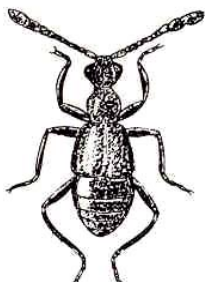




Who am I? Answer
on page 7



Commercial Clippings

A MONTHLY NEWSLETTER
FOR THE NORTHEAST FLORIDA GREEN INDUSTRY
Including Clay, Duval, Nassau, Putnam, and St. Johns

Professional DEVELOPMENT

<http://calendar.ifas.ufl.edu>

DATE	PROGRAM
Jul 7 8:30 AM to 10:30 AM	Landscape Maintenance series—Insects of Ornamentals Duval County Extension Office, 1010 N. McDuff Ave. To make reservations for class or phone 387-8850 and give class title and name to receptionist. Class Fee: \$ 5.00
Jul 13 8:00 AM to 3:30 PM	Public Health Workshop —Re-certification CEUs and Preparation for the Public Health exam 4 Public Health and 2 CORE CEUs requested Lunch Sponsored by UNIVAR No Cost for training More information e-mail pmattis@coj.net or phone 387-8850
Aug 2 8:30 AM to 10:30 AM	Landscape Maintenance series—Diseases of Ornamentals Duval County Extension Office, 1010 N. McDuff Ave. To make reservations for class or phone 387-8850 and give class title and name to receptionist. Class Fee: \$ 5.00
Aug 9 7:45 AM to 4:30 PM	Limited Commercial Landscape Maintenance Workshop Duval County Extension Office, 1010 N. McDuff Ave. Register at 904-387-8850 (by August 02) Cost: \$30.00 includes lunch & study manuals Re-certification \$ 10.00

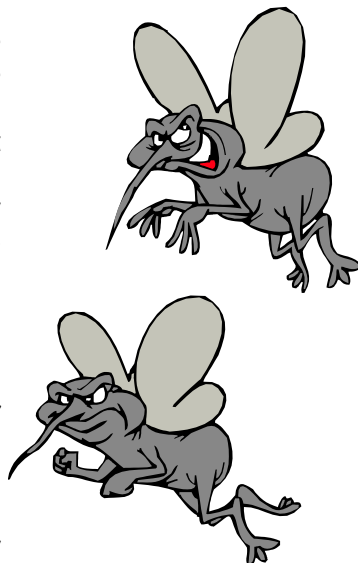
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TIP OF THE MONTH – Avoiding Mosquitoes

by Raymond Zerba

They are here and they're mean – the mosquito! If you work outside, it's hard to avoid them. If it were just that they bite, that's one thing, but they also carry many diseases (see Unfriendly Homesteader) and that makes them something you need to steps to guard against, since your job is in their "home!" An answer is to use a repellent, but the question is what type and how strong? The answer is – how long do you want a repellent to work.



The most common sprays available (and perhaps the most effective) are ones containing DEET (N,N-diethyl-m-toluamide). At 23.8% active ingredient, they averages 5 hours protection before the need to reapply. At 20% they give nearly 4 hours. At 6.65% they give about 2 hours, while at 4.75% with 2% soybean oil additive they only give about an hour. DEET containing products are safe to use by most people with these precautions:

- The higher the level used, the more often you will develop an allergic skin reaction to it. To avoid/delay this, don't go higher than around 25% and just reapply it when mosquitoes are no longer repelled – this may vary with the amount you perspire, humidity and temperature, density of mosquito population you are facing, and personal body chemistry.
- Use enough repellent to cover exposed skin or clothing? Do not reapply to skin that is under clothing. Heavy application is not necessary but good coverage is!
- Do not apply to cuts, wounds or skin that is already irritated.
- When done for the day, immediately bathe and wash product off with soap and water to prevent continued exposure. The more exposure, the more likely you may eventually develop an allergic reaction to DEET.
- Do not spray aerosol or pump products in enclosed areas.
- Do not apply aerosol or pump products directly to the face - instead spray hands and rub on, being careful to avoid eyes, nose, and lips.
- The US Center for Disease Control (CDC) does not recommend using a sunscreen/DEET combination for the reason that the DEET is in a lower amount and may not be as effective, but also because Sunscreen needs to applied more frequently than DEET so you do not want to be reapplying more DEET each time you use a sun screen. They are compatible applied separately. Apply the DEET first – then the sunscreen.
- Note that DEET can damage certain plastics, leather, certain synthetic fabrics (rayon), and painted or varnished surfaces.

How about other products?

Products containing Permethrin (a synthetic pyrethrum) repels mosquitoes well but can only be used on clothing, shoes, bed nets, and camping gear – never on skin, however they last up to two weeks if the sprayed material is not washed or rained on. An added value is that they also give long term repellency for ticks when sprayed on shoes and trouser legs. Vitamin B, Brewer's Yeast, Beer, Whiskey, Garlic, Cigars, and Cigarettes, are sometimes suggested, but their repellency may be due more to other factors (a persons blood chemistry, personal "aura," – or whatever – seems to make them less of a target) than any true repellency property.

Products containing Citronella (derived from lemon-scented grasses) are good the first 30-40 minutes but then their effectiveness quickly drops off. Herbal or plant-derived repellents have some repellency as well, but generally not as good as that of DEET. They offer an alternative to those sensitive to DEET products however. One exam-

(Continued on page 3)

(Continued from page 2)

ple of a herbal repellent (developed by Dr. Jerry Butler of the University of Florida) from lemon grass is being sold as "MosquitoSafe." It reports to repel mosquitoes for up to 4 hours (depending on the factors already described that limit DEET's effectiveness).

"Skin-So-Soft" products have been found to repel only certain types of mosquitoes and also may need to be reapplied after as few as 40 minutes. But for people that have negative skin reactions when using DEET, any alternative is better than nothing. In closing note, that there is now light-weight netting that could eliminate the need to spray. There are types that cover the head only and others that cover the whole upper body that can go over clothing. For the chemical allergic, they offer a safe alternative.



My information came from on line from the CDC site http://www.cdc.gov/ncidod/dvbid/westnile/ga/insect_repellent.htm and from an article by Angela Brammar (University of Florida entitled "Skeeters buggin'you: Insect repellents provide safe relief with proper use," found at <http://pestalert.ifas.ufl.edu/arbovirus/angela-deet.pdf>

PEST OF THE MONTH — Cotton Stainers

by Rebecca Jordi

Cotton Stainers, *Dysdercus suturellus*

Originally, cotton stainers were one of the most important pests on cotton but currently they are noteworthy because of their presence on and occasional damage to fruits and ornamentals, particularly plants that belong to the mallow family such as hibiscus.

This insect also has been a severe pest of oranges on occasion. In puncturing an orange, a cotton stainer often inserts its beak full length with no visible wound; nevertheless, a single puncture may cause the orange to drop in a few hours from the tree and to decay in one or two days (Hubbard 1885). There are old reports of orange trees well

reddened with cotton stainers in which whole crops were lost. Some other hosts pods and blossoms of oleander, tree hibiscus (*H. syriacus*), Turk's cap, Spanish needle (*Bidens pilosa*), rose buds and blossoms.

There are several generations a year. The life cycle can vary from about a month to three and a half months, depending primarily upon temperature differences. The various species are attracted to lights.

For small infestations, colonies of cotton stainers on plants can be shaken into a bucket of soapy water. "Tanglefoot" around tree trunks will keep young bugs from crawling up to fruits and blossoms. Small heaps of seeds, fruits, or bits of sugarcane can be used as baits to attract cotton stainers. Then the insects can be killed with a spray of soapy or scalding hot water. Insecticides can be used on ornamentals and fruits, but tolerances must be observed on edible fruits. Follow label recommendations.

Featured Creatures – UF/IFAS Department of Entomology and Nematology



Photograph by: Lyle J. Buss, University of Florida

Unfriendly Homesteader — Asian Tiger Mosquitoes

by Raymond Zerba

This summer pest is well named for not only do they have stripes (black and white on their legs and body) but the females are vicious "biters!". The Asian Tiger Mosquito (*Aedes al-*

(Continued on page 4)

bopictus) was brought into the US during the 1980's in used truck tires from Japan – so it is a relatively new “immigrant.” It is now throughout the Southeast. The adult mosquito is a little more than 1/8 inch long. Like other mosquitoes, it's the female that needs blood to produce eggs. They attack many type animals, including people, and they like to bite in early morning or late afternoon.

The bite of the Asian Tiger Mosquito is not worse than that of any other mosquito but they occur in large numbers and that can be a problem. The Asian Tiger Mosquito is the one that most commonly breeds around the urban landscape in old tires, tin cans, buckets, bird baths and clogged gutters if all these are not kept free of stagnate water. During warm weather, it may take only a week for the Asian Tiger Mosquito to go from egg to adult. They do not fly far, so if they are in large numbers in one of your clients yards, it is because that yard has provided lots of ideal breeding places.

Besides its bite, a real concern with this species of mosquito is that they carry many animal viruses (over 30) – especially Eastern Equine Encephalitis. In the **TIP FOR THE MONTH** column we talk about repellents. This is one mosquito you are likely to encounter as you service your accounts this time of year, and one you definitely want to wear protective repellents against!

My information for this article came from the UF's Featured Creatures site – go to http://creatures.ifas.ufl.edu/aquatic/asian_tiger.htm and an online site by the North Carolina Dept. of Env. and Nat. Resources at http://www.deh.enr.state.nc.us/phpm/Asian_Tiger.pdf

Key to Successful Landscapes

by Pat Grace

Basic Principles of Landscape Design “Art” Elements

This article is a continuation of the article about the “art” elements found in the May/June issue of Commercial Clippings which discussed

color.

ELEMENTS OF ART

Line is related to eye movement or flow. The concept and creation of line depends upon the purpose of the design and existing patterns. In the overall landscape, line is inferred by bed arrangement and the way these beds fit or flow together ([Figure 2](#)). Line is also created vertically by changes in plant height and the height of tree and shrub canopies. Line in a small area such as an entrance or privacy garden is created by branching habits of plants, arrangement of leaves and/or sequence of plant materials.

Figure 2.



Straight lines tend to be forceful, structural and stable and direct the observer's eye to a point faster than curved lines. Curved or free-flowing lines are sometimes described as smooth, graceful or gentle and create a relaxing, progressive, moving and natural feeling.

Form and line are closely related. Line is considered usually in terms of the outline or edge of objects, whereas form is more encompassing. The concept of form is related also to the size of an object or area. Form can be discussed in terms of individual plant growth habits or as the planting arrangement in a landscape.

Plant forms include upright, oval, columnar, spreading, broad spreading, weeping, etc. ([Figure 3](#)). Form is basically the shape and structure of a plant or mass of plants. Structures also have form and should be considered as such when designing the area around them.

Figure 3.



Texture describes the surface quality of an object than can be seen or felt. Surfaces in the landscape include buildings, walks, patios, ground-covers and plants. The texture of plants differs as

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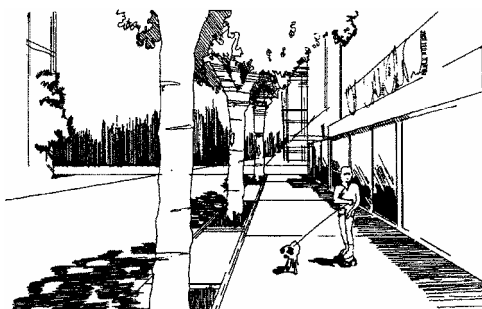
the relationships between the leaves, twigs and branches differ ([Figure 4](#)). Coarse, medium or fine could be used to describe texture but so could smooth, rough, glossy or dull.

Figure 4



Scale refers to the size of an object or objects in relation to the surroundings. **Size** refers to definite measurements while **scale** describes the size relationship between adjacent objects. The size of plantings and buildings compared on the human scale must be considered ([Figure 5](#)).

Figure 5.



In next month's *Commercial Clippings* I will talk about the "Principles of Design" to be considered in the planning of a landscape. These include unity, balance, transition, focalization, proportion, rhythm, repetition and simplicity. All these principles interact to yield the intended design.

SEASONAL QUESTIONS FROM THE LANDSCAPE

With replies for the professional

Q. I take care of ornamental flower beds and one of my clients is upset because her grapefruit has no blooms or fruit. She thinks I have sprayed something on or around them to cause this problem. I am using Round-up in the beds to kill the weeds but this tree still has plenty of green leaves on it. I don't think I have caused it to stop blooming but what do you think? JM

R. You are correct in thinking the glyphosate is not the cause of the problem because large portions of the tree would be dead if the product had drifted onto the leaves. This is a good example of why we need to be knowledgeable about the normal growth patterns of plants so we can distinguish between a problem and typical plant behavior. Unlike most citrus, grapefruits must reach a certain age of maturity before they produce blooms. As you know, fruit is formed once the bloom has been pollinated. Therefore: no bloom - no fruit. So the real issue is that the grapefruit is too young to produce blooms and the client will need to be patient for a few more years before she will see the grapefruit tree produce grapefruits. The University of Florida has useful information regarding growing citrus in our area and you might encourage her to go to our website for more information: <http://edis.ifas.ufl.edu/>. RJ

INDUSTRY NEWS

Home Inspection Bugaboo

Article from Florida Real Estate Headlines

With a growing number of home inspection companies offering pest inspection services, Florida's Department of Agriculture and Consumer Services wants to remind licensees that **termite and other wood destroying organism (WDO) inspections may only be conducted by a pest control company licensed under Chapter 482, Florida Statutes.** Florida law also requires that individuals conducting WDO inspections be employees of licensed pest control companies and that they carry a valid pest control ID card. More info: <http://www.floridatermitehelp.org> and <http://www.planetrealtor.com/Florida/Legislative>

PLANT OF THE MONTH

By Pamela Mattis



July's Plant of the Month makes a striking statement when used as a single specimen. The **Century Plant** (*Agave americana*) has only a ten year life cycle rather than the 100 years it's name suggests. The plant blooms just once before it dies, but makes a very strong statement while doing so.

Agave performs best in full sun but will toler-

(Continued on page 7)

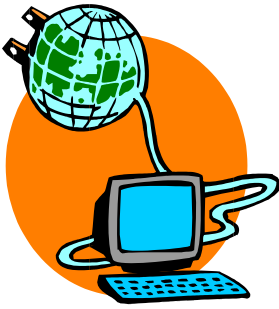
LANDSCAPE MAINTENANCE FOR THE MONTH—JULY

(Northeast Florida)

Topic	Turfgrass	Ornamentals
Irrigation	Water as needed or $\frac{3}{4}$ inch every 2-3 days if there is no rain. Remind your clients that St. Johns River Water Management rules do not allow irrigation between 10:00 AM and 4:00 PM. And effective next month maximum watering is two times a week for landscapes.	Water weekly unless there is a rain event. Established drought tolerant plants in a woody shrub bed (depending on soil type), may need water only once a month if no rain in 30 days.
Fertilization	3 rd fertilizer application of year to turf (if fertilizing 4 times a season – optional if only fertilizing 2-3 times a season). Apply actual nitrogen at the rate of $\frac{1}{2}$ pound per 1000 sq. ft. Another option for greening the lawn in summer is to apply an iron sulfate or manganese.	None unless to correct a deficiency
Weed Control	In the heat of summer, hand-pulling weeds is the best approach but who wants to pull weeds. Or ask clients to tolerate them until the cooler months. Most herbicides cause injury to grass if applied this month. So if an herbicide must be applied, make sure the turf is well irrigated prior to applying the product and try to spot treat only.	Spot treat weedy areas in plant beds with post-emergent herbicide, being careful not to contact herbicide sensitive plants.
Pest Concerns 	<p>Gray Leaf Spot, Pythium Root Rot, Take-all Root Rot and Fairy Rings all thrive on the heavy rains and warm temperatures of this month.</p> <p>Proper fungicide applications will take care of the first two diseases but the last two require cultural controls.</p> <p>Dollar Spot can show this month following the heavy rains in June that washed the water-soluble N out of the soil.</p> <p>Insects causing damage to turfgrass this month include chinch bugs, mole crickets, grubs, and later in the month sod webworms.</p>	Diseases showing up in the ornamentals this month are stem cankers and root rots from the wet June weather. Leaf beetles and scale are also causing problems this month.
Mowing/Pruning Activity	Mow so not more than $\frac{1}{3}$ the grass blade is removed with each cut. If it's been hot and dry and the grass is under some stress water the day before you intend to mow so that this activity does not stress the grass further or dislodge valuable top soil	Do minimum pruning on shrubs and trees removing only diseased or injured woody material
Other	Lots of afternoon showers are common. To reduce disease be sure to keep the mower blade sharp and avoid mowing grass when it is still wet to minimize disease spread.	



**WEBSITES
for the Green Industries**



University of Florida IFAS calendar of events Web site.

<http://calendar.ifas.ufl.edu>

Customer Service is always an issue in the Green Industry, check out this site with different articles and surveys on improving Customer Service:

<http://www.sideroad.com/cs/contents.html>

It's mosquito season again, here is the University of Florida's Mosquito Information website with direct links to facts sheets and Arbovirus reports:

<http://mosquito.ifas.ufl.edu>

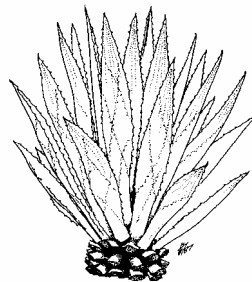
And for even more information try the Florida Medical Entomology Laboratory website:

<http://fmel.ifas.ufl.edu>

(Continued from page 5)

ate partial shade. It requires some space to accommodate a mature spread of six to ten feet with an almost equal height. Foliage color ranges from the blue green of the species to the yellow and green variegation of several cultivars. All have creamy white blooms carried aloft some 20 feet on a single flower spike.

The plant needs well drained soil, is very drought tolerant and has a high salt tolerance that makes it perfect for beach communities. No pests or problems of major importance are listed for the plant either.



Drawing from "Landscape Plants for Subtropical Climates", B. Dehgan



Answer to the cover : Pselaphid Beetle the Florida Friendly Predator from the October 2004 issue of Commercial Clippings.

REFERENCES for Articles in this Issue

TIP OF THE MONTH— Avoiding Mosquitoes

Information for this article came from the CDC site http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect_repellent.htm and from an article by Angela Brammar (University of Florida) entitled "Skeeters buggin'you: Insect repellents provide safe relief with proper use," found at <http://pestalert.ifas.ufl.edu/arbovirus/angela-deet.pdf>

PEST OF THE MONTH— Cotton Stainers

For more information check out Featured Creatures – UF/IFAS Department of Entomology and Nematology at <http://creatures.ifas.ufl.edu>

UNFRIENDLY HOMESTEADER– Asian Tiger Mosquitoes

Information for this article came from the UF's Featured Creatures site at http://creatures.ifas.ufl.edu/aquatic/asian_tiger.htm and the North Carolina Dept. of Env. and Nat. Resources at http://www.deh.enr.state.nc.us/phpm/Asian_Tiger.pdf

PLANT OF THE MONTH— Century Plant

Landscape Plants for Subtropical Climates by Bijan Dehgan, published by the University Press.

Next ID Cardholder Training

TOPIC	DATES
Pesticide Labeling, Ch. 5E-14 review & Biorational Pesticides as Part of an IPM Program	09/20/05

Training for ID cardholders as prescribed under Chapter 482 will be offered quarterly. Session will be 4 hours with topics that meet both new and recurring training requirements. Sign up can be for either 2 or 4 hours. A \$5.00 materials fee per technician, registration in advance requested.

Local EXTENSION Offices

Clay County
 2463 SR 16 West
 Green Cove Springs, FL 32043
 (904) 284-6355
<http://clay.ifas.ufl.edu/>

Duval County
 1010 N. McDuff Avenue
 Jacksonville FL 32254
 (904) 387-8850
 FAX 387-8902
<http://duval.ifas.ufl.edu/>

Nassau County
 543350 US Highway 1
 Callahan, FL 32011-6486
 (904) 879-1019
<http://nassau.ifas.ufl.edu/>

Putnam County
 111 Yelvington Rd., Ste. 1
 East Palatka, FL 32131-2114
 (386) 329-0318
<http://putnam.ifas.ufl.edu/>

St. Johns County
 3125 Agriculture Center Drive
 St. Augustine, FL 32092
 (904) 824-4564
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Newsletter Team

- Pamela Mattis, Duval County
- Raymond Zerba, Jr., Clay County
- Rebecca L. Jordi, Nassau County
- Patricia E. Grace, Putnam County

**MONTHLY
 Landscape Maintenance Series
 Schedule
 2005**

Topic	Time	Date
Insects of Ornamentals	08:30 AM to 10:30 AM	Jul 7, 2005
Diseases of Ornamentals	08:30 AM to 10:30 AM	Aug 2, 2005
Irrigation Basics	08:30 AM to 10:30 AM	Sep 7, 2005
Contracts & Bids	08:30 AM to 10:30 AM	Oct 6, 2005
Equipment Maintenance	08:30 AM to 10:30 AM	Nov 3, 2005
Proper Planting	08:30 AM to 10:30 AM	Dec 6, 2005

This is your newsletter, so please, let us know what you want to read about each month. Pamela Mattis can be reached at (904) 387-8850 or pmattis@coj.net. Ray Zerba can be reached at (904) 284-6355 or rhz@mail.ifas.ufl.edu. Rebecca Jordi can be reached at (904)879-1019 or rjordi@mail.ifas.ufl.edu and Pat Grace at (386)329-0318 or PEGrace@ifas.ufl.edu. For individuals requiring special accommodations, please contact our office (904/387-8850) within a minimum of 5 working days of the program. For persons with hearing or speech impairments, when contacting our office, please use the Florida Relay Service at 1-800-955-8771 (TDD). Your comments and input are necessary for this to be a useful tool for all of us.

This newsletter, past newsletters, links and registration forms for Commercial Horticulture activities can be found at the Duval County Extension website <http://duval.ifas.ufl.edu/>

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 Extension Agent IV-Horticulture

Rebecca L. Jordi
 Extension Agent-Horticulture

Patricia E. Grace
 Extension Agent III, Horticulture

The Duval County Extension Service, through the University of Florida Extension Service offers educational programs and activities to all persons without regard to race, color, sex, handicap, or national origin. This publication is jointly sponsored by the University of Florida, Florida Extension Service, Larry Arrington, Dean; City of Jacksonville, John Peyton, Mayor; and the Duval County Extension Service, Richard E. Godke, Extension Director.