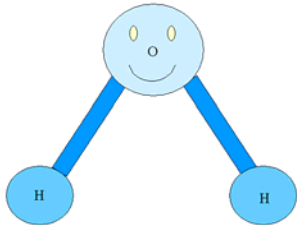


Water Ways

Indian River County Extension Service Water Quality Program

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Volume 4, Issue 1



Hydro the Water Molecule

MULCHING TO SAVE WATER

Mulch can help you save water! This may seem unlikely, but it's true. A benefit of mulch, which is any material that is placed on the soil surface to protect and improve an area, is to prevent water loss through evaporation from the soil. Mulch prevents this loss by covering the surface and creating a barrier that holds in the water where our plants need it. In order to get the maximum water saving benefit from mulch, there are a few things to consider.

What kind of mulch to use

There are many different types of organic mulch available and each has pros and cons. I'll briefly discuss three kinds. The most popular type is cypress mulch because it lasts a long time and has a nice brown color. This mulch type does a good job buffering the soil against water loss when the mulch is completely wet. However, dry cypress mulch repels water, which makes it difficult to wet. Another down side is that it may decrease the amount of water reaching plant roots due to its high water holding capacity. Finally, cypress trees are slow growing and provide an important ecological service by filtering water and providing habitat for wildlife. As the demand for cypress mulch increases, our cypress forests decrease.

Pine bark is another popular kind of mulch because its dark color is very attractive in the landscape. The larger size nuggets (1.5 to 3 inches big) last longer and provide better weed control than smaller nuggets. A negative of pine bark mulch is that it can float away during large rainstorms.

A third option is straw. This can be more economical than the other mulches, but it isn't as attractive and breaks down quickly. In addition, it may contain seeds that become weeds in your landscape.

If you would like to minimize your mulching efforts, then inorganic mulch may be the best option for you. Gravel and pebbles are permanent, fireproof, and have more color options. The one bit of caution with this type is that it can create a very hot landscape environment since it reflects solar radiation. Plastic film is useful, but clear film will allow weed growth because light is

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HYDRO'S WATER TIP

From November to March, irrigate your landscape once every 10 to 14 days.



DID YOU KNOW...

- Most of the earth's surface consists of water; there is much more water than there is land.

MULCH

able to penetrate through. Plastic film should not be used in areas that have poorly drained soil because the soil will remain too wet, which may lead to root diseases. Another inorganic mulch option is woven ground cloth, which allows water and air to move through it. The disadvantage is that it doesn't suppress weed growth and water loss. Woven cloth must be used in combination with another mulching material to get the best effect.

How to mulch

Since mulch holds moisture in, the material must be properly applied so it does not harm the plants. When applying a layer of mulch to plant beds, keep the mulch one to two inches away from trunks and stems of plants. Encircle individual trees with mulch that is two feet in diameter for every inch of trunk diameter. As the tree grows, increase the mulched area. The mulch should also be kept one to two inches away from the trunk.

How much to apply

This depends on the type you choose. Apply most wood and bark mulches two to three inches deep. Do not apply more because this type contains a lot of fine particles that can suffocate plant roots if applied too deep. Pine straw and pine nuggets can be applied up to four inches deep since it allows for more air flow. After applying the mulch of your choice, monitor it occasionally looking for decomposition, and add more where it is needed.

Mulch is a great way to beautify your landscape, and it benefits your plants by keeping the water where it is needed most.

If you have any questions, the Indian River County extension service can help you.

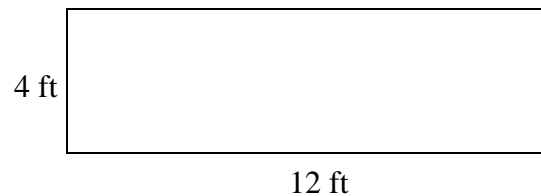


HOW MUCH MULCH?

Calculating the amount of mulch you'll need is simple. Just follow these steps:

1. Measure the area to be covered in square feet (length x width for a square/rectangle area; $\pi \times \text{radius}^2$ for a circular area).
2. Multiple the number by the depth required in inches.
3. Multiple this number by 0.003. This will tell you the amount of mulch needed in cubic yards.
4. To convert the number in step 3 to cubic feet, multiple it by 27.

Example:



1. $4 \text{ ft} \times 12 \text{ ft} = 48 \text{ ft}^2$
2. $48 \text{ ft}^2 \times 3 \text{ in} = 144 \text{ ft}^2 \text{ in}$
3. $144 \text{ ft}^2 \text{ in} \times 0.003 = 0.432 \text{ yd}^3$
4. $0.432 \text{ yd}^3 \times 27 = 11.7 \text{ ft}^3$

Need four 3 ft³ bags of mulch.

Information from "Mulching Practices for South Florida" by John McLaughlin and Charles Yurgalevitch.

NEW PESTICIDE LICENSING REQUIREMENTS FROM FDACS

If you are a professional landscaper, this will be good news to you. Florida Department of Agriculture and Consumer Services (FDACS) has updated the Limited Commercial Landscape Maintenance Certification requirements.

You must still apply to FDACS to take the licensing exam, but the eligibility requirements have changed as of July 2006. To be allowed to take the exam you must:

- Complete 6 classroom hours of plant bed and ornamental continuing education training approved by FDACS. The Indian River County Extension Service offers these training classes.
- Provide proof that you have a certificate of insurance.
- Pay a fee (\$150).

The application materials available on the FDACS website have not been updated, but the proof of experience form is no longer required.

If you are interested in getting a license, there are restrictions on the type of pesticide used and where it may be applied. As a license holder, you can:

- Apply pesticides with a portable handheld 3-gallon compressed air or 5-gallon backpack sprayers.
- Apply pesticides in plant beds and ornamental plantings and to perform integrated pest management on ornamental plants using the following: insecticides with caution label, insecticidal soaps, horticultural oils, and *Bacillus thuringiensis* (BT) formulations.

As a license holder, you **cannot**:

- Apply pesticides to turf; this includes “weed and feed” products and fire ant insecticides.
- Operate a pest control business.
- Apply pesticides to golf courses, parks, and cemeteries.
- Supervise unlicensed personnel apply pesticides.

If you have any questions, please contact Janet or Joan at the UF/IFAS Indian River County Extension Service (772) 770-5030.

PESTICIDE LICENSING CLASSES

Pesticide applicator training classes are here. If you would like to obtain a pesticide applicator license or are a licensed applicator in need of continuing educational units (CEUs), the Extension Service will be offering classes this year in the following areas:

- General Certification Standards (CORE)
- Limited Commercial Landscape Maintenance
- Aquatic Pest Control
- Private Applicator

For more information, go to <http://indian.ifas.ufl.edu> and click on the pesticide page or call (772) 770-5030. Classes offering CEUs statewide can be found at <http://www.safepesticideuse.com>.

NEED A SPEAKER?

Extension agents love to talk!

If you need a speaker for your organization, consider one of our agents. Our agents specialize in water quality, agriculture, and youth development and leadership topics.

Contact the Extension Service at (772) 770-5030.



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Visit Our Web Site
http://indian.ifas.ufl.edu/waterquality/water_quality.htm

UPCOMING EVENTS

Date/Time	Event	Location
Jan. 12 8:00am-12:30pm	General Certification Standards (CORE)	IRC Extension Office Exam offered after class. <i>Pre-registration required*</i>
Jan. 20 2:00pm-3:30pm	Rain Barrel Workshop	IRC Extension Office <i>Pre-registration required*</i>
Feb. 3-4	Gardenfest	Riverside Park, Vero Beach
Feb. 23	Limited Certification Training- new license	IRC Extension Office <i>Pre-registration required*</i>
March 9 8:00am-12:30pm	General Standards Certification (CORE)	IRC Extension Office Exam offered after class. <i>Pre-registration required*</i>
March 10 9:00am-4:00pm	Pelican Island Wildlife Festival	Riverview Park, Sebastian

***To pre-register for classes and workshops, call (772) 770-5030.**

St. Lucie County Extension is also offering pesticide applicator training classes. Call (772) 462-1660 for more information.

If you have any questions about the upcoming events or anything in this newsletter, please contact Janet Bargar at the University of Florida/IFAS Indian River County Extension Service.

The enclosed material is provided as one of the many services to the educational programs offered by this agency. Our statewide network of faculty is prepared to provide current information on food, agriculture, marine, and natural resource science, energy, nutrition, family and 4-H youth, community development, and related fields. We will be happy to help you with additional information upon request.

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