Plant Science Says

Happy Easter!

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Urban IPM Workshop

By Linnea Skoglund and Laurie Neuman

The MSU Urban IPM Program hosted a 1 ½ day workshop on pests of turf and trees on March 18th and 19th. The featured speaker was Dr. Whitney Cranshaw, professor of entomology, Colorado State University. The turf session was attended by 52 landscape professionals (private, municipal, cemeteries, golf courses and university) and extension agents. The tree session was attended by 60 landscape professionals and arborists.

There were sessions on diseases of turf and trees, weeds in the home landscape, herbicide damage, growing healthy turf and trees, water quality and 4 hours on insect pests and beneficial/predatory insects. Presentations were made by Toby Day, Melissa Graves, Barry Jacobsen, Cecil Tharp, Linnea Skoglund, Peter Kolb (Missoula), and Amy Bamber, MDA. The workshop was a huge success.

Two people, Jennifer Weiss, owner of Gardening Under the Big Sky located in Bozeman, and Brent Harris, owner of Yard Guard, Inc. of Livingston, were recognized at the workshop for attaining their certification in the Urban IPM Program. Certification in the program can be used as a promotional tool for businesses wanting to offer IPM practices to their clients. There are now 68 people enrolled in the 2-yr old certification program.

In response to the demand for programming on turf and ornamentals, we will offer a 2 day workshop next year. The entire workshop was recorded and will be available on DVD sometime this summer. For more information on MSU's Urban IPM Program visit our website at http://www.msuextension.org/urbanipm/.

Whitney Cranshaw, CSU, talking about insect pests of turf.

Jennifer Weiss and Brent Harris receiving their IPM certification from Linnea Skoglund.

Toby Day in front of a packed room.

The Future MSU Vineyard Enjoying Budbreak in the PGC
By Victoria Blake

In early June, the Blake Lab and David Baumbauer will be building and planting a grape vineyard at the MSU Horticultural Farm. We received 5-8 each of 21 'cold-tolerant' *Vitus vinifera* hardwood cuttings from the USDA National Clonal Germplasm Repository (Geneva, NY) in early March. These were placed in cone-tainers on a perlite/vermiculite mix under mist and were breaking buds within two weeks. We plan to keep them in the mist bench for another few weeks before taking that nervous peek to see if we also have roots.

The future MSU vineyard enjoying budbreak in the PGC.

Varietals were chosen from among the University of Minnesota 'Cold Hardy Grapes' collection (http://www.grapes.umn.edu/index.html) and represent those suitable for wine and jam/jelly as well as seedless table grapes. The table (page 7) describes the collection. Steps will be taken in early fall to protect the vines from our harsh winter and success will be measured next year when/if we have budbreak. Cold tolerant rootstocks are available and we'll try to acquire these cuttings this spring. Hardwood cuttings will be taken from all varietals in late summer for further propagation and grafting.

The vineyard will be situated between the hopyard and grove at the hort farm. The specific vineyard plan and trellising system are still being considered, and a spring break roadtrip west involved several stops at vineyards to survey and document trellis styles. As an abundance of vine growth and fruit production will be limited in our short growing season, we could likely design a much simpler system than the one below supporting old vines at UC Davis.

Old vines at the UC.Davis Viticulture and Enology Dept. vineyard. March 2010.

Dr. Bob's Orchard
By David Baumbauer

As a tribute to Dr. Bob Gough's many contributions to Montana Horticulture, a tree fruit orchard is being established this spring at the Horticulture farm. Roger Joy of Canyon View Nursery in Corvallis, MT has donated 25 whips of apple, pear and plum trees and the Gallatin Garden Club has provided a grant to offset the cost of deer fencing. A tree planting day will be set in May and you all will be invited to come help plant trees and erect deer fence. The orchard will be due east of the hop yard and the site will eventually contain hops, grapes, tree fruit, and raspberries. It is anticipated that the orchard will be used by horticulture classes by offering hands-on experiences in fruit tree pruning, nutrition, and IPM.

A MSU Foundation account has been established under the name 'PSPP –Dr. Bob's Orchard' to help cover irrigation system, signage and ongoing maintenance of the orchard. For more information on donating to the orchard account contact Tyler Wiltgen in the COA Dean's Office.

Crystal Maier Receives Masters
Crystal Maier defended her thesis last Friday. Her thesis research focuses on the systematics of two groups of metallic wood-boring beetles (Coleoptera:Buprestidae) in the genera *Sphenoptera* and *Chalcophora*. She revised two species-groups of *Sphenoptera*, which are exclusively Old World in distribution, and developed a key to the species-groups of the former U.S.S.R. Included in this work is an illustrated electronic key, which allows users to easily key out specimens using photographs and illustrations. This genus contains species of interest as a potential biological control agents, and Crystal also completed preliminary work on these species.

She plans to continue studying beetles and will be starting a PhD at University of Kansas in the fall.

Grants
Victoria Blake (PI) and Tom Blake (Co-PI), "Barley Straw Fructanosic Ethanol for On-Farm Biofuel Production," North Central Sun Grant Competitive Grant Program on Sustainable Biomass Production Systems. Funded by the U.S. Dept. of Energy. $77,686.

Fabian Menalled, Perry Miller, and Mary Burrows. Transmission and impact of cereal viruses in winter wheat. MJ Murdock Charitable Trust. $15,000.

Bill Hoch Receives Teaching Award
Bill Hoch received The NACTA Teaching Award of Merit on March 26, 2010. The recipient for this award is selected by the University to recognize faculty for outstanding teaching and is NACTA's highest level of recognition a faculty member can receive from the institution for excellence in teaching.

Montana Ag Live! Spring Schedule
April 11 Ian Foley, Entomologist, MT Dept of Agriculture, "Native Pollinators as an alternative to declining honey bee numbers"

April 18 Adam Sigler, MSU research scientist, " taking care of your ground water and septic system issues".

April 25 Dr. Marcia Goetting, MSU's Department of Agricultural Ecomomics, "Transfering farms and ranches from generation to generation"

May 2 Rob Dunn, Co-owner of Westscape nursery and MSU LRES collabator, "University and Private industry cooperation including using plants to detoxify national wildlife refuges which are high in selenium and sodium that often results in bird toxicity"

May 9 Kim Falcon, Director of the Montana Wheat and Barley Committee, "The Montana Wheat and Barley Committee, helping producers and consumers"

May 16 Dr. Dale Clark, Monsanto/ Westbred Plant Breeder, "How corporate plant breeding can be beneficial for small grain producers".

May 23 Dr. Waded Cruzado,"MSU President, "Views of the Land Grant Mission Relative to the College of Agriculture and Montana's Agricultural Industries"

June 6 TBA

June 13 Dr. Cathy Cripps, Mycologist, "Spring Mushrooms"

Bob's Byte
By Bob Johnston
What to Do When a Rogue Software Window Pops Up

You can be surfing along and suddenly a window pops up in your browser telling you that you have all kinds of infection and to click here and they will make it all go away. Actually, they will make it worse. This is Rogue Security Software in action. There are two things you can do - first press ALT and F4 on your keyboard (at the same time) and do not click on the window. If this does not work, you want to do a hard shutdown of your computer. Go to the on/off button and press the button, holding it until your computer shuts down. Better safe than sorry.

Fake updates install backdoors to access your computer
Security firm Bkis has written about an interesting malcode lure: Trojans masquerading as updates for popular applications such as

Adobe, Java or Windows. The fake updates are distributed with icons of the application they're impersonating. As a countermeasure, it would be a good idea to ignore any email you receive with a link or attachment that claims to be an update. Use the "updater" or "check for updates" menu choice on the application or Windows implementation that's installed on your machine.

Watch out for Word documents that contain links to pdf files

A new attack method is to send out a Word document file that appears to have a pdf file linked to it. The pdf file is actually a graphics jpg file which when double clicked on links to an executable file which will install a virus on your machine.

Thanks to Sunbelt Software for these hints -rhj

Clover Mites
By Toby Day

For several years now, I have been walking around campus and my neighborhood in early spring and noticing that the turfgrass around many Colorado spruce was extremely dry. I would also find dry areas of lawn on the south and west sides of the buildings about 4 feet out from the foundation. My past reaction to this "drying out" was that the trees were competing for the moisture or that the sun was reflecting off the buildings and burning the grass.

Recently, while attending the Urban IPM workshop in Bozeman, I learned from Whitney Cranshaw, Author of "Pests of the West" that the problem was most likely caused by a tiny insect called a clover mite. Clover mites are reddish-green in color and long front red front legs that are nearly impossible to see without a hand lens. Clover mites will feed on the turfgrass by sucking the plant juices from the turfgrass that first greens-up in the spring, leaving the grass look as if it was dry or dormant. This is usually near buildings and under darker trees in the landscape.

When I was an Extension agent in Butte, I received several calls about clover mites. Usually the client was more concerned about the "thousands of tiny black insects crawling on their window sill." Further descriptions included that they left a rust colored smear when they were squished. While they were a nuisance, the Extension recommendations rarely warranted chemical control and to simply seal up the windows and doors so that they couldn't enter the house.

Now that I know that the "dry turfgrass" around evergreen trees and buildings may be associated with clover mites, my recommendations are going to change a bit. While miticides are sometimes recommended, many studies have shown they only have partial control. In discussions with Whitney Cranshaw, his recommendation is to alter the environment. Supplemental irrigation in the areas around evergreens and near buildings will decrease the populations of clover mites significantly. Removing a turfgrass strip 18-24" next to a building and replacing it with gravel may also be warranted if the infestations reoccur.

Clover mite damage to turfgrass

Picture by Whitney Cranshaw

Johnstons Welcome New Baby

Jeff and Rachel Johnston welcomed Xander Buliwyf Christopher Johnston on Tuesday, March 9 and he weighed 9 lbs 1 oz. Jeff and Rachel work in Alan Dyer's lab.

Congratulations to Jeff and Rachel and to the proud grandparents, Bob and Susan Johnston!

Recipe of the Month

Marinara Sauce

Contributed by Carol Sharrock

(adapted from Jane Brody's Good Food Cookbook)

A low-fat, garlic flavored tomato sauce, good for pasta, meats, as a sauce for lasagna, etc. Can be doubled and freeze the extra. Makes about 3 cups.

28 ounce can whole tomatoes, preferably Italian plum
3 teaspoons olive oil
4 large cloves of garlic, finely minced
11/2 teaspoons dried oregano
2 teaspoons sugar
1 teaspoon salt, or to taste
Freshly ground black pepper
1/3 cup minced fresh parsley, optional

1. Puree tomatoes in a food processor or blender.
2. Heat the oil briefly in a medium saucepan and add the garlic. Cook about 15 seconds (do not let brown!) and then add all the ingredients except the parsley. Bring to a boil, then lower the heat and gently simmer about 40 minutes, uncovered.

Remove the sauce from the heat and add the parsley, if you like. Can be modified to taste by adding ½ cup red wine, browned Italian sausage, or whatever you like.

April Birthdays

John Sherwood	12
Mike Giroux	12
Matt Lavin	20
Andreas Fischer	25
Nina Zidack	26
Martha Peters	30

Variety	Origin	Relative Hardiness	Berry Color	Ripening	Principal Uses	PI
Marechel Foch	France	Tender-Mod	Blue	Early	W	588107
De Chaunac (Ceibel 9549)	France	Tender	Blue	Mid-Late	W	371984
St Croix	Swenson	Hardy	Blue	Mid	W	597235
Vignoles (Ravat 51)	France	Tender	White	Mid-Late	W	181481
Seyval (Seyve-Villard 5.276)	France	Tender	White	Mid-Late	W	588309
Aurore (Seibel 5279)	France	Tender	White	V. Early	W, T	588064
Eidelweiss	U of M	Tender-Mod	White	Early-Mid	T, W	588280
Elvira	MO	Mod Hardy	White	Early-Mid	T, W	588298
Kay Gray	Swenson	Hardy	White	Early	W, T	597230
St. Pepin (ES 282)	Swenson	Tender-Mod	White	Early-Mid	W, J	588717
Bluebell (Minn 158)	U of M	Mod Hardy	Blue	Early-Mid	T, J	597165
Concord	MA	Tender-Mod	Blue	Late	J, T	588077
Fredonia	NY	Tender-Mod	Blue	Mid	T, J	597098
Worden C	NY	Mod Hardy	Blue	Early-Mid	T, J	588613
Valiant	SD	Hardy	Blue	Early	J, T	588266
Van Buren	NY	Tender-Mod	Blue	Early	T, J	588386
Beta	MN	V. Hardy	Blue	Mid	J	588148
Himrod	NY	Tender	White	Early	T*	588095
Canadice	NY	Tender	Red	Early-Mid	T*	588096
Swenson Red	U of M	Tender-Mod	Red	Mid	T	588281
Vanessa Seedless	Ontario	Tender	Red	Mid	T*	588288

W=wine

T=Table

J=Jelly