

Mulches are beneficial to the Florida yard.

Mulches :

- suppress weeds
- hold moisture and heat in the soil
- improve the organic content of the soil
- provide a pleasing appearance in the landscape

Uses for mulch: Mulches are most often applied to bedding plants, vegetable gardens, and individual trees and shrubs in areas of turf grass. Mulch helps to conserve moisture for the roots of new plants until the roots become established in the soil. Mulch also helps to reduce competition from weeds.

Mulches should also be considered for replacing turf grass or ground covers in areas that are difficult to maintain. Mulches are a good choice for shady areas where plants might not have enough sun light to grow well. Mulches make attractive walkways and driveways, natural areas, and are frequently used around children's play equipment.

When and how often to mulch: Mulch can be added to the garden at any time of the year. Keep a 2-3 inch layer of mulch in planted areas for the best effect. Pine needles and pine bark are coarse-textured

and can be maintained as deep as 4 inches.

Remember to keep the mulch at least 2 inches away from the stem of the plant. Mulching too closely can cause plant stems to rot. Do not mulch around citrus trees as they are especially susceptible to rot.

When mulching around trees, create a circle 2 feet in diameter for each inch of trunk diameter. Increase the size of the mulched area as the tree grows.

How often you mulch depends on the type of product used. Some break down more rapidly than others. Replace as needed.

It's best to keep mulch away from the base of homes to prevent termite problems. If some mulch is preferred to prevent soil splashing against the home, add a thin layer within 6" of the home.

Organic mulches: Organic mulches help to enrich the soil as they decompose. Since they do break down with time, they will need to be replenished in order to remain effective. Some sources of organic mulches include:

- Yard trash - Much of the yard trash that you produce on your own property can be recycled as mulch. Leaves, pine needles, and grass clippings can be used. Pine needles are often one of the best mulching materials. They don't mat down, and are not easily moved by wind

or rain. They do decompose rather quickly and should be replenished every 6 months.

- Leaves also make good mulching material; however, they can be blown about by the wind and washed away by heavy rain. Leaves will stay in place better if they are shredded. Mowing over leaves on grassy areas and collecting them in the grass-catching bag will make them more stable in the landscape. In many cases leaves can remain where they fall, creating "self-mulching" areas in shady areas.



- Grass clippings decompose very rapidly once dry. If you are using grass clippings, spread them in a thin layer and cover with other mulches. Grass clippings can also be recycled as compost.
- Plant trimmings, twigs and small branches can be shredded and used as mulch in the landscape.

- The City collects yard trash from homeowners on a weekly basis. This yard trash is shredded, composted and made available at no charge to the public. Quality and consistency can vary. Color may fade in time. However, this mulch has the highest nutrient content. Call Volusia County Solid Waste at:
East side—947-2952



West side— 943-7889
for more information.

- Cypress mulch - Cypress mulch is, unfortunately, the most popular mulching material. It comes in several colors and breaks down very slowly. Cypress mulch holds a lot of water and may keep water from reaching the plant's roots effectively. Once the mulch is wet all the way through, it continues to hold moisture and during rainy periods, may mold at the soil line. There are additional concerns that harvesting cypress trees for mulch depletes our cypress wetlands. Other sources of organic mulch are available to the homeowner at lower prices. Check with the vendors to determine if their mulch is a by-product of the lumber industry which would be an acceptable source.
- Pine bark/wood chips - Pine bark mulch is produced as a by-product of the lumber industry and therefore does not cause the problems with harvesting that some cypress mulch does. It is attractive, long lasting, and decomposes slowly. It does have a tendency to float if it rains heavily, but is not affected by winds. Pine bark is available in several sizes, but the larger size pieces are the most effective in preventing weeds.
- Eucalyptus - Eucalyptus is grown on plantations for mulching purposes and is not harvested from the natural environment. It is available in a variety of color selections and retains its color well. It is less durable than other

mulch choices, so it will need to be replenished more often. Eucalyptus is often advertised as being termite and insect resistant; however, tests at the University of Florida have not supported these claims.

- Melaleuca ("Enviro-Mulch") - Enviro-mulch is harvested from unwanted, invasive plants that grow in south Florida. It has the second best decomposition rate (behind pine bark) and settles the least of all organic mulches. It retains good color in the landscape and is the only organic mulch that termites did not eat in a study conducted by the University of Florida. Some people do have allergic reactions to this mulch.
- Other sources - Straw, pecan shells and peanut hulls can also be used as mulch in the landscape. However, their availability is usually limited and they may contain weed seeds.

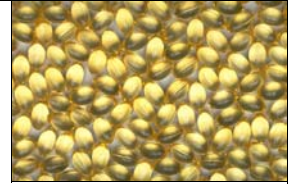
Inorganic mulches: These mulches will not contribute to the organic content of the soil. They also may reflect heat and increase the water needs of the planting area. However, they are considered a long-term mulch because they do not break down in the landscape. Termites are still attracted to inorganic mulches because they provide a moist environment. Some sources of inorganic mulch are:

- Gravel, pebbles, and crushed stone - These materials are permanent, fire-proof and may be sold in a variety of colors to match the landscape environment. Care must be taken in using

these materials next to turf grass.

A lawn mower may pick up and throw the material, creat-

ing safety issues and possibly causing damage to the mower blade.



- Plastic film - Black plastic film is very effective in preventing weed growth. Clear plastic film will not suppress weeds because light can get through the film. Plastic film may be covered with organic mulch to reduce the heat absorption and make a more pleasing appearance. Plastic film is not recommended for wet sites. Plastic will hold the moisture in the soil and reduce air flow which could cause disease problems.
- Woven ground cloth - These fabrics are available from multiple vendors in several lengths and widths and are treated to resist decomposition. Product quality and effectiveness varies. Unlike plastic film, woven materials allow water and air to move through the barrier. They are effective in controlling most weeds, but do little to prevent water and heat loss from the soil. Sedges and some other weeds will grow up through the holes in the fabric and are difficult to hand pull. Fabrics should be fastened down to prevent them from being pushed up by perennial weeds. Adding a layer of organic mulch over the fabric will improve weed control.
- "Rubber Stuff" mulch - This product is

relatively new on the market and is similar to stone in its use. It comes in a variety of colors and blends well in the landscape.

How much mulch to buy? To calculate how much mulch to buy, first determine the amount of bed area in square feet. For example a bed measuring 4 feet by 25' = 100 square feet. Then convert the 3" mulch depth to a fraction of a foot. Three inches divided by 12" = .25 feet. Take the bed area of 100 square feet x .25 feet = 25 cubic feet.

Non-bagged mulch is often sold in cubic yards. One cubic yard equals 27 cubic feet and will cover an area of about 108 feet at a 3" depth.

Bagged mulch is sold in amounts of 1.25 cubic feet or 2 cubic feet. For the 100 square foot landscaped bed listed in the sample problem, you will need 20 bags of 1.25 cubic feet or 12.5 bags of 2 cubic feet.

A bale of pine straw covers 20 square feet.

Acknowledgments

The Florida Yardstick Workbook; ed. Billie Lofland. University of Florida Cooperative Extension Service, Bulletin 325.

A Guide to Environmentally Friendly Landscaping, Florida Yards and Neighborhoods Handbook; Allen Garner, John Stevely, et.al. University of Florida Cooperative Extension Service, 1996.

Documents from the Florida Cooperative Extension Service:

A Comparison of Landscape Organic Mulches. Art Yeaman. 2000.

Mulches for the Landscape. Robert Black, et. al. Fact Sheet ENH 103, 1994.

Web site for the University of Florida, Institute of Food and Agricultural Sciences <http://edis.ifas.ufl.edu>