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- **Left Chrysanthemum white rust as viewed from top of leaf.**
- **Right Chrysanthemum white rust as viewed from bottom of leaf.** (pictures from Central Science Laboratory)

Above & Below: Pink hibiscus mealybug

- **Bacterial leaf scorch on oak**
- **Emerald ash borer larva**

Left: Emerald ash borer “D” shaped exit holes
Above: Serpentine gallery caused by emerald ash borer larvae. As the larvae tunnel under the bark, they cut off the flow of water and nutrients to the top of the plant, which results in death of the tree.
Bacterial Leaf Scorch Is Visible Now
John Hartman, Extension Plant Pathologist
University of Kentucky

County Extension Agents, landscape professionals, and observant homeowners have no doubt noticed premature browning of many shade trees, particularly oaks, these past two weeks. Most of the affected trees are suffering from bacterial leaf scorch, caused by Xylella fastidiosa. This disease is found on several shade and landscape trees in Kentucky, but oaks, especially pin oaks and red oaks, are the primary victims.

Symptoms. Bacterial leaf scorch disease symptoms are characterized by browning of the margins of groups of leaves anywhere in the tree. Some of the scorched leaves are already beginning to drop from the tree prematurely. The number of branches with scorched leaves in a tree may increase during the coming month. On trees that have been infected for many years, nearly all branches will show scorched leaves, but on newly infected trees only one or a few branches will be affected this year.

Infected trees leaf out normally the following year, and in late summer, leaves of a few more branches turn prematurely brown. These events repeat themselves over a period of several years until the entire infected tree turns prematurely brown in fall and begins to show twig and branch dieback and tree decline. The reason for the scorching symptom is that X. fastidiosa is found in the xylem tissues of trees where it blocks the flow of water to the leaves. The bacterial leaf scorch pathogen is spread by leafhopper and treehopper insects, but it does not appear to be spread from tree to tree very rapidly by these insects. Nevertheless, in some neighborhoods with mature oaks and with the disease present for many years, a high proportion of the trees can show symptoms of bacterial leaf scorch. The disease is confirmed in the University of Kentucky Plant Disease Diagnostic Laboratory by detecting the bacteria in infected leaves with a special test specific for Xylella, the cause of the disease.

Where is bacterial leaf scorch? In Kentucky, bacterial leaf scorch has been commonly observed in pin oak, red oak, shingle oak, scarlet oak, white oak, bur oak, and sycamore. It is also occasionally found in red maple, sugar maple, silver maple, London plane, hackberry, mulberry, elm, and sweetgum. Bacterial leaf scorch is found throughout much of the eastern and southern U.S. On the capitol mall in Washington, DC, for example, each summer, American elms can be seen with symptoms of bacterial leaf scorch. Bacterial leaf scorch is present in landscape trees in many of the urban areas of Kentucky. The bacteria have been identified in urban trees from such cities as Paducah, Madisonville, Owensboro, Bowling Green, Somerset, Louisville, and Lexington. In Kentucky, this disease has not been detected in forest oaks.

Prognosis for infected trees. There is no effective long-term cure for bacterial leaf scorch. Because infected trees decline gradually, it may take from five to ten years until they have many dead limbs and branches and need to be removed. In the meantime, tree owners should provide good growing conditions for the trees to prolong their survival, and begin to plant replacement trees that will attain a reasonable size before the diseased ones are removed.

Big Caterpillars Always A Curiosity
Lee Townsend, Extension Entomologist
University of Kentucky

Why is this large caterpillar crawling slowly but purposefully across the ground? Where did it come from? Where is it going? Can it hurt someone?

Ornate caterpillars of several species of large moths have finished feeding on tree leaves and are moving to protected sites where they will spend the winter in custom-spun silken bags. These "wandering stage" caterpillars will crawl until their physiology allows them to stop, spin, pupate, and remain hidden through the winter. We didn't notice them while they were feeding for several weeks in the trees but we can't miss them as they crawl across the yard. The coloring, spines, and spiked ornaments on their bodies can be intimidating enough to keep them from becoming bird food but most are not harmful. However, there are some stinging caterpillars, so it is best to let them go on their merry way if you have doubts.

Quick guide to a few common species

*Cecropia caterpillar - light blue-green body - pairs of yellow knobs down back.

*Polyphemus caterpillar - light green body with short, narrow white vertical bar on each segment.

*Promethea caterpillar - pale green body with pairs of red knobs on two segments behind head and yellow peg at end of body.

*Luna moth caterpillar - green-body with yellow stripe along the body and distinct fine setae (hairs).
Sudden Oak Death Survey Update
Janet Lensing, Nursery Inspector, University of Kentucky

Sudden oak death, *Phytophthora ramorum*, is a pathogen causing oak mortality in areas of California and Oregon. This disease may be moved long distances through infected nursery stock since several common ornamental plants are susceptible to infection. The primary nursery plants of interest are lilac, viburnum, rhododendron, mountain laurel, pieris, and camellia. Symptoms include leaf lesions, death of leaf buds, and stem cankers or dieback.

We have been conducting a nursery survey this summer in conjunction with the USDA to ensure that this pathogen does not become established in Kentucky. In addition to extensively sampling 21 nurseries for this disease, we have been taking samples of symptomatic leaves during regular nursery inspections and have responded to notification that some Kentucky nurseries have received stock from Oregon nurseries in which sudden oak death has been detected.

Emerald Ash Borer Found In Maryland Again
Press Release

ANNAPOLIS, MD (August 22, 2006) - Maryland officials today confirmed the presence of the emerald ash borer (*Agrilus planipennis*) in ash trees located in the Clinton/Brandywine area of southern Prince George’s County. The affected trees were discovered during survey and eradication efforts begun after the detection of the insect in Maryland in 2003, when a Michigan nurseryman shipped infested trees into a Prince George’s County nursery.

"While we are disappointed to find the emerald ash borer after nearly three years of no detections, we are pleased that our surveillance efforts have proven to be effective and that we found the insect before it could spread further," said Agriculture Secretary Lewis R. Riley.

"Together with our federal, state, and local nursery partners, we are beginning aggressive measures to control and eradicate this destructive pest."

The Maryland Department of Agriculture (MDA) today issued a Quarantine Order (#06-01) that prohibits anyone from moving ash trees or any hardwood firewood into or out of Prince George’s County until further notice. Over the next two months, the Department of Natural Resources (DNR) and MDA will survey the area south of Rt. 4 to locate all ash trees. The results of the survey will determine the necessary course of action and scope of tree destruction and pest surveillance. The accepted protocol used in Maryland and the other impacted states is the removal and destruction of all ash trees in defined areas followed by on-going surveillance.

This year Maryland is also restricting the movement of all hardwood firewood into and out of Prince George’s County. "DNR foresters together with MDA are proactively following this course of action to safeguard Maryland’s trees on both private and public lands, neighborhood trees and the nursery industry," said DNR Secretary of C. Ronald Franks.

Since 2003, efforts to eradicate the insect included the collection and destruction of all trees sent to Maryland from the Michigan nurseryman, destruction of all ash trees within a ½ mile radius of the introduction point, and three years of surveillance, which produced no emerald ash borers until now. The insect, an exotic pest from Asia, feeds on and kills ash trees in one to three years after infestation.

The presence of the emerald ash borer typically goes undetected until the trees show symptoms of being infested - usually the upper third of a tree will thin and then die back. This is usually followed by a large number of shoots or branches arising below the dead portions of the trunk. Other symptoms of infestation include: D-shaped exit holes in the bark where adults emerge, vertical splits in the bark, and distinct serpentine-shaped tunnels beneath the bark in the cambium, where larvae effectively stop food and water movement in the tree, starving it to death.

Maryland’s nursery and greenhouse industry accounts for $303 million of the state’s $1.4 billion agriculture industry. Ash is the most common tree in Baltimore with approximately 293,000 trees and accounts for about six million trees in the Baltimore metropolitan area. The U.S. Department of Agriculture has estimated losses could exceed $227,568,000 in the Baltimore area alone if the emerald ash borer were to become established.
**Root And Trunk Diseases & Disorders Cause Decline**  
John Hartman, Extension Plant Pathologist  
University of Kentucky

Kentucky fruit trees were placed under a great deal of stress during recent periods of hot, dry weather. Under these stressful conditions, symptoms of root and collar rot diseases quickly appeared. Growers might have noticed that foliage was not as green as normal, with many leaves turning yellow and dropping. Perhaps over-all growth has been reduced for this season and some twigs and branches are dying back. To determine the reason for this gradual decline growers need to look at the roots and lower trunk for possible causes. Fruit trees in decline may be suffering from a root decay or lower trunk decay or injury problem.

Candidate maladies include: Phytophthora collar rot, southern stem blight, Armillaria root rot, Xylaria root rot, mower damage and voile injury. All of these will cause yellowing of leaves, premature defoliation, decline, and death of trees. In most of these instances, the bark of the lower trunk is decayed or removed so that phloem tissues located in the inner bark are destroyed and phloem function is disrupted. This disruption means that phloem tissues are no longer carrying food made in the leaves back to the roots and when this happens, the roots gradually starve. Starving roots cannot be expected to take up water and mineral elements efficiently enough to sustain the tree through hot, dry weather. Thus the gradual decline being observed now is evident in orchards or landscapes where these diseases occur.

*If collar rot, caused by species of Phytophthora, is the problem, growers can often recognize the symptoms by cutting into the bark at the base of a declining tree. The bark of the diseased trunk and buttress roots just below ground or at the ground level will be soft and the inner bark tissues reddish brown instead of white. A laboratory culture can confirm the presence of Phytophthora. Poor soil drainage or over-watering will provide the moist conditions necessary for Phytophthora to thrive.*

*For southern stem blight, caused by the fungus Sclerotium rolfsii,* growers should be able to observe white fungal mycelium on the bark surface on the part of the trunk just underground or at ground level. Small mustard seed-sized sclerotia embedded in the fungal mycelium may also be visible. Southern stem blight usually only attacks young trees during their first few years in the orchard. Laboratory analysis and culture can confirm presence of this fungus.

*Armillaria root rot, caused by the fungus Armillaria mellea, produces dark shoe-string-like strands of the fungus which are often visible under the bark at the base of the tree. White mycelium may be present under the bark and light brown mushrooms may appear at the base of the tree.*

*Xylaria root rot, caused by the fungus Xylaria mali is characterized by, hard black "fingers" protruding from the ground at the base of the tree.*

*Growers should easily recognize if voles have been chewing the bark off of the base of the trees. Similarly, bark removal due to weed trimmers or mowers will disrupt phloem tissues and hasten tree decline.*

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**Euonymus Scale**  
Lee Townsend, Extension Entomologist  
University of Kentucky

Female Euonymus scale females (about 1/16 inch long) have dark brown to gray, somewhat pear-shaped bodies. The white coverings of males are distinctly smaller and narrower. When abundant, these armored scales can completely encrust twigs and leaves of Euonymus, pachysandra and bittersweet. They use their piercing-sucking mouthparts to feed on sap. Moderately to heavily infested plants grow very slowly, if at all, and yellow spots may appear on the foliage. Heavy infestations can cause branch dieback and may even kill some plants.

Fertilized females pass the winter with their eggs hatching over a two-week period from late April to early May in central Kentucky. The tiny crawlers can be active into late May and are adults four- to six-weeks later. Crawlers that hatch from these eggs are active from late July into early September.

Scale control can be challenging and may need to be repeated over several seasons. Proper timing of insecticide applications is a major key to success. Applications must target newly hatched scale crawlers which are active in May and again in June and July. They are very susceptible to control measures while moving over plant surfaces to find a feeding spot. Once settled, they begin to secrete a waxy covering that shields them from sprays.

Alternatives for crawler control  
**Cultural control**

Scales tend to thrive on stressed plants. Following a recommended fertility program and watering regime will promote plant health. However, over-fertilization favors scale buildup. If practical, improve plant sites to reduce stress and promote growth. Severely prune back heavily infested branches and protect new growth with insecticide applications.  
**Insecticidal Sprays**

Horticultural oils kill by suffocation or after penetrating over-wintering stages of the insect. Consequently, they may not be effective where several layers of scale coverings have accumulated.
Dormant oils are typically applied during February or March but may not be very effective against armored scales. Highly refined supreme, superior, or summer oils can be used on many trees and shrubs during the growing season. Read the product label for guidelines on plant sensitivity and temperature restriction before buying and using these products.

Insecticidal soaps are long chain fatty acids that kill susceptible insects through direct contact. Like horticultural oils, they require thorough coverage. Soaps leave no residue so repeated applications may be needed for some pests. These products may burn the foliage of sensitive plants, such as Japanese maple, so check the label for information about the plant species that you intend to treat.

A variety of natural and synthetic insecticides are labeled for use as sprays to control scale crawlers on landscape trees and shrubs. While the residual life of these products is generally longer than oils and soaps, timing, coverage, and pre-cautions on damage to some plant species are very similar to those for oils and soaps.

**Systemic insecticides**

Imidacloprid (Bayer Advanced Garden Tree & Shrub Insect Control Concentrate) is applied as a drench around the root zone of infested plants. This water soluble insecticide is taken up by the roots and transported throughout the plant where it is ingested by sap feeding insects. This provides a means of scale control without reliance on sprays. However, it may need to be applied several weeks before crawlers are active for best results.

**Evaluating Control**

The success or failure of control efforts may not be readily apparent but here are some things to check.

- Live scales should produce a liquid when mashed, dead scales will be dry and not "bleed" when crushed.
- New foliage should have a healthier appearance once the scale burden has been removed. Buds should break a little earlier than when the plant was infested and expanded leaves should have normal color and turgor.

**Natural Enemies**

Scale insects can be attacked by a variety of lady beetles, predatory mites, and small parasitic wasps. Lady beetle adults and larvae can be seen but mites and parasitic wasps are very difficult to see. You can conserve natural enemies by using insecticidal soaps and oils which have limited impact on beneficial species in comparison to other control alternatives.

**Products for Scale Crawler Control**

Orthene Turf, Tree & Ornamental Spray, Ortho Systemic Insect Killer, Bon-Neem, Gordon’s Garden Guard Liquid Insecticide, Sevin, Bayer Advanced Garden Multi-Insect Killer Concentrate, Spectracide Triazicide Soil and Turf Insect Killer, Dragon Cygon 2E Systemic Insecticide, Ortho Bug-B-Gon Garden & Landscape Insect Killer Concentrate, Ortho Mosquito-B-Gon Tree & Shrub Spray, Bonide Malathion Insect Control, Spectracide Bug Stop Multi-Purpose Insect Control Concentrate, Bonide Borer-Miner Killer.

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**Pink Hibiscus Mealybug**

University of Florida Publication EENY-29

*Editor’s Note: While the pink hibiscus mealybug may not be able to overwinter outside in Kentucky, it is a serious threat to greenhouse operations. If you suspect you may have a problem with this insect, please let us know.*

**Introduction**

The pink hibiscus mealybug, *Maconellicoccus hirsutus*, is a serious pest of many plants in tropical and subtropical regions, including Africa, southeast Asia, and northern Australia. It was found in the Caribbean in 1994 for the first time. It was discovered in Broward County, Florida on 13 June, 2002, then in Dade County, and has continued to spread.

This pest has two common names (pink mealybug and hibiscus mealybug), but there is an effort to standardize the common name by calling the pest “pink hibiscus mealybug,” even though it attacks many plant species, including citrus.

The pink hibiscus mealybug is expected to attack many Florida crops including citrus, avocado, carambola, fig, guava, mango, soursop, and sugarcane; vegetable crops including asparagus, beans, beets, cabbage, peanuts, pigeon pea, cucumber, lettuce, pepper, pumpkin, and tomato; forest trees, and many species of ornamental plants including *Allamanda, Angelica, Anthurium, Bougainvillea, Croton*, ginger lily, *Heliconia, Ixora*, hibiscus, palm, and oleander.

Crop production costs will be increased if growers attempt to manage mealybug populations by pesticide applications. Pesticide applications will disrupt the effective natural enemies of other crop pests, such as mites, scale insects, and whiteflies leading to the application of additional pesticides to control these pests. These additional pesticide applications can contaminate food, water and farm workers. Around the yard and home, insecticide use may also increase due to damage to ornamental plants, particularly hibiscus.

**Distribution**

In the 1990s, *M. hirsutus* invaded several islands in the Caribbean: Grenada, St. Kitts, Nevis, Trinidad, Tobago, and the U.S. Virgin Islands. Pink hibiscus mealybug is expected to colonize all of Florida and spread north into southern Georgia. Because pink hibiscus mealybug attacks so many crop and ornamental plants, populations could become common on many plant species in Florida.

**Description and Life Cycle**

Adult mealybugs are small (about 3 mm long) and pink in body color but covered with a waxy secretion. The
waxy filaments are short and females are usually obscured by this white mealy wax. When adults are crushed their body fluids are also pink. Adult males are smaller than females, reddish brown and have one pair of wings. Males have two long waxy "tails."

Females die shortly after depositing eggs. Freshly-laid eggs are orange, becoming pink before they hatch. Eggs are found in egg sacs. First instar nymphs (crawlers) of the pink hibiscus mealybug disperse by walking and by wind. Nymphs also can walk considerable distances to find suitable host plants. The life cycle takes about 23 to 30 days. The pink hibiscus mealybug has a high reproductive rate (females can deposit up to 600 eggs) and produces up to 15 generations per year, so pest populations can become very large.

Pink hibiscus mealybug eggs overwinter in bark crevices, leaf scars, under bark, in the soil, tree boles, inside fruit clusters, and inside crumpled leaf clusters.

Damage

The pink hibiscus mealybug is not just an agricultural problem. This pest will attack ornamental plants in yards and parks.

Pink hibiscus mealybug feeds on the soft tissues of many plant species and injects a toxic saliva that causes curling and contortion of leaves. The entire plant may be stunted and the shoot tips develop a bushy appearance. Buds may not flower and stems may twist. Fruit may also be deformed. The mealybug excretes honeydew which encourages the development of black sooty mold. Very high mealybug populations can kill plants.

The level of feeding damage depends on the vigor of the infested plant; seedling trees and weakened trees are more susceptible. Shoots become twisted with shortened internodes, forming bunchy heads of small bushy leaves at the tips. The curled leaves can resemble viral damage, but this pest is not known to vector any diseases.

Heavy infestations of young plants by the pink hibiscus mealybug may stunt their growth. The mealybug is found on stems, leaves, buds, fruit and roots of many plants. On hibiscus, the mealybug usually infests young twigs, causing deformed terminal growth due to shortening of the internodes, deformed leaves and thickened twigs. In cotton, the growing parts are attacked, resulting in bumpy growth. Plants are stunted and produce fewer bolls of a smaller size. Boll opening is adversely affected and yield reduction occurs. In grapevines, the mealybug feeds on sprouts after pruning; heavily infested bunches shrivel and drop. In peanut, the mealybug can feed on the underground parts of the roots, pods, and pegs of the plant, resulting in stunted growth and poorly developed pods.

**Biological Control**

As the pink hibiscus mealybug spreads across Florida we will have to learn to live with this pest. Native natural enemies are expected to provide some control. We also believe this pest can be suppressed by the importation, rearing, release and establishment of host-specific natural enemies (classical biological control). Such natural enemies are known to exist and can provide substantial control.

The ladybug *Cryptolaemus montrouzieri* is known to feed on all stages of the mealybug. This beetle already is established in Florida and also is available commercially. The appropriate release rate for this ladybug is unknown. Predatory ladybugs may provide some suppression of high pest populations, but are not expected to provide adequate control of lower populations because the beetles require large numbers of mealybugs to survive.

The pink hibiscus mealybug is a good candidate for classical biological control. Several effective parasitoids are known in Asia and elsewhere. One parasitoid, *Anagyrus kamali*, completes a generation in less than half the time required for its host. *Anagyrus kamali* has been reported to be an outstanding natural enemy in Egypt and Hawaii and is able to dramatically suppress pink hibiscus mealybug populations. This parasitoid has been released on islands in the Caribbean and appears to be providing substantial control already. Pink hibiscus mealybugs parasitized by *A. kamali* produce "mummies" and have an exit hole where the adult wasp emerges. Several other parasitoid species also are known to attack the pink hibiscus mealybug. These parasitoids will be evaluated for their host specificity and may be released when more is known about their biology.

Classical biological control projects often take several years to conduct. In order to shorten the time it will take to conduct a classical biological control program on the pink hibiscus mealybug, we have made contact with scientists in the native range of these pests for assistance in identifying sites where natural enemies can be collected and we have obtained permits for importing these natural enemies into quarantine for evaluation. The USDA-APHIS also has agreed to provide starter cultures of parasitoids for evaluation, rearing, and release in Florida. Natural enemy species have been identified for which a substantial amount of information is available, which means that permission to get these species out of quarantine for mass rearing and release in Florida will be expedited once we know the pest is here in Florida.

**Insecticidal Control**

There is no known chemical control for this pest. **What to Do if You Find This Pest**

If you find this mealybug pest on plants (especially hibiscus) at your home or greenhouse, please send suspect pink hibiscus mealybug specimens to:

Department of Entomology
S-225 Ag Science Center-N
Lexington, KY 40546-0091
Chrysanthemum White Rust
Julie Callahan, Dept of Plant, Soil & Insect Science, University of Massachusetts

Chrysanthemum white rust (Puccinia horiana) is a serious fungal disease of chrysanthemum. This disease was first discovered in Japan in 1895 and was confined to China and Japan until the 1960s. Today it is established in Europe, Africa, Australia, Central America, South America, and the Far East. White rust can spread quickly in greenhouse and nursery environments causing severe crop losses. Eradication of this pathogen is feasible because P. horiana has a limited host range, requires green host tissue, and is a poor disperser.

Chrysanthemum white rust (CWR) is a quarantine significant pest in the United States; therefore, occurrence of this disease leads to state and federal regulatory action. In the last 25 years localized introductions of chrysanthemum white rust have occurred within the United States or Canada and have subsequently been eradicated or are being eradicated. Last year CWR was reported in one location in Norfolk County, Massachusetts. The MA Department of Agricultural Resources worked with the grower to eliminate the disease from their facilities and surveyed the surrounding area to insure the rust had not spread. The federal management plan for CWR includes the following measures destroying symptomatic plants, fungicide treatments on remaining asymptomatic plants, surveys of the surrounding area, and trace backs of infected stock. The full management plan can be viewed on the web on the USDA, APHIS website.

Hosts
Twelve species of chrysanthemum are susceptible including:
- pot mums, spray mums, and garden mums (Dendranthema X grandiflorum = Chrysanthemum morifolium).
- Other hosts include Nippon daisy (Nipponianthemum nipponicum = C. nipponicum)
- High daisy, and (C. pacificum = Ajania pacifica)
- Resistant species include:
  - annual chrysanthemum (C. carinatum)
  - crown chrysanthemum (C. coronarium)
  - pyrethrum (Tanacetum coccineum = C. coccineum)
  - marguerite daisy (Argyranthemum frutescens)
  - ox-eye daisy (Leucanthemum vulgare)
  - shasta daisy (Leucanthemum X superbum = C. maximum)
  - corn marigold (C. segetum)

How to spot it:
The symptoms of chrysanthemum white rust are very distinct. Light green to yellow spots up to 5mm in diameter appear on the upper surface of the leaf. These spots become brown and necrotic with age. Raised beige to pink pustules form on the underside of leaves beneath the spots. Pustules become white with age. Pustules are most common on young leaves and flower bracts but may form on any green tissue or the petals. Symptoms usually occur during cool, wet weather.

How does it spread:
The disease is brought into the greenhouse on infected plant materials. Infected plants may look normal until correct environmental conditions encourage symptom development. Hot and dry weather may delay onset of symptoms for up to eight weeks. Fungicide applications may suppress disease development. CWR can also be spread to uninfected plants on contaminated soil, litter, dead leaves, gardening equipment, clothes, shoes, and hands. The fungus only grows and reproduces on susceptible host plants.

CWR produces two types of spores. Teliospores are in the pustules on the underside of leaves and remain on the pustule unless they are aggressively brushed off. Teliospores can persist up to 8 weeks on pustules attached to leaves. Teliospores produced basidiospores under moist conditions (96-100% relative humidity for at least three hours). Basidiospores are fragile and short-lived (1 hour or less depending on the humidity) but they are responsible for explosive epidemics under the correct environmental conditions. Infection can occur when temperatures are cool (between 40-73F with an optimal temperature of 63F) and relative humidity is high (96-100%). A film of free water on the leaves is required for infection. Symptom development usually occurs in 5 to 14 days.

What to do:
The first step is to prevent CWR from being introduced into your facilities. Obtain materials from a reputable supplier. Use good cultural techniques to limit spread of disease. If CWR is introduced to Kentucky, early detection and cooperative actions between growers and state and federal agencies will aid in preventing this pathogen from establishing in Kentucky. Look for development of disease symptoms during cool, moist periods. Since CWR is a federal quarantine pest, growers are obligated to report it to the State Entomologist’s Office. Please contact Joe Collins at (859) 257-3807 or Terri Gater (for western KY) at (270) 365-7541 ext. 204 or you may email at joe.collins@uky.edu or terrri.gater@uky.edu if you suspect your mums have chrysanthemum white rust.
Gypsy Moth Survey Wrap Up

This year 109 male gypsy moths were captured in 10 counties: Boone, Bracken, Campbell, Fayette, Gallatin, Grant, Jefferson, Kenton, Lawrence and Pendleton. This number will most likely go up slightly in the coming months as the rest of the traps are removed and examined. Most of the traps only contained a single moth which is usually nothing to be concerned about. These are usually “blow ins” from Ohio or West Virginia. The moths are transported to Kentucky on storm fronts or they may have been adult hitchhikers that arrived on someone’s outdoor articles. What is of concern to us is a small area in Campbell county where a significant number of moths were captured this year. One trap yielded 16 moths which indicates that something is definitely happening in that area. The area is a remote part of the county where few people live. We are in the process of letting the residents of that area know what we have found and working on a strategy for next year. Currently we are planning on an egg mass survey in the fall of this year after the trees drop their leaves. If we are lucky enough to spot egg masses, then it will allow us to concentrate our efforts on a smaller area and be more effective. Next spring, we will be burlap banding several trees in the area. Wrapping the trunks with burlap provides the gypsy moth larvae a hiding place for them to pupate into an adult moth and also gives us an easy and effective monitoring tool.

Next year we will place additional traps in the area. We have used these tactics in other parts of Kentucky in previous years when we have had multiple catches and have been able to eliminate the problem so.

Last Newsletter for 2006

This will be the last newsletter that we will publish this year. The first edition for next year will be in April. As always, if you have any suggestions and or input that you would like to make, please feel free to do so.

We’re on the web!
www.KyStateEnt.org

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