

PROSCAPES, a newsletter for the **PRO**fessional Land**SCAPE** industri**S** of Miami-Dade

July-Sept, 2003

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PROSCAPES

A Newsletter for the **PRO**fessional Land**SCAPE** Industries

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Consumer Services Department, Miami-Dade County

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It is the policy of Miami-Dade County to comply with all of the requirements of the Americans with Disabilities Act (ADA). For sign language interpreter services, call 670-9099 five days in advance. For material in accessible format call the Consumer Services Department (CSD). For ADA complaints call CSD at 375-3843 or the Office of ADA Coordination at 375-3566.
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PROFESSIONAL DEVELOPMENT & CEU OPPORTUNITIES: for July - Sept, 2003.

Grades and standards part 2.

July 1, 2003, 7:30 p.m. - 8:30 p.m., at the Extension Service Auditorium, **Homestead**. Free, at the monthly meeting of the United Landscapers Association (ULA).

This training is specifically designed for landscapers who purchase trees for landscape use. We all can use more training in grades and standards. Everyone should make it to this seminar. No registration required, just a sign-in sheet.

Urban tree short course.

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Friday, July 18, 2003, 8:30 a.m. - 2:30 p.m., at the Extension Service Auditorium, **Homestead**. We will cover both production and maintenance topics. Cost for this seminar is \$12.50, which includes pastelitos, coffee, and lunch. A flier with a registration form is available at the Extension office.

Good for **5 CEU** in categories. Call 248-3311 for more information.
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Farm worker safety workshop.

Taught in **English** and in **Spanish** simultaneously. Lunch will be 12-1.

A Friday in August or Sept, 7:30 am - 3 pm, either at South Dade High School or the Miami-Dade Extension Service Auditorium, **Homestead**. Cost for this seminar is \$12.50, which includes pastelitos, coffee, and lunch. A flier with a registration form is available at the Extension office.

Good for **1 CEU** in **General Standards/Core**. Call 248-3311 x 242 for information.

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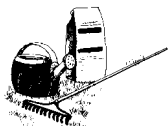
Tropical Palms Short Course.

Friday, September 20, 2002, 9 a.m. - 2:30 p.m.. At the Extension Service Auditorium, **Homestead**. Cost for this seminar is \$12.50, which includes coffee, pastelitos, and lunch. A flier is available at the Extension office.

This year we will cover potential problems in production nurseries and landscapes.

CEUs have been requested for **FDACS; FNGA; MG; ISA,**

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Pesticide training for July - Sept:

Call 248-3311 x 242 for info. on pesticide training.

General standards / core review & exam.

Wednesday, July 30, 2003, 8:00 a.m. - 5 p.m.. At the South Dade Government Center in **Cutler Ridge**. Cost for this seminar is \$15.00 (\$20.00 if late), which includes coffee, donuts, and lunch. A flier with a registration form is available at the Extension office.

Good for **5.5 CEUs** in General Standards/Core.

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Private applicator review & exam.

Wednesday, August 20, 2003, 8:00 a.m. - 5 p.m.. At the Extension Service Auditorium, **Homestead**. Cost for this seminar is \$15.00 (\$20.00 if late), which includes coffee, donuts, and lunch. A flier with a registration form is available at the Extension office.

Good for **5 CEUs**. Call 248-3311 x 242 for information.

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General standards / core review & exam.

Wednesday, September 24, 2003, 8:00 a.m. - 5 p.m.. At the Extension Service Auditorium, **Homestead**. Cost for this seminar is \$15.00 (\$20.00 if late), which includes coffee, donuts, and lunch. A flier with a registration form is available at the Extension office.

Good for **5.5 CEUs** in General Standards/Core.

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Several new fact-sheets are available:

These fact-sheets have been completed or nearly completed since the last newsletter. We call them "In Writing" because so many of you have requested information "in writing" on the various topics. They are also available in electronic form at our website:

[www.http://miami-dade.ifas.ufl.edu](http://miami-dade.ifas.ufl.edu)

1. ***In Writing*** fact-sheet no. 85. *Hurricane damage reduced in trees pruned for strength.*
Terry Lytle, Parks Specialist in the City of North Miami, presented these data at the recent Hurricane Pruning seminar. We collaborated to make the information available to everyone.
2. ***In Writing*** fact-sheet no. 84. It's all in how you define it ... or is it?
This is a discussion of the meanings of the words "hardy," and "tender."
3. ***In Writing*** fact sheet no. 83. *Safety/pesticide curriculum, 2003, July- Dec.*
This covers only seminars offered July - Dec.
4. ***In Writing*** f-s no. 82. *Mussaendas for South Florida.*
Dr. John McLaughlin did a good job gathering information for this fact-sheet, which will be popular & useful to production, maintenance, & lay clientele.

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**TIMELY TOPICS ...
news from the University of Florida and other
land-grant institutions around the U.S. ...**



Alabama clay and Massachusetts sand.

(The following two articles seem to belong together. The Alabama clay is a lot like our marl, and the Massachusetts sand is like our sands.)

SAND? will it fix clay? (improving clay soils.)

(from *Something to grow on*, internet newsletter for the green industry in Alabama. March, 2001. ed by jg.)

Many garden books recommend that you amend your beds with sand to break up hard clay soils. Back in sophomore soil physics class we were told that adding sand had little value for clay soils and that it could do more harm than good. By filling in any open air space, you are creating a soil that is more like concrete.

This is confirmed in any soils textbooks. You would have to add so much sand to make a difference that it is not physically or economically feasible. Golf course superintendents do use a great deal of sand on golf greens and people get the idea that this is the thing to do. However, to make a difference, you have to add until your soil is at least 75% sand; most greens run 80% to 90% sand. It is hard to beat organic matter and some good worm activity to make some good planting beds.

Well, if I (jg) had a "gumbo" clay, I would add sand, and I'd probably not stop at 75% sand. I once covered my entire yard with one foot of sharp sand to separate myself from "crawfish" clay, and I've never regretted it. This is one case in which a little is good, but more is much better.

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Improving sandy soils.

(J.T. Williams, Univ. Mass. CES. ed by jg.)
(See if you don't think most of this also applies to rock.)

A very sandy soil will grow very little plant life unless something is added to it. Organic matter of some type is added what's needed. The only way for a soil to acquire organic matter in proper proportion is for the gardener or landscaper to incorporate. Organic matter improves the texture of sandy soil by filling the spaces among the tiny stones (that's what sand *is*). The filling of the spaces also increases the water-holding and nutrient-holding capacity of the soil, therefore, holding both water and fertilizer where it is available to plants.

Organic matter

Organic matter is derived from plants and includes such materials as animal manures, peatmoss, straw, leaves, compost, Florida peat, old sawdust, garden refuse and sod. Organic matter is a temporary product and must be maintained in the soil. For most gardens the incorporation of organic matter into the soil each year is a simple matter; but for lawns, organic matter can be incorporated only at the time of construction.

Rate of application

Several weeks of preparation should go into supplying new beds on sandy soils with organic matter to properly improve the soil. (Yeah! Most landscapers are lucky if they get two days to complete a job. -jg) Several applications of organic matter over several weeks should be thoroughly incorporated into the soil before planting. The organic materials should be applied at the rate of 2 to 3 cubic yards per 1000 sq. ft. of soil surface. This should be incorporated into the top 5 or 6 inches of soil. Lighter applications are of little value.

Incorporate thoroughly

The organic matter can be spaded, forked, or roto-tilled in, and should be thoroughly mixed with the existing soil. For new beds it is best to do this incorporation several weeks prior to planting to allow time for the organic matter to start breaking down. If available, some topsoil mixed in along with the organic matter would further benefit sandy soils. If you are using native peats, check the pH of your soil because native peat may be acidic.

Do most important areas

If available time or money prevent improving the entire area at one time, do the flower beds, vegetable garden and specific small areas for trees and shrubs. Bed areas for flowers and vegetables should be prepared as described above.

(The following recommendation has been replaced in Florida in favor of using no amendments in backfill.) For trees and shrubs, dig a hole large enough to take the root system or ball with ample room on all sides and a reasonable depth. Work in about 1/3 organic matter and 2/3 original soil in the bottom of the hole and to backfill around the plant. Mix the soil well before planting. Where plants are already growing, sandy soils can be improved considerably by using mulches of organic matter. The mulch should be 2-4" in thick and replenished every six months. For most shrubs and perennials, mulches can be applied at any time during the year.



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Optimizing performance of bedding plants.

(J. Willmott, Camden Co., New Jersey, ext. agent. ed by jg.)

(Last month in this space we read our local fact-sheet on making bedding plants last longer. These ideas from a county agent in the northeast facing some different problems are worth our time and consideration. jg.)

Unfavorable gardening weather has resulted in slow shipment of bedding plants from Northeastern greenhouses. (In South Florida, delayed bed preparation). The delay has implications for garden performance.

Landscape managers and garden center personnel should be aware that plants, especially those in smaller pack sizes, may be somewhat root-bound. When planting, be sure to gently loosen roots or make 2 or 3 vertical slits in the rootball to encourage better establishment. Also, due to low light conditions and crowding, plants may be taller or "stretched."

Quality transplants should be compact and have good color. Prior to purchasing, be sure to inspect plants closely for signs and symptoms of infectious disease or other pest problems. Thoroughly check the foliage, stems and roots.

The most common infectious diseases afflicting the spring crop were impatiens necrotic spot, Botrytis blight and Thielaviopsis and Pythium root-rots. Common arthropod pests included: Western flower thrips, two-spotted spider mites and various aphids. Infected or infested plants are unlikely to perform well.

Consider removing flowers and pinching plants as they are installed. Remove just the growing tips to increase branching. Flower removal and pinching may delay color, but will result in better future performance.

Most plantings will benefit from the application of about one pound of a complete fertilizer per thousand square feet (i.e., a light application). Put it down as the bed is prepared. Many of us assume that flowering plants require applications of high phosphorous fertilizers such as 5-10-5. This, however, may result in nutrient imbalances and reduced plant performance.

(The best fertilizer for most plants in South Florida is "palm special." A ratio of 2-1-3-1, with 100% N, K, and Mg in slow-release form; plus all the trace elements.) Also, applications of excessive fertilizers results in high soil salt levels which can "burn" or retard roots.

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Sooty mold on trees and shrubs.

(S. Nameth, J. Chatfield, & D. Shetlar, Ohio State. ed by jg.)

Symptoms. A sooty, gray-black, velvety, often crust-like coating may develop on the leaves or needles, fruits, and branches of certain plants. The coating is actually the growth of one of several species of black-colored molds. The coating can be removed easily by rubbing the leaf between the fingers, thus exposing the green leaf tissue below.

Sooty molds grow only on the plant surface and will not kill plants. In fact, sooty molds often grow on sidewalks or fences under infested trees. They are normally considered to be a cosmetic problem. In extremely severe cases, it is possible for the black growth to block enough sunlight to interfere with photosynthesis. In such cases, leaves or needles, fruits and new shoots may be smaller, or less intensely colored.

Respiration can be reduced through the physical closure of stomates by the mold. Under drought conditions, plants affected with sooty mold will wilt more rapidly than unaffected plants. If plant vigor has been reduced, the plant may also be predisposed to further injury by other insects, diseases or environmental stresses.

Insect Association. Sucking insects are the primary cause of sooty mold growth. Many sap-sucking insects feed on leaves and stems of trees and shrubs. These sucking insects produce a watery waste rich in sugars; it is called honeydew. (Their digestive system is not very efficient.) Honeydew falls on leaves or needles, branches, fruits or anything else immediately beneath the infested area. It is on this honeydew that the sooty mold fungi grow. Sometimes plants not infested by insects may be affected if an infested tree is above them.

The major types of honeydew producing insects are: Aphids, soft scales, mealybugs, whiteflies, leafhoppers, planthoppers and psyllids. Occasionally, the spittle-like froth produced by spittlebugs promotes the growth of sooty molds.

Susceptible & Resistant Trees. Plants infested by these insects are often hosts to sooty molds. Resistance to this condition is normally a result of resistance by the plant to the honeydew insects.

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Of grubs and porch lights.

(T. Weissling, USDA, Miami. ed by jg.)

A porch light can be a very handy thing to have. It can help you to see at night so you don't trip over something while walking into or out of the house. It can also help gauge potential insect problems. This spring, large numbers of beetles have been flying around porches and into garages at night. These beetles vary in size, but are primarily brown in color. They are the adult stage of white grubs, commonly called June bugs or June beetles.

White grubs are important below-ground turf feeders. The immatures (or "grubs") are "C" shaped larvae that are white to tannish in color with a brown head and 6 prominent legs. Grub larvae mature to a length of about one-half to 2 inches (depending on the species).

The white grub life cycle varies depending on geographical location and the species. As a general example, larvae that have fed through the summer and fall overwinter in the lower soil profile and migrate upwards to feed on grass roots near the soil surface in the Spring. Larvae pupate a few inches below the soil surface and adults emerge in late Spring-early Summer. In addition to being attracted to lights, adults graze on various ornamental vegetation and females lay eggs in the soil. Upon hatching, the small grubs feed on grass roots throughout the Summer-early Fall. Depending on the species, generation times range from 6 months to 4 yrs.

Spotting white grub feeding activity can be difficult. When grass wilts quickly, does not respond to frequent irrigation and fertilization or if the grass becomes thin and exhibits signs of poor knitting, suspect white grub activity. The damage may first appear as spots only a few inches in diameter, but these spots will gradually become larger as feeding continues. Heavy infestations completely destroy the roots, and the grass can be rolled back as a carpet.

Let's not panic. Numerous June beetles buzzing around the house does not necessarily mean there is a serious grub infestation ... adult presence is just an indication that you need to be on the lookout. In late June-early July, monitor populations. This is easy: use a shovel to cut out a square foot of sod. Then inspect the root system for signs of feeding and look for actual grubs in the soil. Also follow the recommended aesthetic threshold for this pest: treat if you find more than 4 grubs per square foot. If the pest density is less than this, then damage will probably not be noticeable. When monitoring, check a few random areas in the lawn, and repeat periodically.

There are relatively few options for management of white grubs. Folks using beneficial nematodes report good results. There are, however, several chemical control

methods available for white grub control. If you choose to manage pests with an insecticide, always follow label instructions.

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What's growing in my landscape mulch?

(This article was inspired by, and is based in part on a Penn. State Univ. CES pub. by E.A. Brantley *et al.*, and on a Univ. of Florida pub. by J. Kimbrough.)

Mulches are used extensively in Florida landscapes. They help retain moisture and control weeds. These mulches are by-products--from lumber and paper mills-- or they are made from Melaleuca and other weedy species. Some are made from small and large trees, cypress and others, harvested for the purpose, and others are mixtures of shredded wood from wooden pallet disposal, construction residue or recycling facilities.

In some areas landscape maintenance residues are "mulched" (shredded) and made available either free or for a fee from public or private agencies. The mulched materials may be composted to produce a good soil amendment or component in potting mixes.

As with any organic material, mulches decompose over time and will need to be replenished two or three times a year if the mulch is to be maintained. The organisms involved in this decomposition include various bacteria and fungi which live on the organic constituents in the mulch. These include cellulose, lignin, sugars, and others.

Bacteria are microscopic organisms that are not visible in the mulch. The fungi, however, are often visible, either as mycelium (the string-like body of the fungus) or as reproductive structures, commonly called "fruiting bodies."

These fungi occur naturally in great abundance and variety. Some are "recyclers" which break down woody tissue directly. Other fungi, for example slime molds, "eat" the bacteria and other organisms living in the mulch.

These fungi are not harmful to landscape plants, and no known hazards to human health, other than allergies, are associated with them unless they are eaten. In South Florida these fungi are always abundant, especially during and after rainy weather.

The decomposers we're speaking of are saprophytes, organisms which live on dead organic material. There is no reason for concern if they are seen growing in mulch,

compost piles, or even in pots in association with the roots of the tree or other plant being produced in the pot. Nurserymen have been known to discard perfectly good plants because they thought the fungus might cause a disease.

MUSHROOMS. (“Toadstools” is the term used if they are known to be poisonous.) Many different Florida fungi produce fruiting bodies called mushrooms. They come in various sizes, shapes, and colors, from less than an inch to several in. tall. Several types are called stink-horns. They get their name from the foul odor of the cap of the fruiting body. Some are substantial enough to last for months, but others are soft and fleshy, and disappear within a few days. You have two basic types, the gill mushrooms and the pore mushrooms. (Look under the cap for gills. There are also shelf types which grow on tree trunks. *Ganoderma* is a shelf, pore type, which also will grow on mulch.)

They may be poisonous if eaten. You should enjoy their beauty, ignore them, or remove them. Making spore prints is an interesting activity. The caps should be removed from the stems and placed directly on a piece of paper. Choose a paper color to contrast with the color of the spores. If the fruiting body is mature, a beautiful spore print will develop on the paper within a few hours or days. Wash your hands well after handling. After they are thoroughly dry, the spore prints can be sprayed with a clear lacquer and framed.

A white mushroom is sometimes seen in lawns forming circles or “fairy rings,” which grow larger over an extended period. These are not harming the lawn. They may be mowed, raked, or pulled; they may also be left to live their brief lives in the Florida sun.

NOTE OF CAUTION: Many wild mushrooms may be poisonous if eaten by humans or pets. **DO NOT** touch or eat them. Wash your hands if you may have touched them. Remember: the only edible mushrooms in Florida grow in cans, jars, and other containers on shelves and in coolers at the supermarket.

SLIME MOLDS are fungi of the species *Physarum*, *Fuligo*, and *Stemonitis* which are common in Florida. They start out black or brightly colored (yellow, orange, etc.). You may see slimy masses that are several inches to more than a foot across growing on mulch. (Black slime molds are seen on turfgrasses during wet weather.) Many tiny, dark spores are produced, which dry out and turn brown, then eventually white, dry and powdery.

These fungi are pathogens “feeding” on bacteria growing in the mulch. The type seen on lawns can be swept off with a broom or washed away with a hose. They are

normally a temporary nuisance confined to small areas. Slime-molds in mulch may be left in place to decompose. If their appearance is offensive, gather and discard them in a compost pile, the household garbage, or a spot in the yard away from mulch. Slime-molds are common in compost piles and compost-based potting mixes.

BIRD’S NEST FUNGUS.

These are species of *Crucibulum* and *Cyathus*. They resemble tiny grey to brown bird’s nests with eggs. The nest is up to 1/4 inch in diameter. These fungi may grow in large areas of mulch, but they are not a problem. The “eggs” are masses of spores that splash out of the nest when hit by a raindrop or irrigation water. These spores occasionally stick to surfaces, but they are easily removed and do not leave a stain.

They are naturally-occurring fungi which decompose organic matter and do not need to be removed. They are interesting to look at—show them to children!

ARTILLERY FUNGUS. These are species of *Sphaerobolus*. They resemble a tiny cream or orange-brown cup with one black egg. The cup is approximately 1/10 of an inch across. Areas of mulch with artillery fungi may appear matted and lighter in color than the surrounding mulch.

They may be a problem. The fruiting body orients itself towards bright surfaces, such as light-colored houses or parked automobiles. At maturity the artillery fungus “shoots” its black, sticky spore mass, which can be windblown as high as the second story of a house. The spore mass sticks to the side of a building or automobile, resembling a small speck of tar. You may also find them on the undersides of leaves on plants growing in mulched areas.

Once in place, the spore mass is very difficult to remove without damaging the surface to which it is attached. If removed, it leaves a stain. A few of these spots are barely noticeable, but as they accumulate, they may become very unsightly on houses or cars. To date, there are no known controls for this fungus. Researchers are studying the problem and hope to find a wood or bark mulch on which the artillery fungus will not sporulate.

One solution to the artillery fungus problem that is not horticulturally sound is to replace wood-based mulch with other types of mulch, such as black plastic or stone, in critical areas adjacent to homes and parking areas.