

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

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BIOLOGICAL CONTROL, IPM, AND EXOTIC PESTS PEST CONTROL

**NEW REVOLUTIONARY PESTICIDE PROVEN SAFE FOR
PEOPLE AND THE ENVIRONMENT; INNOVATIVE PRODUCT
MADE OF NATURAL TREE OILS DESTROYS WIDE RANGE OF PESTS**

"NEW YORK, June 29/PR Newswire/ - In a major scientific breakthrough in man's constant struggle to control common pests and insects, EcoSMART Technologies, a Nashville-based company, has developed a new pesticide technology that has proven to be the safest and most effective for people, animals and the environment. Initial consumer products will be marketed under the "Bioganic" (TM) brand."

"The unique formulation, made from natural plant and tree oils widely used as food and cosmetic additives 'Generally Recognized as Safe' (GRAS) by the Food and Drug Administration, combines the killing power of chemical insecticides with the safety benefits of botanical insecticides. This new technology destroys ants, cockroaches, dust mites, flies, wasps hornets and a host of other common pests. It also economically and effectively controls insects that attack agricultural crops and flowers."

For a copy of the Press Release -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

PRECISION TARGETING, IPM, AND PESTICIDE RISK REDUCTION

(Source: *Access-Pesticides*, Vol. XXIV, No. 8, August 1999)

This article discusses implementation of IPM, using "scouting or monitoring; compatible alternative biological, cultural, mechanical, and chemical practices; and action thresholds." In order to get the information to implement this complex control system is where precision targeting comes in. "Precision targeting is a statistically-based computer program that identifies hot spots of pest infestation and predicts probable pest populations in unmonitored areas." For additional information on precision targeting -

CONTACT: RICHARD J. BRENNER (FL)

(352) 374-5903

rbrenner@gainesville.usda.ufl.edu

OR H. GLENN WILLIAMS (VA)

(703) 308-8287

williams.glenn@epa.gov

For a copy of the article -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

BIOLOGICAL-CONTROL HERBIVORES MAY INCREASE COMPETITIVE ABILITY OF NOXIOUS WEED *CENTAUREA MACULOSA*

(R.M.Callaway, T.H. DeLuca, and W.M. Belliveau)

This report from the University of Montana was recently published in the journal *Ecology* 80(4): 1196-1201, 1999. The authors discuss their findings of experimental evidence in the field and greenhouse that "biocontrol agents for spotted knapweed may actually INCREASE its competitive ability against Idaho fescue."

"Abstract. Biocontrol organisms are generally applied in an attempt to reduce the vigor of target species and provide native species with a competitive advantage. We tested the effectiveness of a widely used biocontrol moth, *Agapeta zoegana* (knapweed root moth) for two years in the field and found that it had no significant direct effect on the biomass of *Centaurea maculosa* (spotted knapweed), one of the most destructive invasive plants in North America. Instead of releasing a native grass from competition, the reproductive output of *Festuca idahoensis* planted with *Centaurea* was significantly lower when neighboring *Centaurea* had been attacked by *Agapeta*. In a greenhouse experiment, we found that *Festuca* planted in pots with *Centaurea* that had been attacked by *Trichoplusia ni* (another nonnative herbivore) had significantly smaller root systems than when they were planted with *Centaurea* that were protected from herbivory. Root systems of *Centaurea* that had been attacked by *Trichoplusia* exuded higher levels of total sugars, but not total phenols. We hypothesize that moderate herbivory stimulated

compensatory growth, induced the production of defense chemicals that also had allelopathic effects, or stimulated root exudates that altered the relationship between *Centaurea* and *Festuca* via soil microbes. Our data suggest that herbivory may increase the negative effects of *C. maculosa* on neighboring plants, and that some biocontrols may have indirect negative effects on native plant species that are not currently recognized."

For a copy of the article -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

NEW STRAIN OF Bt DISCOVERED IN EGYPT

(Source: *Ag BioTech Infonet*, June 21, 1999)

"Egyptian researchers discovered a powerful strain of the pesticide Bt in the dead larvae of the pink boll weevil. Egyptian scientists have discovered a strain of the popular bio-pesticide *Bacillus thuringiensis*, which they say will be able to kill more pests than any other strain of the bacterium without harming beneficial insects."

For a copy of the article -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

INTEGRATED WEED MANAGEMENT TECHNIQUES DISCUSSED IN TWO REPORTS FROM FORESTRY TASMANIA

Weed management in Forestry Tasmania plantations - A handbook of integrated weed control systems for forest plantation managers, prepared by Paul D. Dredge, Forestry Tasmania, December 1997 (Plantation Forestry Bulletin Number 1) includes chapters on: Identifying Weed Problems, In-row Weeds, Between-row Weeds, Fire Hazards, Weed Groups, Impact of Trees on Tree Growth, Estimating Weed Densities, Predicting Weed Problems, Planning for Weed Management, Physical Characteristics of Coupes, Machinery, Timing, Site Prep. and Weed Management, Site Preparation Components, The Principles of Fallow, Access to Ground-Based Machinery, Aerial Weed Management, Weed Management Without Herbicides, Pre-Planting Weed Management Without Herbicides, Post-planting Weed Management by Extra Cultivation, Post-planting Weed Management by Slashing, Mulches, Cover Crops, Ground-Based Weed Management With Herbicides, Herbicides, Calibrating Herbicide Equipment, Integrated Weed Management

Plantation Forestry, Technical Report No. 1, prepared by Paul D. Dredge, Forestry Tasmania, includes chapters on: Pine Chip and Bark Mulching, Mulch Mats, Old Newspaper Mulch, Hot Water, Post-Planting Cultivation, Slashing Between Rows, Cover Crops, Boom Wick Wiper, Shrouded Boom Spray, Other Systems Considered But Not Tried, Methods Assessment Table, Effect of Weeds on Plantation Seedling Growth, and General Conclusions.

For a copy of these reports -

CONTACT: BRIAN HODGSON (TASMANIA)

(011) 255-03-6233-8176

Email: brian.hodgson@forestry.tas.com.au

REGULATORY

ANOTHER SPECIES OF ASIAN LONGHORNED BEETLE FOUND IN U.S.

(Source: Memorandum by Steven W. Lingafelter, July 1999)

"On June 22, 1999, another species of Asian longhorned beetle was found in the United States. One specimen was taken on the trunk of a residential maple tree in Walworth County, Wisconsin. On June 23, the specimen was sent by USDA officer, Jim Triebwasser of Madison, Wisconsin to Steve Lingafelter of the Systematic Entomology Laboratory for identification. On June 24, it was received and identified as *Anoplophora malasiaca* (Thomson), the Japanese rough-shouldered, white-spotted longhorn beetle, a close relative of the species already established in New York City and Chicago. This species was found to be associated with a bonsai plant distributed from a Georgia greenhouse."

For a copy of the memorandum -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

CURRENT BIOPESTICIDE REGULATORY ACTIVITY AVAILABLE ON THE WEB

"6/23/99 - **New active Ingredient Registered: 3-methyl-2-cyclohex-1-one (MCH)** - On June 25, EPA registered 3-methyl-2-cyclohex-1-one to control Douglas fir beetle and spruce beetle. The technical and end use products were registered to the US Forest Service and Phero Tech Inc., respectively."

Current biopesticide regulatory activity such as the above can be accessed at EPA's website at:

<http://www.epa.gov/pesticides/biopesticides/reg_act_all.htm>

For additional information on USDA Forest Service registration -

CONTACT: JACK STEIN (WV)

(304) 285-1584

For additional information about this EPA website -

CONTACT: ANNE BALL (VA)

(703) 308-8717

GYPSY MOTH GENERALLY INFESTED AREAS

(Source: *Federal Register*, Vol. 64, Number 143, July 27, 1999)

AGENCY: Animal and Plant Health Inspection Service, USDA

ACTION: Interim rule and request for comments.

"SUMMARY: We are amending the gypsy moth regulations by adding 4 counties in Indiana, 6 counties in Michigan, 11 counties in Ohio, 4 cities and 3 counties in Virginia, and 2 counties in Wisconsin to the list of generally infested areas. As a result of this action, the interstate movement of certain articles from those areas will be restricted. This action is necessary to prevent the artificial spread of the gypsy moth to noninfested States."

DATES: This interim rule is effective July 27, 1999. Comments on this docket (No. 99-042-1) should be received by September 27, 1999. Comments plus 3 copies can be sent to: Docket No. 99-042-1, Regulatory Analysis and Development, PPD, APHIS, Suite 3C03, 4700 River Road, Unit 118, Riverdale, MD 20737-1238

For further information -

CONTACT: COANNE E. O'HERN (MD)

(301) 734-8247
Email: Coanne.E.O'Hern@usda.gov

HUMAN HEALTH

THE LYME DISEASE NETWORK: LYME DISEASE VACCINE DISCUSSION AND POSITION PAPER

(The LymeNet Editors)

(Source: *LymeNet, On-Line Library, January 1999*)

"INTRODUCTION: Over the last decade, public health officials have adopted a multifaceted strategy in attempting to contain the global Lyme disease threat. Prominent among the strategems employed has been a strong vaccine development effort. Just as the polio vaccine was the first step in virtually eliminating that disease from the American public health landscape decades ago, immunoprophylaxis against Lyme disease could, in theory, reduce the incidence of new Lyme cases dramatically, thus sparing countless individuals from the chronic form of the disease."

"At a hearing convened on May 26, 1998, a vaccine review committee assembled by the U.S. Food and Drug Administration (FDA) recommended approval for a vaccine formulation developed by SmithKline Beecham Pharmaceuticals. Final FDA approval was issued on December 21, 1998. It will be marketed under the product name LYMERix. A second pharmaceutical company, Pasteur M'erieux Connaught, has also conducted Phase III trials and will likely be seeking FDA approval for their own vaccine (known as ImuLyme) shortly. Although the approval of a Lyme disease vaccine would obviously be welcome news, the recommendation for approval did not come easily and was accompanied by several important caveats. According to Dr. Patricia Ferrieri of the University of Minnesota, who chaired the FDA committee, 'It's rare that a vaccine be voted on with such ambivalence and a stack of provisos.'"

"The Lyme Disease Network has received numerous requests from individuals seeking information and guidance on the issues posed by the new vaccines. We don't feel it is appropriate for us to make a specific recommendation as to whether or not individuals should opt for receiving the vaccine -- that is a decision to be made by the potential vaccine recipient in consultation with his or her physician." The paper includes a discussion of the committee's response to the volume of requests they have received and a short review of selected issues that were raised by the review committee.

If you would like a copy of this discussion and position paper -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

MISCELLANEOUS

**11TH USDA RESEARCH FORUM ON INVASIVE SPECIES
JANUARY 2000**

The 11th USDA Research Forum on Invasive Species (formerly the USDA Interagency Gypsy Moth Research Forum which has been renamed to reflect the increased focus on invasive species such as Asian longhorned beetle, hemlock woolly adelgid, and nun moth) will be held January 18-21, 2000, at the Loews Annapolis Hotel, 126 West Street, Annapolis, MD 21401. Program and registration information will be sent in early fall to those on the mailing list (generated from attendees at the 1999 meeting).

For further information, or to be placed on the mailing list, contact Kathy McManus, USDA Forest Service, 51 Mill Pond Road, Hamden, CT 06514, phone (203) 230-4330, fax (203) 230-4315, IBM: kmcmanus/ne,ha; Email: kmcmanus/ne,ha@fs.fed.us

**PROGRESS TOWARDS ALTERNATIVES TO MeBr FUMIGATION
IN BAREROOT FOREST NURSERIES IN THE UNITED STATES**

(*Frankel, S.J., **J.K. Stone, *M.M. Cram, *S.W. Fraedich, *J.Juzwik, *D.M. Hildebrand, and *R.L. James)

(Source: *Methyl Bromide Alternatives Newsletter*, Agricultural Research Service, Vol. 5, No. 3, July 1999)

"This article reviews the results of USDA-Forest Service research and field trials evaluating alternatives to methyl bromide in forest nurseries. Since 1993, the USDA-Forest Service, Forest Health Protection, Special Technology Development Program has contributed \$1.2 million to the search for alternatives to methyl bromide in forest nurseries. The nurseries (both state and federal) have contributed over \$800,000 for a total investment of \$2 million over 6 years. In addition the Forest Service Forest Experiment Stations (Southern and North Central) appropriated over \$2 million from 1995-1999."

(*USDA Forest Service, **Oregon State University)

For a copy of the article -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

ON THE INTERNET

(Source: *ACCESS-Pesticides*) The following website offers 1,000 or more pesticide labels and MSDS from a range of companies and is updated daily.

<http://www.CDMS.net/pfa/LUpdateMsg.asp>

(Source: *The Georgia Pest Management Newsletter*, Vol. 22, No. 6, June 1999)

Many pesticide companies are now listing labels, MSDS, and other information on the Web. Following is a list of these sites: Type <http://address>

AgrEvo USA	www.agrevo-usa.com	Helena	www.helenachemical.com
Amer. Cyanamid	www.cyanamid.com	Monsanto	www.monsanto.com
BASF	www.basf.com	Riverdale	www.riverdaleecc.com
Dow	www.dowagro.com	Terra	www.terraindustries.com
DuPont	www.dupont.com/ag/us	Uniroyal	www.uniroyalchemical.com

Elf Atochem	<www.elf-atochem.com>	Valent	<www.valent.com>
FMC	<ag.fmc.comL>	Wilfarm	<www.wilfarm.com>
Gowan	<www.gowanco.com>	Zeneca	<www.zenecaagproducts.com>
Griffin	<www.griffinllc.com>		

An informative site with new USDA-AHPHIS research information on Salt Cedar, Yellow-Star Thistle, and Arundo donax as well as research information on other exotic and noxious weeds can be found at:

<<http://wric.ucdavis.edu/exotic/research.htm>>

A report entitled "Optimization Trials for Insecticide" by R.E. Mickle, REMSpc, Ontario, Canada and G. Rousseau, SOPFIM, Quebec, Canada reports on results for insecticide spray trials using the aerial spray models AgDRIFT, AgDisp, and FSCBG. The site is located at:

<<http://www.sopfim.qc.ca/sopfim-info.htm>>

Click on **Environment** and then click on **optimization** in the document. The report is in both French and English. If you are not able to access the web and would like a copy of the report -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

PUBLICATIONS

Thistle, H., P. Shea, E. Holsten, and D. Quilici. 1999. **Pheromone dispersion in a canopy trunk space - Analysis of plume data.** ASAE Paper No. 991013. Presented at the 1999 ASAE/CSAE International Meeting, Toronto, Ontario, Canada, July 18-21, 1999. ASAE, St. Joseph, Mi. For a copy of this paper -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

Karsky, D., D.Patterson, and T. Jasumback. 1999. **Evaluation of the Trimble ProXRS GPS receiver using satellite real-time DGPS Corrections.** *Engineering Tech Tips*, May 1999. 9971-2318-MTDC. Missoula Technology & Development Center, Missoula, MT. For additional information contact: Dick Karsky, (406) 329-3921 or for a copy of the publication -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

World Economic Plants: A Standard Reference is a new 784 page reference that contains nearly 10,000 economically important plants and greatly expands on a long popular and out of print reference (USDA's Agricultural Handbook No. 505 that was first published in 1977). The book supplies accepted scientific names, important synonyms, common names, economic uses, and geographical distribution. It was published under a cooperative research and development agreement between ARS and CRC Press of Boca Raton, FL. Price of the book is \$125.00 and

details on purchasing can be found at <<http://www.crcpress.com/catalog/2119.htm>>. (Source: *Agricultural Research Magazine*, Vol. 47, No. 8, August 1999).

For additional information -

CONTACT: JOHN W. WIERSEMA (MD)

(301) 504-9181

Tree Girdling Tools, 9924-2809-MTDC, reports on a field evaluation of four different tree girdlers and also includes a market search of other tools suitable for girdling operations. To order this publication, contact Jerry Wolf, MTDC Publications; phone: (406) 329-3987.

UPCOMING EVENTS

13-17 September 1999. **Joint Meeting of the Western International Forest Disease Work Conference and the Western Forest Insect Work Conference**, Breckenridge, CO. Contact: Dave Johnson, Phone (303) 236-9541, E-mail: djohnson/r2@fs.fed.us or access the meeting website at:

<<http://www.fs.fed.us/foresthealth/technology/combine1999>>

27-28 September 1999. **Short Course in Genetic Issues in Using Native Plants for Revegetation**, USDA Forest Service, Rocky Mountain Regional Office, Lakewood, CO. Contact: Gay Austin, Phone (970) 641-0471, Email: gaustin7@juno.com or Angelique Petterson, Phone (970) 498-2732, Email: apetterson/r2_arnfpng@fs.fed.us

11-13 October 1999. **Exotic Organisms in Greater Yellowstone: Native Biodiversity Under Siege, Fifth Biennial Scientific Conference on the Greater Yellowstone Ecosystem**, Mammoth Hot Springs Hotel, Yellowstone National Park. Contact: Joy Perius, Phone (307) 344-2209, E-mail: joy_perius@nps.gov, or for information on the web <<http://www.nps.gov/yell/conference/index.htm>>

15-16 October 1999. **The California Exotic Pest Plant Council Symposium 1999 - Taking it to the Field, from Prevention to Management**, Sacramento, CA. Contact: Mike Pitcairn, Phone: (530) 262-2049, Fax (530) 262-2059, Email: mpitcairn@cdfa.ca.gov

3-5 November 1999. **Fourth Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions**, San Diego, CA. Contact: Anna Williams, MBO, 144 W. Peace River Drive, Fresno, CA 93711-6953, Phone (209) 447-2127, Fax (209) 436-0692.

2-12 November 1999. **USDA Forest Service Advanced Pesticide Management Training (Eastern Session)**, U.S. Fish and Wildlife Service training facility, Shepherdstown, WV. Contact: Dr. Jesus A. Cota, Phone (202) 205-1595 or Karene Motivans, Phone (304) 876-0580. Additional information can be found at the following website: <<http://www.fws.gov/r9nctc/pestmgmt.html>>

14-18 November 1999. **Society of Environmental Toxicology and Chemistry 20th Annual Meeting: Sustaining Global Environmental Integrity**, Pennsylvania Convention Center,

Philadelphia, PA. Contact: SETAC, 1010 North 12th Avenue, Pensacola, FL 32501-3367, Phone (850) 469-1500, Fax (850) 469-9778, E-mail: setac@setac.org

12-16 December 1999. **Entomological Society of America Annual Meeting**, Atlanta, GA. Contact: Z.B. Mayo, Dept. of Entomology, 202 Plant Industry Bldg., P.O. Box 830816, Lincoln, NE 68583-0816, Phone (402) 472-8703, Fax (402) 472-4687, Email: zmayo1@unl.edu

18-21 January 2000. **11th USDA Research Forum on Invasive Species**, Loews Annapolis Hotel, 126 West Street, Annapolis, MD. Contact: Kathy McManus, USDA Forest Service, 51 Mill Pond Road, Hamden, CT, Phone (203) 230-4330, Fax (203) 230-4315, IBM <kmcmanus/ne,ha>, Email: kmcmanus/ne_ha@fs.fed.us.

5-10 February 2000. **Weed Science Society of America Annual Meeting**, Toronto, Canada. Contact: WSSA, J. Breithaupt, P.O. Box 1897, Lawrence, KS 66044, (913) 843-1235, Fax (913) 843-1274, E-mail: jbreith@allenpress.com

28 February - 10 March 2000. **USDA Forest Service Advanced Pesticide Management Training (Western Session)**, Bureau of Land Management training facility, Phoenix, AZ. Contact: Dr. Jesus A. Cota, Phone (202) 205-1595. Additional information can be found at the following website: <<http://www.fws.gov/r9nctc/pestmgmt.html>>

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 and Timely Tips*. 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
IBM: Pat Skyler/r5,rsl
Email: Pat.Skyler/r5_rsl@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 20th Street, Sacramento, CA 95814, e-mail <Pat.Skyler/r5_rsl@fs.fed.us>, or IBM: Pat Skyler/r5,rsl. 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 or the USDA Forest Service guarantees the accuracy of the information provided in this *Short Subjects*. 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.