



# HORT SHORTS

## Spring 2003



OSU at Toledo Botanical  
Garden

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The Ohio State University,  
The United States  
Department of Agriculture,  
and  
Lucas County  
Commissioners Cooperating

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Urban & Consumer  
Horticulture Program  
Funded by:

Cities of Maumee  
Oregon, Sylvania, and  
Toledo;

Townships of Monclova,  
Springfield, and Sylvania;  
the Villages of Holland  
and Ottawa Hills; and  
Lucas County

*Amy K Stone*

Amy K. Stone, Ext. Agent  
Urban & Consumer  
Horticulture

### *We Outgrew our Offices!*

Early in November we moved our offices from the artist village at Toledo Botanical Garden, to a larger garden-property house on Bancroft Street. Our mailing address and phone numbers have remained the same. We outgrew our digs and love our new spacious offices, including an expanded Horticulture Library and conference room. So, if you used to bring us samples to identify, you can now find us at 5526 W. Bancroft, between Reynolds and Holland-Sylvania Roads, right next to Hawkins Elementary School.

Feel free to stop out and see us—we love visitors. Usual office hours are Monday-Friday 10:00 a.m.—4:00 p.m. Hotline hours are Monday, Wednesday & Friday 10:00 a.m. to 1:00 p.m.

### *Gypsy Moth Update—Volunteers Needed*

Good News! Gypsy Moth populations appear to be at tolerable levels across the county. The Ohio Department of Agriculture's egg mass survey this winter determined egg mass numbers below required levels to be included in the State's aerial treatment program.

However, it is very important to stay diligent, and continue an aggressive monitoring program. Research indicates that populations decrease over time, and then may "sky rocket" up, within a 7 to 10-year window, before returning to low levels.

This year we will be expanding our monitoring program and you can help. We are looking for volunteers who have oaks (or other highly-sought after food sources for gypsy moth caterpillars), have just a little extra time, and would be willing to join our fight against this leaf-feeding critter.

Volunteers are asked to attend one educational meeting on April 28th. Duties will include picking up a free "burlap-band monitoring" kit; burlapping a preferred tree on their property; checking the burlap one to three times a week; and reporting their findings to our office via email, fax, or telephone.

Extension staff and Master Gardener Volunteers look forward to the involvement of residents across the county. If you, family members, friends, or neighbors are interested in helping out, here are the meeting details: Monday, April 28th, 7:00 p.m. in the Stable's Room in the Conference Center at Toledo Botanical Garden (5403 Elmer Drive between Reynolds & Holland Sylvania Roads). Please RSVP to our office so we will have ample supplies for all.

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

Keith L. Smith, Associate Vice President for Ag. Admin. and Director, OSU Extension. TDD No. 800-589-8292 (Ohio only) or 614-292-1868

*Plant of the Issue*

The Ohio Nursery and Landscape Association has launched a *Plant of the Year* program, designed to promote an award-winning plant to gardening enthusiasts and green industry consumers throughout Ohio. The plant selected is the recipient of the highest recognition of Ohio's nursery professionals. The Plant of the Year is selected annually through a vote of all ONLA members. Criteria include: the plant must be of woody stock; be considered low maintenance with strong pest and disease resistance; require minimal routine care; be readily available in Ohio; and exhibit strong survivability in the range of soil types and climates in Ohio.

2003 is the year of the crabapple. Gone are the days of defoliation due to the apple scab disease. Large, messy fruits messing up the landscape just does not have to happen with the new and improve crabapples out in the market. The new crabapples are not your grandfather's crabapples as repeatedly said by Jim Chatfield and Erik Draper, *Malus* men and researchers with Ohio State University.

Here are five top-rated crabapples:

*Prairifire*

- ◆ Fruit effect lasts late June to early December
- ◆ Mature tree size: 15-18'
- ◆ Red-purple fruits, coral-red flowers, open rounded form
- ◆ Yearly spectacular bloom and fruit displays
- ◆ Blooms contrast with newly emerged red-tinted green foliage
- ◆ Firm purplish fruits slowly age to cherry-red
- ◆ Fabulous fall colors range the spectrum from red to orange to apricot
- ◆ Unique lenticel-speckled bark

Negatives: Mediocre winter and early summer appearance. Diseases: Trace of scab.



*Sugar Tyme*

- ◆ Fruit effect lasts late September to early April
- ◆ Mature tree size: 15-18'
- ◆ Cherry-red fruits, white flowers, mounded spreading form
- ◆ Stunning sugar-white floral display from pale pink buds
- ◆ Showy, persistent firm fruits through late winter
- ◆ Good overall form; dense foliage

Negatives: Mediocre appearance during summer before fruit colors; foliage appears off-color or chlorotic during mid to late summer; fruit drops all at once before bloom. Diseases: Minor scab.

*Holiday Gold*

- ◆ Fruit effect lasts late September to late March
- ◆ Mature tree size: 15-18'
- ◆ Golden-yellow fruits, white flowers, open spreading form
- ◆ One of the best new, yellow-fruited crabapples in the plot
- ◆ Annual flower show and fruit display is excellent
- ◆ Attractive cream-yellow fruits mellow to golden yellow
- ◆ Rose blush accents nicely yellow fruits
- ◆ Fruits hang in distinct clusters along branches

Negatives: Tree form may become awkward due to fruit load. Diseases: No scab; trace of fireblight.

(Continues on Page 3)

**Plant of the Issue (Continued)***Louisa*

- ◆ Fruit effect lasts late July to mid-November
- ◆ Mature tree size: 12-15'
- ◆ Lemon-gold fruits, pink flowers, true weeper form
- ◆ Reliable annual bloom is a true pink
- ◆ Flower display is extraordinary, like pink clouds
- ◆ Arching, graceful branches are upswept at ends
- ◆ Tree form is greatest asset
- ◆ Fruit mellows to a gold-orange with a rose blush accent

Negatives: Fruit set is consistently light and scattered, never dazzling. Diseases: No scab.

*Adirondack*

- ◆ Fruit effect lasts late August to mid-December
- ◆ Mature tree size: 12-15'
- ◆ Orange-red fruits, white flowers, narrow upright form
- ◆ One of the best tight, columnar form
- ◆ Great autumn fruit/foliage combination
- ◆ Fruit ripens to a deep orange-red
- ◆ Fruit appears singular rather than clustered
- ◆ Annual consistent flowers are red-tinged

Negatives: Somewhat slow to establish and grow; leafhoppers appear to relish the foliage, but no apparent harm from the feeding. Diseases: No scab.

For additional information on the crabapple research being done at OSU Extension check out this website at - [http://ohioline.osu.edu/sc189/sc189\\_91.html](http://ohioline.osu.edu/sc189/sc189_91.html)

***Insect of this Issue***

A repeater in this column is usually not a good thing. On February 25, 2003, Research Entomologists of the USDA's Systematic Entomology Laboratory in Beltsville, Maryland identified the insect detected and found in southwestern Lucas County in January to be Emerald Ash Borer (EAB). EAB is the critter that made headlines in southeastern Michigan and Windsor, Ontario last summer.

This exotic pest from Asia is killing tens of thousands ash trees within 6 counties in Southeastern Michigan. The extent of infestation in Lucas County is currently being identified, and a task force has been developed.

The emerald ash borer appears to have a one-year life cycle in southern Michigan, but could require two years to complete a generation in colder regions. Adult emergence begins in mid to late May, peaks in early to mid June, and continues into late June. The adults are active during the day, particularly when conditions are warm and sunny. Most beetles remain in protected locations in bark crevices or on foliage during rain, heavy cloud cover, high winds, or temperatures above 32°C (90°F). Adults, which are present into August, feed on up to 0.45cm<sup>2</sup> of foliage per day, leaving irregularly-shaped patches of leaf tissue with jagged edges.

Females lay 65 to 90 eggs during their lifetime. Eggs are deposited individually on the bark surface, or in bark crevices on the trunk or branches. In southeastern Michigan, the oviposition period likely extends into mid to late July, which would be similar here in Ohio.

Eggs hatch in 7 to 10 days. After hatching, first instar larvae chew through the bark and into the cambial region. Larvae feed on phloem and the outer sapwood for several weeks. The S-shaped feeding gallery winds back and forth, becoming progressively wider as the larva grows. Galleries are packed with fine frass. In some areas, woodpeckers feed heavily on larvae.

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***Insect of the Issue*** (Continued)

The insect overwinters as a full-grown larva in a shallow chamber excavated in the sapwood. Pupation begins in late April or early May. Adults may remain in the pupal chamber for 1 to 2 weeks before emerging head-first through a D-shaped exit hole.

Infestations of emerald ash borer can be difficult to detect until canopy dieback begins. Evidence of infestation includes D-shaped exit holes on branches and the trunk. Callus tissue produced by the tree, in response to larval feeding, may cause vertical splits to occur in the bark above the gallery. Distinct, frass-filled larval tunnels etch the outer sapwood and phloem of the trunk and branches. An elliptical area of discolored sapwood, likely a result of secondary infection by fungal pathogens, sometimes surrounds larval feeding galleries in live trees.

Infested branches in the canopy die when they are girdled by the serpentine tunnels excavated by feeding larvae. Many trees appear to lose about 30 to 50 percent of the canopy in one year, and the tree is often killed after 2-3 years of infestation. Frequently a profusion of epicormic shoots arises at the margin of live and dead tissue of the trunk. When trees die, dense root sprouting occurs.

Emerald ash borer has caused severe devastation on ash-lined streets, in parks, and in commercial and residential landscapes in Michigan and Windsor, Ontario, where thousands and thousands of trees have died. Infested trees must be removed and the wood destroyed. Current pesticide research indicates insecticidal treatments are more successful if the pest is found in the very early stages of infestation to the tree, or as preventative control.

The Ohio Department of Agriculture is currently determining the extent of the known infestation in Swanton Township. They will be identifying every ash tree in a 1/2 mile radius of the properties where the insect was found.

If you have an ash tree, you are urged to check out our website for more details and photos <http://www.ag.ohio-state.edu/~osutbg/eab.htm>

**Hort Shorts on the Web**

This newsletter will now be posted on the web in a PDF file. If you would prefer receiving an email announcement alerting you to check the web, rather than receiving a hard copy in the mail, please email us. Requests should be sent to [northrup10@ag.osu.edu](mailto:northrup10@ag.osu.edu). In the subject line, please reference Hort Shorts. Thank you for helping us lower our expenses, while at the same time, continuing to provide you with valuable horticultural information.

**Horticulture Hotline**

Graduates of our Master Gardener classes volunteer their time at our office at Toledo Botanical Garden. They are available to answer your horticulture questions. Leave a voice mail any time, or catch them in (call or stop by) during the following hours:



Hotline Hours are 10:00 a.m. - 1:00 p.m. Monday, Wednesday, and Friday  
Local Phone 419-578-OSUE (6783) Toll Free 1-800-358-HORT (4678)  
or email your questions to [mghotline@ag.osu.edu](mailto:mghotline@ag.osu.edu)

This publication is provided to assist you in receiving horticultural information necessary to enhance the quality of life for you and your family. If you have any additions or deletions to our mailing list - please call Amy Stone or Barbara Northrup at 419-578-OSUE (6783) or visit our website at <http://www.ag.ohio-state.edu/~osutbg>