FOR 68

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Landscape Mulches: How Long Do They Retain Their Color?[1]

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Landscape mulches contribute to the beauty of Florida's urban gardens and landscapes. The contrasting color of the mulch compared to the plants contributes to a natural yet neat appearance. Yet, in addition to beauty, mulches provide a number of other benefits. Mulches are known to buffer soil temperature, prevent water loss from evaporation, and control weeds. These advantages along with the attractiveness of mulch have resulted in a variety of mulches available for the gardener and landscaper.

Many questions emerge about the benefits of various mulches. One common question is: How long do different mulches retain their color? As mulch ages and is exposed to the sun and rain, it loses its color and may need to be replenished. This article is one of a series of fact sheets, which compare six common Florida landscape mulches (Duryea et al. 1999; Duryea et al. 1999).

The Study

In this study six landscape mulches were compared:

- Cypress (bark and wood from *Taxodium distichum* [L.] Rich. and *Taxodium distichum* var. *nutans* [Ait.] Sweet)
- Eucalyptus (bark and wood from *Eucalyptus grandis* W. Hill ex Maiden)
- Melaleuca (bark and wood from *Melaleuca quinquenervia* [Cav.] S.T. Blake)
- Pine-bark (mostly bark from *Pinus elliottii* [Engelm.] and *Pinus taeda* [L.])
- Pine-straw (needles from *Pinus elliottii* [Engelm.])
- Gainesville Regional Utility (GRU) mulch containing utility-prunings (leaves, bark and wood) from oaks *Quercus laurifolia* Michx., *Quercus rubra* [L.], and *Quercus virginiana* Mill.) and cherry (*Prunus serotina* Ehrh.), with a small amount of cedar *Juniperus silicicola* [Small] Bailey) and southern pines (*Pinus spp.*).

All mulches (except the GRU utility-pruning mulch) were purchased at garden stores in Gainesville, Florida. Wood frames were filled with each mulch to a depth of 9 cm (3.5 in). To determine color changes, we assessed mulches initially, then quarterly in the first year and again after 2 years using Munsell® Color Charts (1975).

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Color Changes

The ability to retain color is often a factor affecting the landscaper's decision on which mulch to use. The six mulches in this study started out with varied colors ranging from pink cypress to the browns of other mulches (Table 1). Cypress mulch retained its pink color for one year. Melaleuca changed from a dark reddish brown to gray and pink within one year. Eucalyptus, utility, and pine-straw mulch all changed to pinkish gray. Pine-bark retained its reddish brown color throughout the year. After 2 years, all of the mulches had grayed. However, pine-bark and cypress retained slightly more of their original color than the others. The utility mulch was categorized as gray while the others had a pinkish hue.

Other studies have recorded this variable graying of mulches. In a six-month study, municipal yard waste began to gray after six months, while cypress, pine-bark and pine-straw all retained their color (Stinson et al. 1990). A study comparing bark mulch to plastic mulches rated bark to have the highest appearance rating after five months (Ashworth and Harrison 1983).

Conclusions and Recommendations

Color retention is an important mulch criteria to some landscapers. It appears from this study that color retention after one year is variable with cypress, pine-bark and melaleuca the best having retained their color in the first year (Table 2). Yet after 2 years, most mulches had grayed with pine-bark and cypress retaining some of their original color.

Of course, this graying is mostly on the surface where the sun has impacted the mulch. If these same mulches are raked, their color will reappear. Raking is one of the solutions to longer color retention. Another solution is to replenish the mulch with a thin layer of new mulch.

In the overall comparison of mulches, mulch color seems to be the most minor with no impacts on the mulch's benefits and with many simple solutions to correct graying mulches.

Literature Cited

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Table 1. Color of mulches from the beginning of the experiment (0 months) to the end (24 months).

Mulch	Color of mulches from the beginning of the experiment (0 months) to the end (24 months).					
	0	3	6	9	12	24
Cypress	Pink	Reddish yellow	Pink	Light brown	Pink	Pinkish gray
Eucalyptus	Light reddish brown	Pinkish gray	Pinkish gray	Light gray	Pinkish gray	Pinkish gray
Utility (GRU)	Olive, Very pale brown, Pink	Light reddish brown	Pinkish gray	Very pale brown	Pinkish gray	Gray
Malaleuca	Dark reddish brown	Pinkish gray	Pink	Light gray	Pink	Pinkish gray
Pine-bark	Reddish brown, Light brown	Dark reddish brown	Reddish brown	Brown	Reddish brown	Dark reddish gray
Pine-straw	Reddish brown	Reddish brown	Reddish gray	Light brownish gray	Pinkish gray	Pinkish gray

Table 2. Color ranking of mulches after 1 and 2 years.

Color	Mulch	
	After 1 Year	After 2 Years
Least change	Cypress, Pine-bark	Pine-bark Cypress
	Melaleuca	Eucalyptus Melaleuca Pine-straw
Most change	Eucalyptus Pine-straw Utility	Utility