

HORTICULTURE NEWS

Phone: 870-534-1033 P.O. Box 6896 Pine Bluff, AR 71611 May 14, 2008

Dear Gardener:

Greetings! My name is Mike Carroll, and I am a new Jefferson County Extension agent in Agriculture (Horticulture). I am a native of Pine Bluff, and I'm excited about the opportunity to be a valued asset to the Pine Bluff community. If you have questions or suggestions, please feel free to contact me at the Jefferson County Extension office at 534-1033.



FARMERS' MARKET OPENING

The 34th Annual Farmers' Market Opening will be held on **Saturday, June 7, 2008**, at Saracen Landing (Lake Pine Bluff). This year's event will be filled with various family-friendly activities: The Vegetable Display Competition, the Community Band and Kid's Corner, as well as other activities for the residents of the Pine Bluff area.

The registration for the **Vegetable Display Competition** will start promptly at **7:00 a.m.**, and the **opening ceremony** with start at **9:00 a.m.** There will be drawings each hour (7:00 a.m. until noon) for free \$5 coupon books redeemable at the Farmers' Market located at Saracen Landing. **You must be present to win.**

The Vegetable Display Competition is open to all market members. All vegetables entered must be **locally-grown**. Prizes will be awarded in each category. As you will notice, squash (green and white), broccoli and a "*Best of Show*" category have been added for judging this year. The following is a list of the vegetables eligible for individual displays:

Beans - 6	Hot peppers - 3
Sweet peppers - 3	Irish potatoes - 3
Blackberries - 10	Okra - 5
Cabbage - 1	Onions - 3
Corn - 3 ears	Peas - 8
Cucumbers - 3	Broccoli - 3
Eggplants - 3	Tomatoes - 3
Greens (large bundle)	Flower display
Miscellaneous	(One 4"-10" pot or
Squash - green - 3	bundle of cut flowers in vase)
Squash - white - 3	
BEST OF SHOW	

Any five varieties of the **same item may be entered, but only **one** will be chosen in each category.**



LAWNMOWER SAFETY

(FSA 1005)

With the recent rains and the onset of spring, many of us have begun to work diligently in our yards. This is often a time of great joy as we commune with nature and beautify our homes' surroundings. This can also be a time when we can get overwhelmed by the amount of work and time needed to ensure the yard meets our satisfaction.

Lawnmowers are a big part of this process, however. If not used properly, they can become a big safety issue. Here are a few tips on lawnmower safety to help you enjoy your time in the yard and avoid unplanned trips to the emergency room:

- 1) Always read the operator's manual carefully.
- 2) Train all operators on the proper use of the mower(s).
- 3) Check your lawn thoroughly before mowing to remove objects that can be hurled by the blades.
- 4) Make sure all protective devices are in place prior to starting the mower.
- 5) Wear the appropriate attire to do the job safely. *You should avoid wearing sandals or sneakers, and definitely don't mow barefooted.*
- 6) Be extremely careful with gasoline. The engine should be off when filling the mower, and fill the mower outdoors.
- 7) Keep everyone, including pets, away from the mowing area.
- 8) Do not allow riders when using a riding mower.
- 9) Avoid horseplay around lawnmowers.
- 10) Do not use riding mowers on steep slopes. *Mower overturns can cause serious injury. Always drive up and down slopes when operating a riding mower and mow across the slope when using a walk-behind mower.*

- 11) Take care of your mower. Keep it clean, and have your blades sharpened and installed properly.
- 12) Store all fuel outside the house and away from heat sources. Gasoline is a volatile, flammable liquid!
- 13) Use earplugs to preserve your hearing.

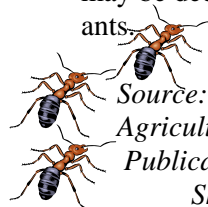
Source: University of Arkansas Division of Agriculture Cooperative Extension Service Publication (FSA1005) written by Gary Huitink

TEN FREQUENTLY ASKED QUESTIONS ABOUT THE CONTROL OF FIRE ANTS (FSA 7052)



- 1) **Why do they move when I treat them with a pesticide or run over them with my lawnmower?** Disturbing the mound often causes the colony to move to another location. To kill a fire ant colony, **you have to kill the queen.**
- 2) **Do any of the home remedies work – like gasoline and instant grits?** There are many home remedies mentioned to control fire ants—from instant grits, orange peels and gasoline, to vinegar, bleach and diatomaceous earth. Some home remedies do kill a few fire ants—but generally only cause the ants to move to another location.
- 3) **What are some organic methods to treat fire ants?** The two most common organic methods to treat fire ants are the use of hot water or steam and diatomaceous earth. Both have been found to be somewhat effective in controlling ants when used properly. These methods impact only the ants that come in contact with the hot water or diatomaceous earth.
- 4) **What can I use that is affordable?** Although the bait products may appear to be quite expensive, when used with the two-step method of control, they are affordable and provide longer-term control than many other products. Baits are more effective and provide longer-term control because they are products that impact the queen and/or her egg-laying ability.
- 5) **How toxic are the baits to humans and pets, especially birds?** Bait materials have a variety of active ingredients—*hydramethylnon*, *fenoxycarb*, *methoprene* and *abamectin*—with varying toxicity levels. The toxicity of baits to various test animals can be compared using the LD50-lethal dose needed to kill 50 percent of the impacted test animal population.

- 6) **Can I drown them?** Fire ants, as a group, cannot drown. Fire ants can form balls on the water and float to new locations after a flood.
- 7) **Will a hard winter kill them?** Studies have shown that a minimum of two weeks of temperatures lower than 10° F would be needed to have a kill significant enough to affect the number of fire ant colonies.
- 8) **What control measure can I use in my garden?** There are various products labeled for use in the garden; however, *EXTINGUISH*, the *methoprene* bait material, is the only bait product currently labeled for use in the garden.
- 9) **When are the natural enemies of fire ants going to be available to me to release?** Phorid flies, or decapitating flies and *Thelohania*, a microsporidian protozoa, have been released in Arkansas to determine if they will have an impact on fire ant populations. To date, the research is NOT concluded. The natural enemies will build up in the environment on their own, it is hoped. Any movement of the organisms into new areas will be controlled at this time.
- 10) **Are there any benefits to having fire ants?** Fire ants have been shown to decrease some pest insect numbers. Cotton growers in Texas and sugarcane growers in Louisiana appreciate the predatory nature of the ant. Also, tick pressure may be decreased in pastures infested with fire ants.



Source: University of Arkansas Division of Agriculture Cooperative Extension Service Publication (FSA7052) written by Donna Shanklin and Dr. Kelly Loftin.

**Sponsor credit or recognition does not imply the University of Arkansas' endorsement of the service or products named.

DO YOU SEE WHAT I SEE???

This spring has been full of surprises! The constant rains and fluctuations in temperature have been a breeding ground for diseases, insects and other issues that may not manifest themselves fully until later in the growing season. Two of the most common questions have centered around two of Arkansas' most beloved ornamentals: "Redtip Photinia" and Callery pear "Bradford." The most common culprit diagnosed this year has been **Photinia leaf spot** in Redtip Photinias and **Fire Blight** in Callery pear "Bradford." The following articles are provided to highlight these common diseases and offer solutions on how to care for these beautiful ornamentals.

LEAF SPOT OF REDTIP PHOTINIAS (FSA 6112)

The fungus *Entomosporium mespili* causes Photinia leaf spot. This is a widespread disease on the ornamental shrub redbtip Photinia and causes a lot of damage. Cool, wet weather and active growth contribute to this disease's most destructive nature.



Fig. 1. Photinia Leaf Spot



Fig. 2. Fruiting Bodies of *Entomosporium mespili* within Leaf Spots

Some of the first symptoms of Photinia leaf spot (above photos) are tiny, circular, bright red spots that appear on the upper and lower leaf surfaces. Gray centers are most common on more mature leaf spots. The spore-producing bodies are represented within the spot by black specks. More distinctive characteristics of leaf spot are dark red to purple margins. The leaf petioles and stem tissue are not immune to these symptoms during cool, wet periods when the fungus is most active. Extensive leaf drop is not uncommon in severe cases and can ultimately lead to plant death.

Infected leaves and shoots harbor the fungus over winter from the previous year. These leaves and shoots can be an important source for future disease outbreaks. Large masses of spores are produced and released from the spots from late winter through spring. The dispersal of spores slows during hot, dry periods and is mainly spread by splashing water. Within 10 to 14 days of exposure to these spores, particularly in warm, wet conditions in spring, new leaf spots may appear. The reddish new flush of Photinia leaves are the most susceptible. The infection frequently starts at the bottom portions of the plant and moves upwards during cool, rainy periods. The following practices encourage flushes of succulent summer growth: summer pruning, frequent pruning and fertilization often promote disease development. Japanese and Chinese Photinia tend to be less susceptible to Photinia leaf spot. Levels of resistance are also available in some Indian hawthorn cultivars.

To control Photinia leaf spot, purchase only plants with no leaf symptoms. You want to provide adequate spacing between plants and avoid overhead irrigation to minimize leaf wetness. All fallen diseased leaves should be destroyed. Avoid practices that promote new growth as outlined previously. In severe cases, it may be

necessary to remove infected plants and replace them with a less susceptible species.

Protectant fungicidal sprays may be used in early spring for plants with a history of leaf spot. Preventative fungicide applications sprayed routinely may be required to maintain healthy specimens in the landscape. Fungicide choices include materials with the active ingredients of *chlorothalonil*, *myclobutanil*, *propiconazole*, *triforine*, and *triadimefon*. Multiple applications may be necessary and should begin at bud break until all new foliage is matured. Fungicide sprays in combination with sanitation are needed to maintain healthy plants.

FIRE BLIGHT OF ORNAMENTAL PEAR (FSA 7534)

The Callery pear “Bradford” can be persistently affected by the disease—fire blight. The bacterium *Erwinia amylovora* is responsible for fire blight, and this disease can also affect other ornamentals in the Rosaceae family. Some varieties of bearing pear, apple, blackberry, pyracantha, flowering crabapple and quince are susceptible. Hawthorn, rose, and cotoneaster are also attacked, but to a lesser degree. The disease can develop rapidly under warm, humid conditions. It is most apparent during the spring, and heavy fertilization increases disease severity.



Fig. 3. Fire blight

Ornamental trees and shrubs show symptoms (photo above) similar to those of apple and commercial pear. The presence of blighted leaves and blossoms near the twig tips is usually the first symptoms. The leaves wilt and rapidly turn dark brown. Twig tips appear as if they are scorched by fire or damaged by frost. These symptoms may be randomly distributed throughout the tree. As the disease progresses downward toward larger stems, the twigs become blackened and the affected leaves tend to cling to the branches. A “shepherd’s crook” may develop on the twig tips and is useful in disease diagnosis. The severity of the disease is directly related to the cultivar and weather conditions at the time of infection. On highly susceptible plants significant dieback may occur.

Blossoms and shoots infected with the bacterium begin the disease cycle in spring. Bacteria ooze from “holdover cankers” and attract insects that spread the bacteria to the plant. This bacterium is commonly carried to the

blossoms, fruit, leaves and shoots by crawling or flying insects. Watering from overhead can also be a method of spread. The bacterium may also be spread by insects, birds and people using contaminated pruning tools. The process can last throughout the summer, and as outside temperatures fall, bacterial infections tend to slow down.

The first priority in preventing or managing fire blight should be growing resistant varieties. Pruning on diseased wood in landscape trees should be done during the dormant season or during an extended dry period. The wood should be removed 8–10 inches below the edge of the sunken cankers. Either a 10 percent household bleach solution or a 70 percent alcohol solution should be used to sanitize pruning equipment following each cut. Both soil conditions and nutrition can affect tree susceptibility. Fire blight tends to be more susceptible in trees grown in poorly drained sites with low pH values. Regular soil tests should be performed to determine fertilization needs.

Resistant cultivars and selective pruning are the best methods of control for ornamental pears and other woody ornamentals in home landscape conditions. Chemical control is not usually successful since timing and coverage are very important for control. The application of copper materials during the dormant season followed by regular spray applications of *streptomycin* beginning at bloom in commercial operations have shown success in managing the disease.

Sources: University of Arkansas Division of Agriculture Cooperative Extension Service Publications (**FSA6112** and **FSA7534**) written by Dr. Stephen Vann, Assistant Professor, Extension Urban Plant Pathologist



The Master Gardeners of Jefferson County have started this growing season off with a BANG! They've committed themselves to several projects this year, and many of them are actively engaged in them now. The youth garden, located at East 6th and Idaho, has seen over 400 youth during the month of April. Various Master Gardeners were instrumental in fostering and providing the atmosphere for these youth to experience gardening from an educational and hands-on perspective. The herb, flower and butterfly gardens are beautiful as well. The Master Gardeners will work on projects at UAPB, JRMC and the Adopt-a-Spot program, as well as many others. We look forward to having all of our past and present Master Gardeners out working on these various projects.



For those interested in joining the Master Gardeners of Jefferson County, please feel free to contact me at 534-1033. We will be accepting applications for the 2009 class beginning in December.

UPCOMING EVENTS

- The **University of Arkansas Southwest Research and Extension Center (SWREC) in Hope** will host the **2008 Horticulture Field Day on June 5**. The field tour will start at 3:00 p.m., and the event will conclude at 8:00 p.m. A barbecue dinner will be included with the tour. **The registration for the tour is \$8, and you must R.S.V.P. by May 25.** All correspondence should be directed to (870) 777-9702 ext. 109 or Qchen@uaex.edu.
- The **34th Annual Farmers' Market Opening** will be held on **Saturday, June 7, 2008, at Saracen Landing** (Lake Pine Bluff). The registration for the **Vegetable Display Competition** will start promptly at **7:00 a.m.**, and the **opening ceremony** will start at **9:00 a.m.**
- The **52nd Annual Bradley County Pink Tomato Festival** will be held **June 7–14, 2008**, in downtown **Warren, Arkansas**. If you need more information, the following site will be of assistance: www.bradleypinktomato.com
- The **Delta Rivers Nature Center in Pine Bluff** will host its **2008 Plant Show on Saturday, June 21, 2008**, from 10:00 a.m. to 2:00 p.m. The show will consist of a plant show, contest and sale. Several seminars will be available. For more information, please contact Diana Neal, Botanical Education Specialist and Master Gardener, at (870) 534-0011.
- The **U of A Division of Agriculture** will conduct a **Fruit Station Field Day at Clarksville on June 24**. For details, contact the Jefferson County CES office at (870) 534-1033. Interested producers may want to carpool or register to attend by **pre-registering with the county Extension office by June 15**.

On a personal note, I'd like to thank the Master Gardeners for their support. They've been a tremendous source of inspiration and help as I start my Cooperative Extension career.

Sincerely,

County Extension Agent-Agriculture