University of Idaho
Pest Management Center
Newsletter

Pest Management News
Newsletter and archives can be found at http://www.ag.uidaho.edu/ipm/news.htm
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Pest Alerts

First Detection of Potato Tuberworm in Idaho
Potato tuberworm, also referred to as tuber moth, is a relatively new pest of concern in the Pacific Northwest. The most economically important damage occurs through larval (worm) feeding on the tuber. This feeding can occur in the field and in storage facilities. Larvae excavate tunnels throughout the tuber. Tuberworm adults are dull-colored moths, about 0.4 inches long with a 0.5 inch wingspan. Moths are quick fliers and are seldom seen because they are active at dusk. Tuber moths move between crops and forage up to 0.15 miles to infest tubers or plants. Long distance movement of tuberworms is probably due to movement of infested tubers. It is imperative not to store or transport potato tuberworm-infected tubers. Early detection of adults with pheromone traps can help growers avoid storing damaged tubers.

University of Idaho Entomologist Dr. Juan Alvarez, with funding from the Idaho Potato Commission, placed 36 potato tuberworm traps in potato fields across southern Idaho during the past growing season. Several adult moths were collected near Parma in this trapping system. A search of the field where the initial two moths were caught failed to detect any infested tubers or plants. At this time, no other life forms of the potato tuberworm have been found. The Idaho State Department of Agriculture (ISDA) responded by developing a more extensive set of traps (at total of 461) throughout southern Idaho that include commercial and seed fields as well as packing and processing facilities.

ISDA has made the results of this survey available on their website; as of November 17, 2005, no potato tuberworms have been captured east of

Elmore County. They have also made available a complete list of proposed Best Management Practices (BMPs) for potato tuberworm (including in-field detection procedures and controls for future growing seasons), as well as a current summary of the tuberworm survey. http://www.agri.state.id.us/Categories/PlantsInsects/RegulatedAndInvasiveInsects/Insectsformreports.php#Potato. Included in this list are some practices that can be employed by processors and packers now. Some of the practices are:

- Do not transport any lot of potatoes into Idaho or Malheur County, Oregon that have any level of potato tuberworm infestation
- Remove vines from all lots of potatoes to be delivered into Idaho
- Process all lots of potatoes from the Columbia Basin within 48 hours of arrival; do not store them
- Bury all culls and tare dirt originating from the Columbia Basin and the Parma area
- Cease delivery for any lot of potatoes found to have tuberworm damage. Bury and cover culls and tare dirt from that lot as soon as possible.
- Place tuberworm traps in or near storage houses, processing and packing facilities, cull piles, tare dirt piles and disposal pits. Monitor daily.
- Notify ISDA of any tuberworm detections. Mike Cooper or Stacey Lee (208)-322-8500.

For more information about the potato tuberworm, read: http://info.ag.uidaho.edu/pdf/CIS/CIS1125.pdf.

Pesticide Updates

New Study Shows Organic Diets Lower Children's Exposure to Some Pesticides

An article published in Environmental Health Perspectives in September, 2005 by scientists at Emory University (Atlanta, Georgia), the University of Washington (Seattle) and the Centers for Disease Control and Prevention (Atlanta, Georgia) concludes that organic diets significantly lower children's exposure to organophosphorous (OP) pesticides, a class of pesticide known to cause neurological effects in humans and animals. The study was supported by the U.S. Environmental Protection Agency (EPA) Science to Achieve Results (STAR) program. Over a 15-day study period, scientists tested the urine of 23 children, aged 3-11, for specific metabolites of malathion (Malathion) and chlorpyrifos (Lorsban), two common OP insecticides used in agricultural production. During the first and third phases of the study (days 1-3 and 9-15), the children consumed a diet consisting primarily of conventional (non-organic) foods, and during the second phase (days 4-8), organic food items were substituted for most of children's conventional foods, including fresh and processed fruits and vegetables, juices, and wheat- or corn-based items (e.g., pasta, cereal, popcorn or chips). These food items are routinely reported to contain OP pesticides; no meat or dairy products were substituted because OPs are not regularly detected in those food items. When they enrolled in the study, all 23 of the children's urine samples contained metabolites of the two pesticides studied. Immediately after the introduction of organic food to the children's diets, the metabolites of both dropped to the non-detectable level. OP pesticide metabolites re-appeared in the samples once the children resumed a conventional diet. Based on the study design and results, the authors "conclude that organic diets provide a protective mechanism against OP pesticide exposure in young children whose diets regularly consist of fresh fruit and vegetables, fruit juices, and wheat-containing items." The study directors did not indicate whether or not the malathion and chlorpyrifos metabolite levels found in the children's urine during the conventional diet phases of the study exceeded the levels allowed by EPA. No health outcome data were collected, so it is not possible to know for sure if children consuming a conventional diet have a higher probability of neurological health risks due to consumption of foods with OP insecticide residues than those who eat a diet that includes organic foods. However, the drop in detectable metabolites as soon as the children switched to an organic diet is compelling. The persistence of OP pesticide metabolites in urine during the conventional diet periods raises a concern of the possible chronic exposures to OP pesticides in children. However, the authors caution against inferring exposures and health risks solely based on OP urinary metabolite levels. The complete article is available online.

Miscellaneous News

Debate Continues Over Synthetic Ingredients in Organic Foods

There is an on-going controversy over the use of synthetic substances in products certified organic by the United States Department of Agriculture National Organic Program (USDA NOP). In early October, Congress voted to approve an amendment to the 2006 agricultural appropriations bill that would allow small amounts of 38 synthetic ingredients, such as vitamins, baking powder, bleach, pectin, ethylene and xanthan gum, to be used in the processing and packaging of certified-organic products. These 38 products are already being used in the production of organic products; under USDA's current rules, organic producers can use the “USDA Organic” label if at least 95 percent of the product’s ingredients are organic. The remaining five percent can contain non-organic or synthetic substances. The amendment simply approves the continued use of the 38 synthetic products, and in some cases would enable the USDA to continue adding others to the list without getting feedback from the public or the National Organic Standards Board**,** the independent advisory group that crafted the first federal organic standards. In addition to allowing the continued use of synthetic substances in organic processing, the amendment allows dairy farmers to continue to feed dairy cows 80 percent organic feed, and 20 percent conventional feed in the year before transitioning to organic.

This amendment is in direct conflict with a June 2005 court decision (Harvey v. Veneman) that concluded synthetic substances should not be allowed in products bearing the “USDA Organic” label. Arthur Harvey, a 73-year-old blueberry grower who represented himself in court, won on appeal by arguing that under the Organic Foods Production Act of 1990, products labeled organic should not be allowed to contain synthetic substances or the 5 percent non-organic ingredients permitted by the National Organic Program. The federal appellate court also ruled that the USDA could not give a blanket exemption to non-organic substances, such as spices and oils, unless they were approved during a public process. The court further ruled that dairy farmers must feed their cows 100 percent organic feed in the transition year before their milk could be sold as organic.

Much of the dispute over these issues stems from the fact that the Organic Foods Production Act was written when the organic industry consisted primarily of farmers who grew organic fruits and vegetables. As the number of organic manufacturers and organic products increased, so did the complexity of regulating the industry because processed foods often require additives that either are not available organically, not readily available, or are very costly.

Those in favor of the amendment allowing the continued use of limited synthetic and non-organic products in the processing of organic foods argue that it provides continuity in buying and selling organic products that currently contain these substances. Many products that currently bear the “USDA Organic” label would have to be relabeled in the absence of the amendment. Products containing the synthetic substances that have been allowed would no longer be eligible for the full "USDA Organic" label. Instead, they would have to be labeled "Made with Organic Ingredients," which is applied to products containing a minimum of 70 percent organic ingredients. Organic growers fear this will result in financial losses, because consumers are willing to pay a premium for products with a “USDA Organic” stamp, but would be less inclined to pay an increased cost for an “less organic” product. The Organic Consumers Association, a network of 600,000 organic consumers, is concerned about the decision, stating that the amendment would weaken the role of the National Organic Standards Board (NOSB), an independent advisory group that provides guidance to federal rulemakers.

The USDA's National Organic Standards Board (NOSB) met November 16-17, 2005, in Washington, DC. All committees (Crops, Livestock, and Handling) presented recommendations concerning the continued use or prohibition of substances being reviewed under the Organic Food Production Act’s sunset provisions. All sessions were open to the public. Resulting decisions have not yet been made public.

Cost Share Funds Approved for Pest Management Activities

The United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) was re-authorized by the 2002 Farm Bill to provide a voluntary conservation program to farmers called the Environmental Quality Incentives Program (EQIP). The program supports production agriculture and environmental quality as compatible goals. Through EQIP, farmers receive financial and technical help with structural and management conservation practices on agricultural land. In Fiscal Year 2006, for the first time, NRCS has initiated cost share funding under EQIP for selected pest management practices, bio-fumigation and scouting for insects.

Bio-Fumigation (Green Manures)

Bio-fumigation involves planting either radish or mustard as a cover crop preceding potatoes or sugarbeets following an early harvested crop such as wheat or beans. Based on trials in 2003 and 2004, NRCS estimates planting green manures costs the farmer $120-140 per acre. Farmers have reported significant decreases in nematode populations and increases in potato yields. NRCS will pay a flat rate of $50 per acre, for a maximum of 160 acres.

Scouting

Scouting for insects (weeds and diseases are not included in this cost share program) to determine if threshold numbers are exceeded prior to making an insecticide application, is an integral part of any IPM program. Scouting must be done by a qualified (certified) individual, presumably a crop consultant. Growers will be required to submit scouting and insecticide application records. NRCS will pay $10 per acre, for a maximum of 160 acres.

The early sign up deadline for next year was November 22, 2005, although contracts do not need to be signed until January, 2006. More information about the program and the potential for growers to get cost share for these two pest management practices can be obtained by contacting Bob Bartholomew, Idaho EQIP Program Manager, (208) 378-5703, Bob.Bartholomew@id.usda.gov.

Report Documents Growth of Organic Sector in U.S. Agriculture

Organic farming has been one of the fastest growing segments of agriculture in this country for over a decade. A report released by the United States Department of Agriculture Economic Research Service (USDA ERS) documents that growth from 1992 to 2003. In 2003, 2.2 million acres of cropland and pasture in 49 states were in organic production systems. Nearly 1.5 million acres were used for growing crops, with California, North Dakota, Minnesota, Montana, Wisconsin, Colorado and Iowa leading the list. Texas, Alaska and California had the largest amount of organic pasture and rangeland. The report notes that while adoption of organic farming systems showed strong gains between 1992 and 2003 and the adoption rate remains high, the overall adoption level is still low—only about 0.4 percent of all U.S. cropland and 0.1 percent of all U.S. pasture was certified organic in 2003. Obstacles to adoption by farmers include high managerial costs and risks of shifting to a new way of farming, limited awareness of organic farming systems, lack of marketing and infrastructure, and inability to capture marketing economies. Still, many U.S. producers are embracing organic farming in order to lower input costs, conserve nonrenewable resources, capture high-value markets, and boost farm income, especially as prices fall for staple commodities. To read the full report, or to download any of the 57 data tables, visit the USDA ERS website: http://www.ers.usda.gov/Data/Organic/index.htm.

Coming Events and Funding Opportunities

Integrated Organic Program Announces Grant Opportunity

The United States Department of Agriculture's Cooperative State Research, Education and Extension Service (USDA-CSREES) requests grant applications for the Integrated Organic Program for fiscal year (FY) 2006 to solve critical organic agriculture issues, priorities, or problems through the integration of research, education, and extension activities in two program areas: (1) Organic Transitions Program (ORG); and (2) Organic Agriculture Research and Extension Initiative (OREI). The Integrated Organic Program is particularly interested in proposed projects that emphasize research and outreach that assist farmers and ranchers with whole farm planning and ecosystem integration. Projects should plan to deliver applied production information to producers. Fieldwork for both program areas must be done on certified organic land or on land in transition to organic certification, as appropriate to project goals and objectives. The difference between the two program areas are outlined below:

Organic Transitions Program (ORG)

- Purpose: to fund the development and implementation of research, extension and higher education programs to improve the competitiveness of organic livestock and crop producers. Projects should plan to deliver applied production information to producers and students;
- Applications may be submitted by colleges and universities, and
- Approximately $1.8 million is available for this program area.

Organic Agriculture Research and Extension Initiative (OREI)

- Purpose: to fund research and extension programs that enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic agricultural products;
- Applications may be submitted by State agricultural experiment stations, all colleges and universities, other research institutions and organizations, Federal agencies, national laboratories, private organizations or corporations, and individuals, and
- Approximately $2.9 million is available for this program area.

For both ORG and OREI, all award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the project.

Applications are due Dec. 20. More information about the Integrated Organics Grant Program can be found at http://www.csrees.usda.gov/funding/rfas/pdfs/06_organic.pdf.

Regional Integrated Pest Management Program Announces Grant Opportunity

The Western IPM Center (WIPMC) announces the release of the 2006 Request for Applications (RFA) for Regional Integrated Pest Management Competitive Grants Program. The Regional IPM Competitive Grants Program supports projects that develop individual pest management tactics, integrate individual tactics into an IPM system, and develop and implement extension IPM education programs. The program is administered by the University of California Davis in partnership with the United States Department of Agriculture's Cooperative State Research, Education and Extension Service (USDA-CSREES). In FY 2006, CSREES anticipates that approximately $655,000 will be available for support of the IPM Competitive Grants Program in the Western Region (W-IPM). Approximately $420,000 of that is expected to be available for research projects, $70,000 for extension projects, and $165,000 for joint research-extension projects.

The due date for applications is December 15, 2005. Please contact Dr. Frank Zalom, Western IPM Regional Grants Panel Manager, (530) 752-3687 or fgzalom@ucdavis.edu or visit the CSREES website for more information: http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1101.

Pesticide Applicator Training in Canyon County
A pesticide applicator re-certification training will be held on Tuesday December 13, 2005 at the Caldwell, ID Police Department (110 S 5th Street). Six Idaho and Oregon pesticide applicator license credits are being offered, as well as 5.5 CCA credits. The program costs $25.00. Call 208.459.6003 prior to December 8, 2005 to RSVP. Lunch and refreshments will be provided. Registration starts at 8:00 am; program starts at 8:30 am. The program is sponsored by UI Canyon County Extension and the Idaho State Department of Agriculture. To view the flier for this program, go to: http://www.tvpestalert.net/reference/RegistrationFormPestRecert2005.pdf. Call Jerry Neufeld at 208.459.6003 if you have questions.

Organic Seed Growers Conference
The Organic Seed Alliance, in collaboration with Washington State University, Center for Sustaining Agriculture and Natural Resources (CSANR) and Oregon State University, is hosting the fourth biennial Organic Seed Growers Conference January 11-12 in Troutdale, Oregon. A Seed Biology Short Course is offered January 10. The agenda covers seed biology, diseases, economics, cleaning, and more. For more information, visit the Organic Seed Alliance website: http://www.seedalliance.org/index.php?page=Seed_Growers_Conference

University of Idaho Potato Conference
The 38th annual Idaho Potato Conference, sponsored by the University of Idaho Extension, will be held at the Pond Student Union Building on the Idaho State University Campus in Pocatello, Idaho January 17-19, 2006. For a copy of the agenda or registration information, check the Potato Conference website: http://extension.ag.uidaho.edu/district4/potato.html.

Growers Marketing Forum: Farm to Fork
The University of Arizona Controlled Environment Agriculture Center (CEAC) presents the first Growers Marketing Forum for vegetable and specialty crop growers. The Forum will be held in Tucson, Arizona January 18-20, 2006. It will begin with a tour of a state-of-the-art greenhouse tomato production and packing facility and continue with topics ranging from branding and packaging to competitive entry into markets ranging from restaurants to wholesale to retail. For more information about the forum, visit the CEAC website: http://ag.arizona.edu/ceac/extension/shortcourse001.htm.

Sustainable Agriculture, Communities, and Environments Symposium
The Department of Community & Rural Sociology (C&RS) is organizing a symposium on "Sustainable Agriculture, Communities, and Environments in the Pacific Northwest," to be held next year on May 18-20, 2006, at WSU Tri-Cities. A copy of the initial call for papers may be found via the symposium website: http://www.tricity.wsu.edu/crs. C&RS would like to invite you to participate in this exciting, regional gathering, as a presenter, session organizer, or co-sponsor. Researchers, policymakers, practitioners, professionals and graduate students all will find the symposium to be a friendly, stimulating place to present and discuss ongoing activities related to the future of food and agriculture, communities, and environments in the Pacific Northwest. For further information, please contact David Sonnenfeld at sonn@wsu.edu, or Jim Zuiches at zuiches@wsu.edu.

Approved Section 18 and 24c Labels for Idaho

Section 18 Labels

Please Note: It is a violation of Federal Law to use these products in a manner inconsistent with the updated, EPA stamped label. This label must be in possession of the user at the time of pesticide application.

Name	Crop	Pest	Notes
Api Life Var (thymol, eucalyptus oil and menthol). EPA File Symbol # 05-ID-05	Honeybee Colonies	Varroa Mites (*Varroa* spp.)	**Valid until December 1, 2005**. Best used when average daily temperatures are between 59 to 69° F. Not to be used when temperatures exceed 90° F. Tablets must be removed a minimum of 30 days before honey harvest. Do not apply when bees are robbing. Do not use during honey flows. Do not use when surplus honey supers are installed. Do not harvest honey from brood chambers or colony feed supers.
Axiom DF Herbicide (flufenacet and metribuzin) EPA File Symbol # 05-ID-13	Wheat	Annual Ryegrass (syn: Itallian Ryegrass) (*Lolium multiflorum*)	**Valid until December 31, 2005.** For use only in the following counties: Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis and Nez Perce. Most effective when used between seed germination and the 2-3 leaf growth stage. Should not be applied beyond the 3-leaf growth stage. Application with ground equipment ONLY. Do not apply within 100 feet of lakes, reservoirs, rivers, permanent streams, natural ponds or estuaries. Do not graze winter wheat within 30 days of application. Do not apply more than 10 oz. per acre per season.
CheckMite+ (coumaphos). EPA File Symbol # 05-ID-04	Honeybee Colonies	Varroa Mites (*Varroa* spp.) and Small Hive Beetles (*Athenia tumida*)	**Valid until February 1, 2006.** Treatments must be applied at a time when bees are not producing a surplus honey crop. Not recommended for use in honeybee colonies that are used as cell builders for producing queens. Remove honey supers before application, and do not replace supers until 14 days after the strips are removed. Treatment is most effective when brood rearing is lowest. Do not leave strips in hives for more than 45 days. Do not treat more than twice a year for Varroa mites and no more than four times a year for small hive beetles.
Dividend Extreme (difenoconazole + metalaxyl-M). EPA File Symbol # 05-ID-03	Sweet Corn grown for seed (Seed Treatment)	Suppression of post-emergence die-back complex and damping off (*Penicillium oxalicum*, *Fusarium oxysporum* and *Aspergillis niger*)	**Valid until March 10, 2006**. Dividend Extreme can be used in combination with the following fungicides and insecticides: Maxim 4FS; Apron XL LS; Dynasty; Cruiser 5FS; Allegiance FL, LS; Lorsban, Carboxin; Captan; Thiram; Gaucho and Poncho. DO NOT plant any crop other than wheat within 30 days of planting Dividend treated seeds. Treated seed must be labeled, “Seed treated with difenoconazole and metalaxyl-M. Do not use treated seed for food or feed purposes.”

For more information on Section 18 labels, check the ISDA website: http://www.agri.state.id.us/Categories/Pesticides/registration/Section18.php, or contact George Robinson at (208) 332-8593, or grobinso@agri.state.id.us.

Section 24c Labels

Please Note: It is a violation of Federal Law to use these products in a manner inconsistent with the updated EPA stamped label. This label must be in possession of the user at the time of pesticide application.

Name	Crop	Pest	Notes
Dibrom 8 Emulsive (naled) EPA SLN # ID-010017	Alfalfa Seed, Carrot Seed	Lygus bugs, Thrips	This is a revised label. The previous Special Local Needs (SLN/24c) label for Dibrom 8 included only Alfalfa Seed; this label includes the addition of carrot seed as a new application site. No portion of the alfalfa or carrot seed plant may be used or distributed for food or feed purposes; this includes livestock feed and sprouting. Seed must be labeled "Not for human or animal consumption". This product is highly toxic to bees; do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This pesticide is toxic to fish, aquatic invertebrates and wildlife, and should not be used in an area where impact on listed threatened or endangered species is likely.
Prowl 3.3 EC (pendimethalin) EPA SLN # ID-930012 and ID-000003	Alfalfa Seed; Perennial Grass Seed	Broadleaf and Grass Weeds	This is a revision to two previous Special Local Needs (SLN/24c) labels for Prowl 3.3 EC. The only major changes to these labels involve the conversion of the expiration date from December 31, 2005 to December 31, 2015.
Pendant 3.3 EC (pendimethalin)	Alfalfa Seed; Carrot Seed; Clover Seed	Broadleaf and Grass Weeds	This is a revision to previous Special Local Needs (SLN/24c) labels for Pendant 3.3 EC. The only major changes to these labels involve the conversion of the expiration date from December 31, 2005 to December 31, 2015.
Pin Nip (chlorpropham) EPA SLN # ID-050012	Potatoes	Sprout Control	This is a storage use only; do not apply in the field. Do not use on seed potatoes. Use rates in this label will allow facilities to adequately treat their potatoes with a second application of chlorpropham to prevent significant losses from sprouting for the remainder of the storage season.
Sprout Nip Briquette (chlorpropham) EPA SLN # ID-050004	Potatoes	Sprout Control	This is a revised label. Rates have been modified and a restriction allowing the use of Sprout Nip only in storage facilities that have previously been treated with Sprout Nip has been added. This is a storage use only; do not apply in the field. Do not use on seed potatoes.
DRC 1339 EPA SLN # ID-050013	Non-crop Staging Areas in Urban Environments	American Crows	This is a Restricted Use Product and can only be applied by USDA Wildlife Services personnel that have been trained in the proper use of the pesticide.
DRC 1339 EPA SLN # ID-050014	Feedlots	American Crows; Ravens; Black-billed Magpies; Pigeons	This is a Restricted Use Product and can only be applied by USDA Wildlife Services personnel that have been trained in the proper use of the pesticide.

Section 24c Labels, continued

Name	Crop	Pest	Notes
Oust (sulfometuron-methyl) EPA SLN # ID-000019	Non-cropland Managed by the U.S. Air Force	Weeds	**This use is being voluntarily cancelled by the registrants.**
Pyristar (chlorpyrifos) EPA SLN # ID-030015	Beans for Export	Microencapsulated Insecticide Seed Treatment	This is a revised label. The statement, "For use only on seed to be exported from the USA" has been bolded and enlarged, and the storage and disposal section has been revised.

For more information on Section 24c labels, check the ISDA website: http://www.agri.state.id.us/Categories/Pesticides/registration/Section24cmain.php, the Idaho Pest Management Center website, http://www.ag.uidaho.edu/ipm/24C%20labels.htm, or contact George Robinson at (208) 332-8593, or grobinso@agri.state.id.us.