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USDA Forest Service Washington Forest Health Protection Staff Forest Health Technology Enterprise Team

SHORT SUBJECTS AND TIMELY TIPS FOR PESTICIDE USERS

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BIOLOGICAL CONTROL, IPM, AND EXOTIC PESTS PEST CONTROL

MARYLAND CONCLUDES GYPSY MOTH SPRAYING

(Source: Agnet, June 1, 1999)

It has been announced by Maryland Secretary of Agriculture, Henry A. Virts, D.V.M. that Maryland Department of Agriculture has concluded its statewide gypsy moth cooperative suppression spray program for 1999. "The Maryland Department of Agriculture, in cooperation with the U.S. Forest Service and county and local governments, sprayed the trees on 6,306 acres in five counties this year."

For additional information about the Cooperative Gypsy Moth Suppression Program, contact Robert Tichenor of the Maryland Department of Agriculture, 50 Harry S. Truman Parkway, Annapolis, MD 21401, Phone (410) 841-5922.

For a copy of the article -

CONTACT: PAT SKYLER (CA)

Page No.

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(916) 454-0817

MONARCH BUTTERFLIES AND B.T.

Several articles have recently been published on the effects of Bt pollen on the monarch butterfly. A list of some of these articles follows:

Monarch butterfly (published by the Department of Entomology, Iowa State University (this article discusses the following:)

Have other studies examined the effects of Bt pollen on monarchs?
Is Bt corn a serious problem for monarchs?
Is all Bt corn pollen harmful to monarchs?
Will monarchs lay their eggs in cornfields?
Is Bt corn potentially harmful to other insects?
Are there any potential benefits to monarchs from the use of Bt corn?
Are there other hazards to monarch survival?
Is the monarch endangered?
What should farmers do?
What is the bottom line?
BIO responds to *Nature* Report on Bt Threat to Monarch Butterflies (Washington, May 21/PRNewswire)
Monarch butterfly researchers urge caution in over-interpreting results (Washington, June 10/PRNewswire)

Of corn and butterflies (*Science*, Vol. 153, No. 21, May 31, 1999)

For a copy of these articles -

CONTACT: PAT SKYLER (CA)

(916) 454-0817

NUCLEAR POLYHEDROSIS VIRUSES AS MANAGEMENT TOOLS IN THE CONTROL OF FOREST PEST INSECTS

(Source: Pest Management News, Vol. 10, No. 4, Winter 1999)

A collaborative effort to look at "the potential of using NPV's [nuclear polyhedrosis viruses] to control forest pest insects, most notably the balsam fir sawfly, white-marked tussock moth and hemlock looper" is being conducted by the Canadian Forest Service, the Universities of New Brunswick and Victoria, Laval University, the provincial governments of Newfound-land and Nova Scotia and industrial partners that include, Abitibi Consolidated, Corner Brook Pulp and Paper, Forest Protection Limited and Stora Woodlands.

For additional information on the study - contact Dr. Chris Lucarotti, Canadian Forest Service, Atlantic Forestry Centre, P.O. Box 4000, Fredericton, NB E3B 5P7, Phone (506) 452-3538, Email: clucarot@nrcan.gc.ca

For a copy of the article -

CONTACT: PAT SKYLER (CA)

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THE POTENTIAL FOR BIOLOGICAL CONTROL OF ASIAN LONGHORNED BEETLE IN THE U.S. (Michael T. Smith, USDA-ARS, Beneficial Insects Introduction Research Laboratory, Newark, DE.)

(Source: *Midwest Biological Control News Online*, Vol. VI, No. 6, June 1999.) Adapted from: Smith, M.T., G. Ruitong, Y. Zhong-qi, L. Guohong, Y. Luo, Y. Jin, R. Xu, and L. Jianguang. Review and analysis of the literature on *Anoplophora glabripennis* (Motsch.) in China (manuscript in preparation.)

Summary

"A successful biological control program for ALB [asian longhorned beetle] in the U.S. and China will rely heavily upon the integration of several other essential components. In addition to the conservation of native natural enemies, as well as the introduction of exotic natural enemies, utilization of resistant hosts is paramount. Host defenses may either target adult ALB (nonpreferred hosts), and/or target egg and larval ALB (hosts which are unsuitable for their growth and development). It should be emphasized that biological control and host plant resistance will likely focus on the egg and larval stages of ALB, as they apparently represent the more vulnerable stages in its life cycle. Selection of tree species which are better able to withstand the more common stress factors, particularly those associated with the urban landscape (i.e. soil compaction and air pollution), should be encouraged. As in any pest management program, selection of plants or trees (species, cultivar or variety) which are best adapted to the particular site and environment under consideration is often the single most important decision that is made in managing an insect pest. This may be particularly true in landscapes, such as urban areas, where the implementation of control measures such as the application of insecticides is generally very difficult. In addition, silvicultural practices directed at improving tree health should strengthen the tree's ability to withstand ALB attack. Such practices include the modification of irrigation and fertilization methods, as well as the use of bait trees. Finally, the integration of methods resulting from the identification of weak links in the life history and behavior of ALB will play a major role in any management program. This may include the use of detection methods, as well as direct control methods (i.e. insecticides, bait trees). In conclusion, any one of these components, if exclusively utilized for management of ALB, will run the risk of jeopardizing any management program. Therefore, the integration of these methods will be essential for the management of ALB in the U.S."

For a copy of the article -

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HOT WATER USED TO CONTROL WEEDS

(Source: PANUPS, June 14, 1999)

The town of Carrboro, NC, is testing a machine which kills weeds with water instead of chemicals. The self-contained unit which is mounted on a small truck "produces a steady stream of near-boiling water that kills weeds by melting the waxy outer coating of their leaves." The hot water system is being loaned to the city by its New Zealand manufacturer for evaluation. The equipment is being tested "to implement the town's least toxic Integrated Pest Management Policy, adopted in March 1999."

For additional information -

CONTACT: ALLEN SPALT (NC)

AUSSIE TOXIN MUNCHER DISCOVERED

(Source: CSIRO Media Release, May 18, 1999)

A native Australian microbe that eats pesticides has been discovered by Julian CSIRO scientists. Identified from a polluted site in Perth by University of WA PhD researcher Ms. Amanda Tilbury, working with microbiologist Dr. Peter Franzmann of CSIRO Land and Water, the microbe is a new strain of the soil organism *Pseudomonas*. According to Ms. Tilbury, the microbe "is equipped to degrade the world's most widely-used herbicide, atrazine."

For a copy of the article -

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HIGHLY POTENT NATURALLY-OCCURRING FUNGUS PROVIDES FIRST NON-TOXIC INSECTICIDE

(Source: Boston and Gainesville, FL, May 24/PRNewswire)

"SafeScience, Inc. (Nasdaq:SAFS) and the University of Florida (UF), Office of Technology Licensing (OTL) today announced that they have entered into an agreement whereby SafeScience has licensed worldwide rights from the University of Florida Research Foundation, Inc. to all patents and patent applications on several potent strains of the microbial agent *Beauveria bassiana* (fungus) for the development of natural products for pest control. Products based on this fungus have been shown to be more effective than conventional toxic synthetic chemicals in laboratory and/or field tests with household ants, cockroaches, termites and fire ants."

For a copy of the news release -

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HUMAN HEALTH

REPELLENTS CONTAINING DEET OFFER SAFE WAY FOR CONSUMERS TO STOP WHAT'S BUGGING THEM

(Source: Washington, May 28/PRNewswire)

"As outdoor sports and recreation take center stage this summer, the Chemical Specialties Manufacturers Association (CSMA) is reminding consumers nationwide that insect repellents containing DEET (N, N-diethyl-m-toulamide), when used according to label directions, are the timetested, safe and effective solution for what's 'bugging' them." For a copy of the consumer brochure which explains the steps to protect against mosquito- and tick-borne diseases and which also offers a list of do's and don'ts about safely using DEET-containing insect repellents call CSMA at 1-888-NO-BITES or write them at CSMA, P.I.R. Program, 1913 Eye Street, N.W., Washington, DC 20006.

For a copy of the press release -

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MISCELLANEOUS

PAST FOREST MANAGEMENT PROMOTED ROOT DISEASE IN YOSEMITE VALLEY

(Garey W. Slaughter and David M. Rizzo)

(Source: California Agriculture, Vol. 53, No. 3, pp. 17-24, May-June 1999)

"Abstract - Root disease is one of the most important vegetation-management considerations in Yosemite Valley. Large trees with root decay have fallen in the valley causing human fatalities and property damage. Many of the problems associated with root disease in Yosemite Valley can be traced back to the area's history of vegetation management. Wildfire suppression and meadow draining were implemented after the arrival of Euroamericans in the mid-19th century. These practices created conditions that encouraged the development of a dense conifer forest within the valley. Tree removals for vista clearance, campground and lodging construction, and bark beetle control projects created thousands of stumps. Many of these stumps have been infected with spores of *Heterobasidion annosum*, a fungal pathogen that causes root decay in conifers. The fungus has since spread from initial infection sites into the surrounding forest, creating hundreds of enlarging tree mortality gaps. Park resource managers have established a program of hazardous-tree removal, but efforts to restore natural ecosystem processes must be continuously reconciled with public safety."

For a copy of the article -

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ON THE INTERNET

A new USDA Forest Service internet site entitled *Great Plains National Grasslands, Threat*ened, Endangered, & Sensitive Species can be found at:

<http://www.fs.fed.us/r2/nebraska/gpng/>

The site contains visitor maps, other visitor use information, Geographical Information System (GIS) data for National Grasslands, and links to other relevant Great Plains natural history information.

An excellent source of on-line publications has been made available by the Forest Health Protection unit of the USDA Forest Service, St. Paul office. The website is located at:

<http://willow.ncfes.umn.edu>

then click on "on-line pubs. & other info."

EPA'S Superfund Administrative Reforms Report for Fiscal Year 1998 is now available on the internet at:

<http://www.epa.gov/superfund/programs/reforms>

The following website contains photos of most of the more common flowering plants including noxious weeds:

<http://elib.cs.berkeley.edu/photos/flora>

The website for the California Exotic Pest Plant Council can be found at:

<http://www.caleppc.org/index.html>

PUBLICATIONS

Pests of the Garden and Small Farm has recently been revised and released by the University of California. The publication discusses alternative pest management practices, such as biocontrol, host plant resistance, etc. to reduce grower's reliance on chemical pesticides. The publication sells for \$35.00 and can be ordered by phone at (800) 994-8849

UPCOMING EVENTS

4-9 July 1999. **10th Biological Control of Weeds International Symposium**, Bozeman, MT. Contact: N.R. Spencer, USDA/ARS, 1500 North Central, Sidney, MT 59270, Phone (406) 482-9407, Fax (406) 482-5038, E-mail: nspencer@sidney.ars.usda.gov. Website: http://www.symposium.ars.usda.gov/

7-10 July 1999. **The Ecology and Management of Port-Orford-cedar, a Symposium**, Gold Beach, OR. Sponsored by the Bureau of Land Management, Oregon Department of Forestry, Oregon State University, Siskiyou Regional Education Project, and USDA Forest Service. Contact: Don Rose, Phone (541) 471-6561, E-mail: drose/r6pnw_siskiyou@fs.fed.us or Kirk Casavan, Phone (541) 440-4931, ext 339, E-mail: kcasavan@or.blm.gov.

18-22 July 1999. **1999 American Society of Agricultural Engineers Annual International Meeting**, Toronto, Canada. Contact: Brenda West (616) 429-0300, E-mail: west@asae.org, or for information on the web http://www.asae.org/meetings/

21-22 July 1999. **National Spray Model and Application Technology Working Group**, Toronto, Canada. The working group meeting is being held in conjunction with the 1999 American Society of Agricultural Engineers Annual International Meeting. Contact: Harold Thistle, Phone (304) 285-1563, Fax (304) 285-1564, E-mail: harold_thistle/na_mo@fs.fed.us

22-27 August 1999. **32nd Annual Meeting, Society for Invertebrate Pathology**, University of California, Irvine, CA. Contact: Brian Federici, Phone (909) 787-5006, Fax (909) 787-3086, Email: brian.federici@ucr.edu

2-5 August 1999. **Southern Forest Insect Work Conference**, Beachside Resort and Conference Center, 14 Via De Luna Drive, Pensacola Beach, FL 32561 (1-800-BEACH-16), or contact their website at http://www.bugwood.caes.uga.edu/sfiwc.html/conference_99.html.

31 August - 3 September 1999. **1999 National Urban Forest Conference - Building Cities of Green**, Seattle, Washington. Contact: Cheryl Kollin, Phone (202) 955-4500, Ext. 221, or visit the conference website at: http://www.amfor.org/frames.shtml?whatnew/

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

1-4 November 1999. Annual International Conference on Methyl Bromide Alternatives and Emissions Reductions, San Diego, CA. Contact: MBAO, 144 W. Peace River Drive, Fresno, CA 93711-6953, Fax (559) 436-0692, Email: gobenauf@agrc.cnchost.com

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@un1.edu

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.

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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.