online], Center for Disease Control)

“Abstract: The distribution and abundance of *Ixodes scapularis* were studied in Wisconsin, northern Illinois, and portions of the Upper Peninsula of Michigan by inspecting small mammals for ticks and by collecting questing ticks at 138 locations in state parks and natural areas. Environmental data were gathered at a local level (i.e., micro and meso levels), and a geographic information system (GIS) was used with several digitized coverages of environmental data to create a habitat profile for each site and a grid map for Wisconsin and Illinois. Results showed that the presence and abundance of *I. scapularis* varied, even when the host population was adequate. Tick presence was positively associated with deciduous, dry to mesic forests and alfisol-type soils of sandy or loam-sand textures overlying sedimentary rock. Tick absence was associated with grasslands, conifer forests, wet to wet/mesic forests, acidic soils of low fertility and a clay soil texture, and Precambrian bedrock. We performed a discriminant analysis to determine environmental differences between positive and negative tick sites and derived a regression equation to examine the probability of *I. scapularis* presence per grid. Both analyses indicated that soil order and land cover were the dominant contributors to tick presence. We then constructed a risk map indicating suitable habitats within areas where *I. scapularis* is already established. The risk map also shows areas of high probability the tick will become established if introduced. Thus, this risk analysis has both explanatory power and predictive capability.”

The paper is available online at <http://www.cdc.gov/ncidod/EID/vol8no3/01-0166.htm> or -

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AFRICANIZED BEES DISCOVERED IN CENTRAL SAN JOAQUIN VALLEY

(Source: *California Agriculture*, Volume 56, Number 2, March/April 2002)

Two Africanized bees were recently identified in Tulare County, CA by Dave Nielsen, an entomologist with the University of California. This is the first time they have been found in the central San Joaquin Valley. According to Scott Kinnee, California Department of Food and Agriculture (CDFA), "They're moving up the San Joaquin Valley." He also stated "they're probably even further up than that, but the sampling hasn't been done yet." As the bees range grows and their contact with areas populated by humans and domestic animals increases, the number of stinging incidents has risen. Between December 1995 and late January 2002 seventy incidents of multiple stinging have been reported to CDFA. For more information visit CDFA's website at http://www.cdfa.ca.gov/phpps/pdep/ahb_profile.htm. For a copy of the article -

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MISCELLANEOUS

RELATIONSHIP BETWEEN SPRUCE BEETLE AND TOMENTOSUS ROOT DISEASE: TWO NATURAL DISTURBANCE AGENTS OF SPRUCE

(Kathy J. Lewis and B. Staffan Lindgren)

(Source: *Can. J. For. Res.* 32:31-37, 2002)

"Abstract: This project investigated the interaction between tomentosus root disease of spruce, caused by *Inonotus tomentosus* (Fr.:Fr.) S. Teng, and spruce beetle (*Dendroctonus rufipennis* (Kirby)). Both organisms are important agents of mortality and volume loss in boreal and sub-boreal spruce forests of British Columbia. They also occur in similar stand types with respect to species composition and tree age. One study involved an intensive survey of 23 spruce stands, where trees were sampled for both beetle and root disease. Tree condition (dead standing, live, windthrown) was also recorded. Few stands showed a significant relationship between incidence of spruce beetle and incidence of root disease, regardless of tree condition. Observations indicated that beetles actually tended to avoid severely infected trees. A second study involved pheromone baiting of paired healthy and infected trees, and measurements of phloem thickness. Two sites were used, one with very high (epidemic) populations of beetles, and the second with low (endemic) levels. Spruce beetle attacks were more successful on infected trees compared with healthy trees only at the site with endemic levels of beetle. Collectively, the results indicate that tomentosus root disease helps to maintain endemic levels of spruce beetle, and disease incidence may be useful as a tool to identify areas that may have endemic populations of spruce beetle."

For a copy of the paper -

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HABITAT SHAPE, SPECIES INVASIONS, AND RESERVE DESIGN: INSIGHTS FROM SIMPLE MODELS

(Graeme Cumming)

(Cumming, G. 2002. Habitat shape, species invasions, and reserve design: insights from simple models. *Conservation Ecology* 6(1):3[online].

“Abstract: Species invasions have become a major threat to global biodiversity. We currently lack a general theory of species invasions that allows us to make useful predictions about when and where invasions will occur, whether they will be successful, and whether they will alter ecosystem function in invaded habitats. One line of enquiry in developing such a theory is to focus on the characteristics of successful invaders. A second, complementary approach is to examine habitats of interest more closely and ask how the properties of the habitat that is being invaded affect the likelihood of invasion success. In this paper, I consider the importance of habitat shape (also termed “habitat topology” or “habitat geometry”) as a variable affecting the dispersal and abundance of invasive populations. I use two well-established simulation modeling approaches, namely, a cellular automation model and a reaction-diffusion model, to mimic species invasions in hypothetical habitats that cover a range of linear, branching, rectangular, and square shapes. The results suggest that invasions in more geometrically complex habitats will occur faster and may ultimately produce a higher abundance of the invasive species. Differences in invasion rates are not a simple consequence of differences in overall connectivity, as shown by a comparison of habitats with identical connectivities but different spatial arrangements of cells. Ultimately, if combined with other modeling approaches, these methods may be useful in generating recommendations for managers about the vulnerability of particular habitats and reserve networks to invasion.”

The article is available online at <http://www.consecol.org/Journal/vol6/iss1/art3/> or –

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NEW CD'S AVAILABLE

The CD entitled “**Forest Insects and Their Damage: Volume III and IV – Bark Beetles of North America**” has been released by Bugwood Network. The CD includes a set of USDA Forest Service publications that provide hot-linked identification, distribution and management information to accompany the 192 high-resolution images. Information and images of both hardwood and conifer bark beetles are included. The CD, along with the previously issued “**Forest Insects and Their Damage: Volume I and II – Forest Pests of North America**” can be ordered online at <http://www.barkbeetles.org>. Cost of the two CD set is \$25.00.

The USDA Agricultural Research Service has available a CD with the **Best Management Techniques for Grasshopper Populations**. It focuses on pasture/rangeland problems and is available free by contacting the Northern Plains Agricultural Research Laboratory, 1500 North Central Avenue, Sidney, MT 59270, phone (406) 433-5038, fax (406) 433-2020, Email: hoppercd@sidney.ars.usda.gov.

Available on CD are the **proceedings of the X International Symposium on Biological Control of Weeds held in Bozeman, MT, July 4-14, 1999**. In addition to the proceedings, the CD contains photographs from the event and the full text of “Host Specificity Testing of Exotic Arthropod Biological Control Agents – The Biological Basis for Improvement in Safety” a document published by the USDA Forest Service, Forest Health Technology Enterprise Team. For a copy of the free

CD contact Beth Redlin at the Northern Plains Agricultural Research Laboratory, 1500 North Central Avenue, Sidney, MT 59270, phone (406) 433-9427, fax (406) 433-5038, Email: bredlin@sidney.ars.usda.gov.

“**Biological Control of Leafy Spurge: Informational Resource CD**,” the first release in TEAM Leafy Spurge’s (TLS) Integrated Pest Management series offers a comprehensive overview of how to get and use biological control agents to control leafy spurge. It is intended as a companion to the “Biological Control of Leafy Spurge” manual. The manual is included on the CD in pdf format along with a “how-to” PowerPoint presentation on biological control of leafy spurge, a poster/publication section, photo gallery, an extensive bibliography, and more. The CD was produced by Steve Merritt, former TLS technical information specialist, and R.D. Richard, USDA-APHIS PPQ, Bozeman, MT, with the aid of the Northern Plains Agricultural Research Lab. For a copy of the free CD contact Beth Redlin or Jill Miller at the Northern Plains Agricultural Research Laboratory, 1500 North Central Avenue, Sidney, MT 59270, phone (406) 433-9427, fax (406) 433-5038, Email: bredlin@sidney.ars.usda.gov or jmiller@sidney.ars.usda.gov.

ON THE INTERNET

Find answers to questions such as: What percentage of threatened or endangered species in the U.S. is impacted by invasive species? - How can invasive species hurt the economy? - How much does it cost to deal with invasive species? – plus view pictures of commonly found invasive plants that may be in your own backyard and learn what you can do to help by logging onto The Nature Conservancy’s website at <http://nature.org/invasives/>.

The National Pesticide Telecommunications Network (NPTN) has changed its name to the National Pesticide Information Center (NPIC); however, the 800 telephone number remains the same (800-858-7378). The website is located at <http://npic.orst.edu>.

The USDA Agricultural Research Service has posted a new internet site which answers all kinds of questions about honey bees. The site provides information on beekeeping as a hobby or profession, crop pollination, honey bee biology, and related research. The site also maintains a Student Forum on Honey Bees that includes questions and answers for students grades K through 12. Visit the site at <http://gears.tucson.ars.ag.gov>. For additional information –

CONTACT: GLORIA DeGRANDI-HOFFMAN (AZ) (520) 670-6481
(Carl Hayden Bee Research Center)

PUBLICATIONS

Boyd, E.A. and Dr. G.L. Piper. 2002. Outsmarting the purple foe: Battling purple loosestrife with biological control. *Agricultural and Environmental News*, Issue No. 192, April 2002[online]. A copy of the article is available at <http://aenews.wsu.edu/Apr02AENews/Apr02AENews.htm> or contact Pat Skyler (916) 454-0817, Email: pskyler@fs.fed.us.

Durkin, P. and G. Diamond. 2002. Neurotoxicity, immunotoxicity, and endocrine disruption with specific commentary on glyphosate, triclopyr, and hexazinone: final report. SERA TR 01-43-08-04a. Submitted to the USDA Forest Service under GSA Contract No. GS-10F-0082F. A copy of the report is available on the internet at <http://www.fs.fed.us/foresthealth/pesticide/risk.htm> or contact Dave Thomas (703) 605-5342, Email: dthomas06@fs.fed.us.

Missoula Technology and Development Center (MTDC). Comparison of commercial deer repellents. 0124-2331-MTDC. USDA Forest Service, MTDC, Missoula, MT. For further information on animal repellants contact Andy Trent (406) 329-3912, Email: atrent@fs.fed.us. For a copy of the publication contact Jerry Taylor Wolf (406) 329-3978, Email: jtwolf@fs.fed.us.

Peterson, J.L., P.C. Jepson, and J.J. Jenkins. 2001. A test system to evaluate the susceptibility of Oregon, USA, native stream invertebrates to triclopyr and carbaryl. *Environmental Toxicology and Chemistry*, Vol. 20, No. 10, pp. 2205-2214. For a copy of the article contact Pat Skyler (916) 454-0817, Email: pskyler@fs.fed.us.

UPCOMING EVENTS

13-15 June 2002. The National Pest Management Association's (NPMA) Academy 2002, Tucson, AZ. Contact: NPMA, (800) 678-6722.

16-19 June 2002. The Entomological Society of America Pacific Branch Meeting, Lake Tahoe, NV. Contact: Frank Zalom, (530) 752-3687 or visit their website at <http://pbsa.ucdavis.edu/>.

16-30 June 2002. The Biology of Disease Vectors Course, Ft. Collins, CO. This course is being offered by Colorado State University. The course is sponsored by the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases and the MacArthur Foundation. Contact: Nancy DuTeau, (970) 491-8505, Fax (970) 491-1815, Email: nancy.duteau@colostate.edu or visit their website at <http://sci-site.com/bdv/>.

17-21 June 2002. Fourth International Conference on Forest Vegetation Management: Technical, Environmental and Economic Challenges of Forest Vegetation Management, Nancy, France. Contact Henri Frochot, Fax: 33-3-83-39-40-34, Email: ifvmc4@nancy.inra.fr or visit their website at <http://www.ifvmc.org>.

18-19 June 2002. The 2002 Invasive Species Symposium, Davis, CA. The symposium is sponsored by the University of California College of Agricultural and Environmental Science, Division of Agricultural and Natural Resources, IPM Program, Department of Entomology, Department of Plant Pathology, and the UCD chapter of Gamma Sigma Delta. Contact: Janet Brown-Simmons, (530) 752-0476, jbsimmons@ucdavis.edu or visit their website at <http://www.cevs.ucdavis.edu/Cofred/Public/Aca/ConfHome.cfm?confid=130>.

29 July – 1 August 2002. Southern Forest Insect Work Conference, Roanoke, VA. Contact: Brian Sullivan, (318) 473-7206, Email: briansullivan@fs.fed.us or visit their website at <http://www.sfiwc.org/2002/index.html>.

28-31 July 2002. American Society of Agricultural Engineers Annual International Meeting, Chicago, IL. Contact: Brenda West, (616) 428-6327, Email: west@asae.org or visit their website at <http://www.asae.org/meetings/am2002/index.html>

31 July–1 August 2002. National Spray Model and Application Working Group Meeting (held in conjunction with the American Society of Agricultural Engineers Annual International Meeting), Chicago, IL. Contact: Harold Thistle, (304) 285-1574, Email: hthistle@fs.fed.us or Pat Skyler (916) 454-0817, Email: pskyler@fs.fed.us.

15-16 August 2002. California Conference on Biological Control III, University of California, Davis, CA. Contact: Brenda Nakamoto, (530) 752-1606 or visit their website at <http://www.biocontrol.ucr.edu/CCBCIIIa.html>.

2-5 September 2002. Methodology of Forest Insect and Disease Survey in Central Europe, Krakow, Poland. Contact: Michael McManus, (203) 230-4321, Email: mlmcmanus@fs.fed.us or visit their website at <http://iufro.boku.ac.at/iufro/iufro.net/d7/wu70310/krakow/>.

9-13 September 2002. 50th Annual Meeting of the Western International Forest Diseases Work Conference, Powell River, B.C. Canada. Contact: John Muir, Fax: (250) 387-8740, Email: john.muir@gems1.gov.bc.ca or visit their website at <http://www.fs.fed.us/foresthealth/technology/wif/index.html>.

12-15 September 2002. California Urban Forest Conference – Planning for California's Urban Forests, Visalia, CA. Sponsored by California Urban Forests Council and California ReLeaf. Contact: Mel Johnson, (415) 647-4207, Email: caufc@attbi.com or Martha Ozonoff, (916) 557-1673, ext. 12, Email: martha.ozonoff@tpl.org.

11-13 October 2002. California Exotic Pest Plant Council Symposium, Sacramento, CA. For information visit their website at <http://caleppc.org/symposia/02symposium/symposium2002.html>.

22-23 October 2002. Aquatic Weed School 2002, UC Davis, CA. Learn about the biology, ecology, and management of important aquatic weeds and algae. All methods of practical management including mechanical, biological, cultural, and chemical will be discussed. Contact: Kitty Schlosser (530) 752-7091, Email: wric@vegmail.ucdavis.edu or visit their website at <http://wric.ucdavis.edu/education/aquaticweedschool02.html>.

27-30 October 2002. Invasive Plants – Global Issues, Local Challenges, Chicago Botanic Garden's Annual Conservation Symposium, Chicago, IL. Contact: Dr. Kay Havens (847) 835-8378, Email: khavens@chicagobotanic.org.

4-7 November 2002. Annual Gypsy Moth Review, Niagara Falls, Canada (being held in association with the Spray Efficacy Research Group (SERG) workshop, Nov. 7-9, same location). Contact: Patricia Cuglietta (613) 225-2342, Email: cugliettap@inspection.gc.ca.

7-9 November 2002. Spray Efficacy Research Group (SERG) workshop, Niagara Falls, Canada. Contact: Patricia Cuglietta (613) 225-2342, Email: cugliettap@inspection.gc.ca.

20-23 January **2003**. California Weed Science Society Conference, Santa Barbara, CA. Contact: Lars Anderson (530) 752-7870, Bruce Kidd (909) 698-3081, Pam Knoepfli (775) 626-7470 or visit their website at <http://www.cwss.org>.

11-14 March **2003**. Western Society of Weed Science Annual Meeting, Poipu Beach, Koloa, Hawaii. Contact: Wanda Graves, (510) 790-1252, Email: Wgraves431@aol.com.

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:

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The Washington Office, Forest Health Protection, Forest Health Technology Enterprise Team sponsors, compiles, edits, and distributes this informal information letter as a means of providing current information to forestry pesticide users. Recent copies can be viewed online at <http://www.fs.fed.us/foresthealth/pesticide/news.htm>. Comments, questions, and items of input are welcome and may be sent to Pat Skyler, Editor, USDA Forest Service, Remote Sensing Lab, 1920 20th Street, Sacramento, CA 95814, or by E-mail: pskyler@fs.fed.us. Reference to a commercial product or source in this information letter 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 information letter. 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.