The emerald ash borer, *Agrilus planipennis* Fairmaire, is an exotic beetle discovered in southeastern Michigan in 2002. It probably arrived in the United States on solid wood packing material originating in its native Asia. Since then it has spread to several states where it has killed millions of ash trees. It is slowly approaching the Southeast and may pose a threat to trees in Florida. By the end of 2008, the beetle was established in Ontario, Michigan, Ohio, Indiana, Illinois, Missouri, Wisconsin, Pennsylvania, Maryland, West Virginia and Virginia.

This borer is a member of the beetle family Buprestidae, known as metallic wood-borers. Adult beetles have a narrow body approximately 1/2 inch in length with a flat back. They are bright green above and have a purple abdomen under the wing covers. The adults readily fly to avoid capture and are often difficult to observe. They differ from our native metallic wood borers by their large size, narrow body, and bright green coloration. The cream-colored larvae are flat-headed wood borers that can be found in serpentine galleries under the bark.

The emerald ash borer attacks only ash trees, and they prefer the green and black ash. There are four species of ash in Florida which primarily occur in the northern part of the state. All Florida ash species are potential hosts for this beetle.

Adult beetles nibble on foliage, but cause very little damage. Larvae feed on the inner bark of ash trees, disrupting the tree’s ability to transport water and nutrients. Infested trees initially show canopy dieback. Extensive larval damage can lead to tree death.

If established in the Southeast, adult activity would probably be early in the spring. Adults are short lived, living about three weeks, and are active on sunny, warm days. Otherwise, adults may hide in crevices or other sheltered areas on host trees. For larvae, look for trees with signs of decline and canopy dieback. On trees with those symptoms, look for split bark, serpentine larval galleries, and D-shaped exit holes. Look for larvae under the bark in the galleries. The life cycle is generally one year. In all cases, specimens are needed for confirmation of the presence of the emerald ash borer.

Control of any wood-boring insect, once established, is very difficult. The best cure is prevention. Moving firewood, nursery stock, and other ash wood materials in areas infested with emerald ash borer is regulated by the infested states and federal government. Florida is in the process of developing regulatory rules.

Condensed From Pest Alert, Florida Department of Agriculture and Consumer Services, Div. of Plant Industry.
**Pest Resistant Potato**

The final phase of work is being done for a new russet potato which shows genetic nematode resistance. The Columbia root-knot nematode, or CRN, is a problem to potato production in the Pacific Northwest, where two-thirds of America’s potatoes are grown, and in Florida. The research started with a wild native potato species growing in Arizona and New Mexico. The wild species and the cultivated potato are chromosomally incompatible, so a technique called bridging was used. This process forces both DNA’s to combine. The cells were then stimulated to become plantlets. By back-crossing, the undesirable traits such as poor taste were eliminated.

Normally, resistance levels are tested by inoculating plants with the nematodes and then waiting 7 weeks for them to grow and reproduce. The roots are then washed and the pest’s eggs are counted. With new technology, a DNA marker was used to identify the plants with the gene for nematode resistance. By using the markers to determine resistant plants, the wait time is cut to only one day. Even with the time saved by using the DNA markers, the process has taken the better part of 20 years.

The nematode resistant potato has been in field tests for the last three years. The plants will undergo two more years of testing before the resistant potato is released in commercial varieties to the public. The work is being done by Agricultural Research Service, the research agency for the USDA.

Jan Suszkiw, ARS

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**Termites Not Swarming – But They are There**

It’s been about five years since the southeastern U.S. saw a good termite swarm season like those that were once common, University of Florida researchers say. Swarms of termites fly from their nests to mate and start new colonies. In the last few years, termites may have swarmed for a couple days, but nothing like the swarms that used to occur. Rather than swarming, wingless termites are crawling off by the thousands to mate and form new colonies.

In the last few years, termites may have swarmed for a couple days, but nothing like the swarms that used to occur. Rather than swarming, wingless termites are crawling off by the thousands to mate and form new colonies. That means homeowners and experts can miss these events, and without evidence of infestation, homeowners may not get the warning they need.

Floridians deal with subterranean termites and drywood termites. Subterranean termites tunnel from moist underground colonies to attack homes. They typically swarm from January until April. When deprived of water, they stay underground searching for it. Drought conditions have forced termites underground for so long that by the time they emerge, they’ve lost their wings. Drywood termites are found living in the dry wood of the house and they swarm in June and July. Both species can go undetected until they’ve done extensive damage to a home.

The state’s building codes were strengthened in 2001 to require that new construction include termite protection. In 2004, the state mandated that builders choose termite-protection products from a list of 64 proven effective in Florida.

Even with those rules, about half of Florida’s homeowners have no termite protection. If limited swarming continues, homeowners may need to seek professional help to assess termite infestation. It is much less costly to prevent termites than it is to treat infestations.

From an article by M. Anderson, April 09 IFAS NEWS

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**The Argentine ant, Linepithema humile, was introduced into Louisiana in 1890 on coffee ships from Brazil. It is now permanently established in parts of the south, including Georgia and Florida. It disrupts ecosystems by directly displacing other ant species and other insects.**

The Argentine ant is becoming a serious pest of commercial honey bee hives. This ant challenges the front entrance of the bee hive causing the European honey bee to guard it. More ants then invade the colony through unguarded openings in the hive causing the bees to abandon it. If left unhindered, the ants will continue to overwhelm one or two hives a day until the whole bee yard is consumed.

Argentine ants are very small and not easily obvious which makes it difficult for a beekeeper to spot the beginning ant invasion. It is common for the ant’s takeover to go unnoticed in the bee hive.

Beekeepers in Hillsborough County have reported hive losses caused by the Argentine ant. When beekeepers move their hives to bee yards that are not already occupied by colonies, the Argentine ant can invade new colonies overnight.

Reported 20-April-2009

FDACS, Div. of Plant Industry

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**Bee Hive Invasions**

Reported in the following counties: Alachua, Bay, Broward, Duval, Escambia, Gulf, Highlands, Hillsborough, Okaloosa, Orange, Palm Beach, Pinellas, Polk, Putnam, Seminole, Walton and Washington.
UPCOMING EVENTS

Butterfly Gardening Workshop
When: Tuesday, May 19th 6:00 pm – 7:30 pm
Where: UF/IFAS Columbia County Ext. Office (located on the Columbia County Fairgrounds in Lake City)
Learn how to attract Butterflies to your garden. Find out which plants will keep them happy and healthy. Hands on experience – start your own cuttings of their favorite plants to take home and grow.
Registration Required – call 752-5384
A $10 fee covers the class materials, and your

Rain Barrel ‘Make and Take’ Workshop
Thursday, May 28th 6pm – 7:30 pm
Columbia County Extension Office (located on the Columbia County Fairgrounds in Lake City)
Learn the benefits of harvesting and using rainwater.
We’ll help you construct your own rain barrel to take home and use.
Registration required – call 752-5384. $35 fee covers class materials and your completed 55 gallon rain barrel.

Creating a Rain Garden
UF/IFAS Master Gardener Library Presentation Series
Saturday, May 16th at 1pm
Free Presentation at the Columbia County Library in Downtown Lake City
The Institute of Food and Agricultural Sciences (IFAS) is an Equal Employment Opportunity – Affirmative Action Employer authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations.

Master Gardener Plant Clinic
The UF/IFAS Columbia County Master Gardeners are available to help you with your home gardening problems on Tuesday, Thursday and Friday mornings from 9am to noon at the UF Extension Office located on the fairgrounds in Lake City.
Bring in samples for plant or pest identification.
You may also reach the Master Gardeners during the above hours by calling 386 752-5384.

Free pH testing for home gardens on Tuesday, Thursday and Friday mornings

Palm Production Seminar
TUESDAY, JUNE 23, 2009 ♦ 8:30 AM TO 12:30 PM
HAMILTON COUNTY EXT, 1143 US HWY 41, JASPER FL
Agenda
8:30 am Registration
9:00 am Welcome and Introductions Allen Tyree
9:15 am Best Management Practices for Palm Production
10:10 am Break
10:30 am Basic Palm Nutrition and Fertilization
11:15 am Palm Diseases in Production Systems
12:00 pm Surviving the Economic Storm, Linda Landrum,
12:30 pm Adjourn
Program is Free, but Seating is Limited - RSVP by June 19
Call Allen Tyree at 386-792-1276, email aTyree@ufl.edu
Or Linda Landrum 386-362-1725 x105 email LLandrum@ufl.edu.

Plan to attend the Small Farms Alternative Enterprises Conference in August
Attend sessions on Cut flower production, Hydroponics, Tropical fruit production, Direct marketing, Beekeeping, Organics, High value vegetables and herbs, Pasture poultry, and much more. Is this for you? Visit the website http://smallfarms.ifas.ufl.edu and check it all out!
Spanish Moss, a Strange Sight for Visitors

To native Floridians, Spanish moss is just a part of the Florida landscape. But to newcomers and visitors, the plant is a fascinating part of the scenery. Trees draped with masses of gray-green Spanish moss are such magnificently beautiful exclamations in the winter landscape. There are many misconceptions because the moss looks and grows so much differently than other plants. Spanish moss is not really a moss and it is not even Spanish. It has no roots and is not a parasite of the host tree. Spanish moss is an epiphytic plant which means it grows on another plant for support, but makes its own food. It gets water and nutrients from the air by absorption through its leaves and stems. Some tropical orchids and ferns are also epiphytic plants. This native flowering plant grows in Southeastern U.S., Central America, and south as far as Argentina. It is said to have been named by early French explorers who called it ‘Spanish Beard’ as an insult to their Spanish rivals in the New World. Notice how the grayish ‘beards’ are draped in trees with a more horizontal branching instead of upward branching. New plants are started from seeds or pieces of another plant. Spanish moss blooms from April to July with tiny, fragrant bluish flowers. They develop tiny seeds with hair-like sails that float on the wind until they become lodged on rough tree bark. During damaging wind storms, plant pieces can be broken off, blown to new locations and grow into new plants. Rough textured bark, warmth, and high humidity are needed to begin new growths of Spanish moss. Native Americans had many uses for the abundant masses of plants. The same process they used to prepare Spanish moss long ago is still used today. Bundles of moss are submerged in shallow ponds for six weeks to rot away the outer layers. The remaining dark wiry filaments are tough and long lasting. The filaments were once woven into a course cloth that was used as mats, bedding and horse blankets. Long fibers were twisted together to make rope. Dried moss made a good fire kindling for campfires as well as tips for the ends of fire arrows. Later it became popular as the stuffing material for furniture, auto seats, and mattresses. It is often now used as stuffing, packing material, and craft decorations. Even though Spanish moss is not a parasite, it can harm a plant if it becomes exceptionally thick. Branches can break during long rains because the moss becomes so heavy with water. Also, if the tree leaves become blocked from sunlight, they cannot produce food for the tree. Many small creatures make their home in the heavy clumps of Spanish moss. Chiggers, or red bugs are often living in moss that is close to the ground. Reptiles, amphibians, and spiders find the thick masses a good place to hide. Several species of bats hang out in the clumps. But, on a lighter note, several lovely song birds, like the yellow-throated warbler, use the moss as nesting material or build their nests right in the long tresses.

Nichelle Demorest  
UF/IFAS Extension Agent II  
Columbia County  
dndemorest@ufl.edu  

Want to be included on our Horticulture mailing list?  
Please complete and return in the enclosed envelope.  

Name______________________________  
Mailing address_________________________  

Circle all that apply:  
*Fruit/nut grower  
*Home Gardener  
*Nursery stock grower  
*Nursery stock retailer  
*Landscape/Maintenance  
*Vegetable grower  

To native Floridians, Spanish moss is just a part of the Florida landscape. But to newcomers and visitors, the plant is a fascinating part of the scenery. Trees draped with masses of gray-green Spanish moss are such magnificently beautiful exclamations in the winter landscape. There are many misconceptions because the moss looks and grows so much differently than other plants. Spanish moss is not really a moss and it is not even Spanish. It has no roots and is not a parasite of the host tree. Spanish moss is an epiphytic plant which means it grows on another plant for support, but makes its own food. It gets water and nutrients from the air by absorption through its leaves and stems. Some tropical orchids and ferns are also epiphytic plants. This native flowering plant grows in Southeastern U.S., Central America, and south as far as Argentina. It is said to have been named by early French explorers who called it ‘Spanish Beard’ as an insult to their Spanish rivals in the New World. Notice how the grayish ‘beards’ are draped in trees with a more horizontal branching instead of upward branching. New plants are started from seeds or pieces of another plant. Spanish moss blooms from April to July with tiny, fragrant bluish flowers. They develop tiny seeds with hair-like sails that float on the wind until they become lodged on rough tree bark. During damaging wind storms, plant pieces can be broken off, blown to new locations and grow into new plants. Rough textured bark, warmth, and high humidity are needed to begin new growths of Spanish moss. Native Americans had many uses for the abundant masses of plants. The same process they used to prepare Spanish moss long ago is still used today. Bundles of moss are submerged in shallow ponds for six weeks to rot away the outer layers. The remaining dark wiry filaments are tough and long lasting. The filaments were once woven into a course cloth that was used as mats, bedding and horse blankets. Long fibers were twisted together to make rope. Dried moss made a good fire kindling for campfires as well as tips for the ends of fire arrows. Later it became popular as the stuffing material