



For more information call: 321-952-4536
lseals@ufl.edu

FACT SHEET # FS 6093
Date: 06/2007

Fertilizer summary: palms, ornamental trees and shrubs, citrus trees, fruit trees, and lawn grass

The following summary contains information on fertilizer recommendations for landscape plants used in Central Florida. The information was compiled from various University of Florida IFAS publications.

Palms

- Use only 8-2-12+4Mg (Magnesium) and micronutrients palm maintenance fertilizer. Several companies manufacture this fertilizer. Contact the Extension Office for local retailers.
- Broadcast using a calibrated rotary spreader under the canopy area, entire bed area, or entire landscape at a maximum rate of 15 pounds of fertilizer (not Nitrogen) per 1000 sq. ft. every 3 months.
- Never use turf fertilizers within 50 feet of a palm. The recommended palm fertilizer can be used on turf and other ornamentals within range of the palm(s).
- Fertilize in February, April, June and early October (once established, *Sabal palmetto* do not require additional fertilizers)

Additional information can be found at: <http://edis.ifas.ufl.edu/pdf/EP/EP26100.pdf> and <http://edis.ifas.ufl.edu/pdf/EP/EP27300.pdf>.

Established Trees and Shrubs

Shrub beds:

- Apply a complete fertilizer at the rate of 1 pound of actual N per 1,000 square feet. Example: Lesco 8-2-10, Landscape & Ornamental Fertilizer, 100% sulfur-coated slow release.
- Apply in February, April, June and no later than late September.

- Broadcast throughout the shrub bed directly onto the soil or mulch. Do not fertilize next to the trunk(s).
- Water in to wash fertilizer off of foliage.

Flowering and Shade Trees:

- Apply a complete fertilizer with a ratio of 3:1:2 or 3:1:3 (e.g., 15-5-10 or 15-5-15). At least 30-50% of the N and K should be slow release.
- Apply fertilizer to the soil or mulch surface no more than 1 ½ - 2 times the canopy diameter (note: if the turf surrounding the tree has been fertilized within the past 2 weeks, do not apply additional fertilizer to the turf. Fertilize the mulch area only and base fertilizer calculations upon the mulch square footage).
- Fertilize trees planted less than 5 years twice yearly; once in February and once in October.
- During especially rainy summers, a third application can be made midsummer.
- Trees planted more than 5 years (especially those surrounded by turf) do not need supplemental fertilizer unless they exhibit a specific nutrient deficiency.

Citrus

Year Since Planting	Number of fertilizer Applications per Year	Pounds Nitrogen per Tree per Year	Pounds of Fertilizer per Tree per Application		
			6-6-6	8-8-8	10-10-10
First	6	0.15 - 0.30	0.4 - 0.8	0.3 - 0.6	0.3 - 0.5
Second	5	0.30 - 0.60	1.0 - 2.0	0.8 - 1.5	0.6 - 1.2
Third	4	0.45 - 0.90	1.9 - 3.8	1.4 - 2.8	1.1 - 2.3
Fourth	3	0.80 - 1.0	4.4 - 5.6	3.3 - 4.2	2.7 - 3.3
Fifth & up	3	1.1 - 1.4	6.1 - 7.8	4.6 - 5.8	3.7 - 4.7

Fruit Trees

Recommended fertilizer practices for selected young (Y) and mature (M) tropical fruit crops. (Adapted from Tropical and Subtropical Fruit Crops for the Home Landscape: Alternatives to Citrus. Visit <http://edis.ifas.ufl.edu/MG373> for complete list)

Fruit crop	Recommended fertilizer practices 1, 2, 3
Avocado	Y: 1/4 lb. per tree bimonthly - increase amount with tree size. M: 4-5 lbs. per tree, 3-5 applications per year; maximum per year, 20-25 lbs.
Banana	Y: 1/4-1 lb. per tree bimonthly - increase amount with tree size. Use a 6-2-12 or similar fertilizer. M: (after plants are 10-15 months old) 5-6 lbs. per tree bimonthly; maximum per year, 10-12 lbs.
Carambola	Y: 1/4-1 lb. per tree bimonthly - increase amount with tree size. M: 4-5 lb. per tree, 4-6 applications per year; maximum per year, 20-25 lbs.
Guava	Y: 1/4 lb. per tree bimonthly - increase to 1 lb. per tree bimonthly the second year. M: 1-5 lbs. per tree, 3-5 applications per year; maximum per year, 20-25 lbs.
Jaboticaba	Y: 1/4 lb. per tree per month the first year, every 2nd month the second year, and every 3rd month the third year. M: 1-2 lbs. per tree, 3-4 applications per year; maximum per year, 3-8 lbs.
Jackfruit	Y: 1/4-1/2 lb. per tree every 6-8 weeks the first year - increase amount with tree size. M: 1-5 lbs. per tree, 3-5 applications per year; maximum per year, 20-25 lbs.
Lychee	Y: 1/2-1 lb. per tree every 6-8 weeks - increase amount with tree size. M: 3-5 lbs. per tree, 3-5 applications per year; maximum per year, 15 lbs.
Mango	Y: 1/4-1/2 lb. per tree every 6-8 weeks the first year - increase with tree size. M: 3-5 lbs. per tree, 3-5 applications per year; maximum per year, 15-20 lbs.
Papaya	Y: 1/2 lb. per tree every 2-3 weeks. Increase the amount to 1 1/2 lb. per tree until plants are 7-8 months old. M: 1 1/2 lb. per tree per month; maximum per year, 18-24 lbs.
Passion fruit	Y: 4-6 oz. per vine, 4-6 applications per year. M: 1-2 lbs. per vine, 3-5 applications per year; maximum per year, 6-12 lbs.
Sapodilla	Y: 1/4 lb. per tree every 2-3 months - increase with tree size. M: 3-5 lb. per tree, 2-3 applications per year; maximum per year, 15-20 lbs.
<p>1, Common fertilizer ratios may be used such as 6-6-6, 8-3-9, 8-2-8, 10-10-10, or similar materials.</p> <p>2, Y, young trees; M, mature trees.</p> <p>3, Apply minor elements (manganese, zinc) in a foliar spray 3-4 times during the growing season (April-Sept.). Apply iron in a soil drench (water plus iron) 3-4 times during the growing season (June-Sept. best).</p>	

Turfgrasses Maintained Without the Benefit of a Soil Test

Turfgrass	Maintenance Level	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bahia grass	Basic	--	--	C	--	N	--	--	--	C	--	--	--
	Moderate	--	--	C	--	N	--	Fe	--	--	C	--	--
	High	--	--	C	N	--	SRN	--	Fe	--	C	--	--
Bermuda-grass	Basic	--	--	C	--	N	--	SRN	--	C	--	--	--
	Moderate	--	--	C	--	N	--	SRN	--	SRN	--	C	--
	High	--	--	C	N	SRN	--	C	Fe	SRN	--	C	--
St. Augustine-grass	Basic	--	--	C	--	--	--	Fe	--	C	--	--	--
	Moderate	--	--	C	--	SRN	--	Fe	SRN	--	C	--	--

	High	--	C	--	N	SRN	--	Fe	SRN	--	C	--	--
Zoysiagrass	Basic	--	--	C	--	SRN	--	--	--	C	--	--	--
	Moderate	--	--	C	--	SRN	--	--	SRN	--	--	C	--
	High	--	C	--	N	SRN	--	SRN	--	N	--	C	--

C=Complete fertilizer applied at 1 pound N per 1000 sq. ft. containing a 50% soluble and 50% slow-release N.

N=soluble Nitrogen applied at 0.5 pounds of N per 1000 sq. ft.

SRN=slow release N applied at 1 pound of N per 1000 sq. ft.

Fe=apply iron to provide dark green color without stimulating excessive growth. For foliar applications use ferrous sulfate (2 oz/3-5gal water/1000 sq. ft.) If the Fe is applied to an acidic soil, use 1 pound of iron sulfate per 1000 sq. ft. If the soil is calcareous, use the container label recommended rate of an iron chelate.

Additional Resources

EDIS Publications

- Tropical and Subtropical Fruit Crops for the Home Landscape: Alternatives to Citrus - <http://edis.ifas.ufl.edu/MG373>
- Figuring out Fertilizer for the Home Lawn - <http://edis.ifas.ufl.edu/EP221>
- Soil pH and Plants - <http://edis.ifas.ufl.edu/MG092>
- Fertilization and Irrigation Needs for Florida Lawns and Landscapes - <http://edis.ifas.ufl.edu/EP110>
- General Recommendations for Fertilization of Turfgrasses on Florida Soils - <http://edis.ifas.ufl.edu/LH014>
- The Florida Fertilizer Label - <http://edis.ifas.ufl.edu/SS170>
- Homeowner Best Management Practices for the Home Lawn - <http://edis.ifas.ufl.edu/EP236>