

Newsletter Debut

WELCOME to the inaugural issue of the bimonthly Montana State University Urban IPM Program newsletter. The Urban IPM program was begun at MSU in 2008 with a grant from the National Extension Integrated Pest Management Special Projects Program (EIPM) grant from the National Institute of Food and Agriculture (NIFA). With this grant we began

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the Urban IPM practitioner certification program. In 2010, we received a Pesticide Environmental Stewardship Program (PESP) grant from the Environmental Protection Association (EPA). With this new grant we are beginning this newsletter.

The Urban IPM program at MSU, along with the School IPM program, is part of the Montana Integrated Pest Management Center, which in turn is part of the Western International Management Center. The Montana IPM Center develops and promotes the use of integrated, ecologically sound pest management programs in Montana to serve agriculture, urban and community, and

natural resources audiences.

Integrated Pest Management (IPM) programs focus on long-term prevention of pests or their damage through a combination of techniques including resistant plant varieties, biological control, physical or mechanical control, and modification of gardening and home maintenance practices to reduce conditions favorable for pests. Pesticides are part of IPM programs but are used only when needed. Products are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

We have created this newsletter as a way to disseminate time-sensitive information to nursery and landscape professional. It also should be of interest to people working in government and extension. The newsletter will be distributed bimonthly through the spring, summer and fall. We will cover topics of current and general interest. Topics may include plant diseases, insects and mites, weeds, pesticides, IPM, as well as occasional articles dealing with soils, water, and horticulture that are important to IPM.

Contributions will come from the staff at Schutter Diagnostic Lab and IPM and Extension specialists at MSU. We hope to augment this with articles from respected members of the landscape and nursery community.

We invite you to let us know what

you think of our newsletter. From time to time you may receive a few survey questions that will help us assess our progress. We would love to hear from you about our success or failure. Feel free to suggest topics you would like to know more about. Feedback can be sent to urbanipm@montana.edu.

This newsletter will be available electronically only. Each issue will be sent automatically to subscribers. Past issues will be accessible on the web. We do not have all those details worked out at this time. Visit www.urbanipm.org or email urbanipm@montana.edu for details on how to subscribe.

Linnea Skoglund



AUSTRIAN PINES DYING

The Schutter Diagnostic Lab, county extension offices, landscape services and nurseries are receiving many calls about dying Austrian pines around the state. Symptoms start at the leader at the top of the tree. Less often, dieback starts at branch tips in the upper canopy. The bark pops off easily from these dead branches and the area under the bark has a blue-black to black appearance. In cross section, you will see a blue to blue-black stain radiating into the wood much like the spokes of a wheel. Currently, only Austrian pines have this problem. Dieback in scots pines and other pines is due to various insects and environmental factors such as moisture (too much or too little) and early fall or late spring frost.

Diagnosticians at the Montana State University Schutter Diagnostic Lab are attempting to identify the cause or causes of this problem in Austrian pines. At this point, we have a number of suspects that might be involved.

DISEASE: Several fungi have been associated with dying trees. The most likely suspect of this group is one of the fungi that cause a disease



known as blue stain. A similar disease is found in the wood of ponder-

osa pines and other trees killed by mountain pine beetle.



NEMATODES: Last year we were confirm pinewood nematode in Austrian pines in Billings. The dieback symptoms and blue stain are similar to pine wilt disease. However, we have been unable to extract nematodes from any trees brought to the clinic last fall or this spring. Once temperatures are consistently above 70°F, we may find the nematode.

INSECTS: We have found populations of bark beetles (NOT the mountain pine beetle) in some trees (see photo at right of holes in pine bark). Examination of the trunk from top to bottom is essential to locate either disease or insects. Branch tips are not useful for diagnosis.

ENVIRONMENT: The early severe freeze in October 2009 damaged trees and may have made them more susceptible to insects and disease. Trees also may be affected by soil compaction, flooding, drought, de-icing salts, and excessive fertilizer (especially nitrogen). Many of the trees with dieback are

planted in lawns where they may receive too much water and fertilizer. However, symptoms of drought can look very similar. Trees may also have been planted improperly. A history of the planting location is important to identify possible factors.

DO NOT spray these trees with a fungicide nor fertilize them heavily. There is nothing that can be sprayed onto these trees to kill the fungus and save the trees. Insecticide treatment might be warranted if the presence of beetles is confirmed and there is not excessive damage to the tree. Treatment should be done by a

tree care professional with a State of Montana pesticide applicator's license.

Do not replace dead trees with more Austrian pines. Be sure to give all the trees in your landscape adequate water and fertilizer, keeping in mind that trees require little or no fertilizer. Water deeply and infrequently during the growing season, stopping in early September to allow the tree to harden off for the winter. After leaves have dropped off the deciduous trees, you can apply one final deep watering to help the tree avoid winter desiccation. Water should be provided at and beyond the drip line (outside tips of the branches). Check with a probe of some kind that the soil is moist to a minimum depth of 18 inches. A healthy, vigorous tree that is properly planted and well maintained will be resistant to many diseases and insects.

Linnea Skoglund

Early Detection and Rapid Response

One of the most important steps in integrated pest management is the correct identification of a pest species and early intervention to control it. A series of workshops is being offered across Montana. These workshops focus on theory and rationale behind Early Detection and Rapid Response (EDRR), new invader weed identification, and instruction on reporting new weed



Figure 1. Flower head of yellow starthistle

sightings. The EDRR Workshop helps participants understand the



Figure 2. Eurasian watermilfoil

importance of early recognition and early control of invasive plant species. To facilitate the identification process, workshop participants are introduced to basic plant identification and some of the important species currently on the Montana nox-

ious weed list. Some of the species covered in the workshop include yellow starthistle (*Centaurea solstitialis*). (Figure 1), Eurasian watermilfoil (*Myriophyllum spicatum*) (Figure 2), and curlyleaf pondweed (*Potamogeton crispus*). (Figure 3). Workshop participants have successfully identified and reported some of these species.

Melissa Medley



Figure 3. Curlyleaf pondweed.

March Flies

March flies often gather in large numbers on the blossoms of fruit trees and other landscaping plants at the end of May and the beginning of June in Montana. While large swarms of adult March flies may look like they are up to no good, they are actually harmless to landscaping plants, gathering only to feed on nectar and mate. In southern states, March flies are commonly called “love bugs” due to staggering numbers of mating pairs, so numerous that they grease up roadways and become thickly plastered on car windshields and grills.

March flies are small (3/8”) dark insects with a soft, fuzzy appearance and a drunken manner of fly-

ing; when they land they stumble about in a clumsy way. Females (image above) have weirdly flattened heads, giving them a reptilian look. After mating, females burrow into the soil, rotting manure, or fermenting crop remains, where they excavate a little chamber to lay their eggs (usually several hundred). The larvae complete their development in the soil, and are often turned up by gardeners’ shovels in April and May, and again later in the summer. March fly larvae are uncommon and sporadic pests of cereal crops, especially in Europe, but they don't cause significant damage to the roots of woody ornamentals in landscaping. This is because larvae prefer to feed on de-

caying matter in soils rich in organic materials, and will only switch to root-feeding when available detritus is exhausted.

Ruth O'Neill



Female March fly. Image source: <http://www.gardensafari.net/english/>

Workshops, Training, Meetings

Fall, 2011
Urban IPM Workshop—Turf
Bozeman
www.urbanipm.org

January 4-5, 2012
Montana Green Expo
MNLA
www.plantingmontana.com

January 29-31, 2012
AMTOPP Annual Meeting
Fairmont Hot Springs
www.amtop.org



We are soliciting articles for future issues.
Please send your submissions to Linnea Skoglund
(linnea.skoglund@montana.edu).

Montana State University

Urban IPM Program



The objectives of the Urban IPM Program

- Establish an IPM certification program for urban landscape and turf professionals.
- Develop resources for using IPM methods in the urban landscape.
- Train landscape professionals to be First Detectors for invasive pests.
- Educate homeowners/consumers in the basic principles of IPM.

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How to Subscribe

You may subscribe to the newsletter on the Urban IPM website (www.urbanipm.org). Email urbanipm@montana.edu if you have problems. Sorry, the newsletter is not available in print.



This newsletter is funded by a Pesticide Environmental Stewardship Program (PESP) Regional Grants. Established in 1994, the Pesticide Environmental Stewardship Program (PESP) is an EPA partnership program that works with the nation's pesticide-user community to promote Integrated Pest Management (IPM) practices.