Gardening Article

March 5, 2023

To fertilize, or not to fertilize

Temperatures are warming up and spring is showing her colors (and pollen!). You may be thinking that it's time to get a head start on the growing season and make a grab for the fertilizer. Stop! (Cue the record player scratch sound effect). Yes, the Alachua County fertilizer code says you *can* apply fertilizer from March through June but just because you can doesn't mean you *should*.

Since fertilizers containing nitrogen and/or phosphorus can decrease water quality by running off into nearby surface waters or leaching into our groundwater, it is important that we *only* use fertilizers when plants need them and can use them. Applying too much fertilizer can also burn plants, trigger excessive growth, and aggravate pest problems. Plus, fertilizers cost money and time to apply. If your plants don't need it, you can use that time and money for something else (like buying more plants!).

So before reaching for the fertilizer, reach for some information.

Get to know your plants

Plants can vary in their nutrient needs, depending on their species, age, and where they are planted, and one fertilizer type does not fit all plants. For example, turfgrasses will have different nutrient requirements than shrubs, which in turn will differ from trees.

Young, actively growing plants with developing root systems may need fertilizer to give them a head start until their roots can establish and access nutrients on their own. In contrast, older plants with established root systems may not need any fertilizer at all.

Determine if your plant(s) and/or soil environment need fertilizer.

A general rule is that if a plant is in a location where it is thriving and has become established, it most likely does not need fertilizer. If a plant is in a container, newly planted, in poor soil, or showing signs of a nutrient deficiency then it may need to be fertilized. Plants may also only need fertilizer at certain times, for example right before flowering or fruiting. A soil test can help you to understand what nutrients are present in your soil and provide recommendations based on the plants you are growing or want to grow. For more information, contact your local county Extension office.

If fertilizer is needed, determine how much and when to apply.

To avoid overfertilizing, first know your fertilizer ordinances for your county. In Alachua County, fertilizers containing phosphorus are prohibited unless a deficiency is verified by a soil or plant tissue test since phosphorus is usually abundant in our soils. Fertilizers with nitrogen must have

a minimum of 50% of the nitrogen in a slow- or controlled-release form and only be applied from March to June.

Next, read and follow the label on the fertilizer container for application instructions and to understand what you are applying. If you need help with calculations, contact your local Extension office and provide the type of fertilizer you are using, the plants you are fertilizing, and the size of the area which you want to fertilize.

Fertilizing is only helpful to the plant if it is actively growing and can uptake the nutrients. If the plant is dormant or has slowed growth due to seasonal changes, temperature extremes, or drought then it is not a good time to fertilize since most of it will not be taken up by the plant. Additionally, if a plant is stressed due to disease or pest pressure, it's best to address the disease or pest problem first before applying fertilizer.

For future plantings, select plants that match the site's soil, light, water, and climatic conditions

When plants are matched to their environment, they require less inputs. They may need some help when they are initially planted, but once established and growing they should need little to no fertilizer.

Help us help you!

The UF/IFAS Extension Alachua County Master Gardener Volunteers are conducting a county-wide survey of homeowners on their current landscape pest and disease knowledge and practices. Information collected from this survey will be used to inform our educational programs and help us continue to provide science-based recommendations to the public to improve home landscape quality and protect Florida's natural resources for communities and future generations. To participate in our survey please visit https://go.ufl.edu/wmkyosn.

To learn more about managing your Florida landscape, reach out to UF/IFAS Extension Alachua County's office to speak with a Master Gardener Volunteer at (352) 955-2402 or mag@alachuacounty.us. Dr. Cynthia Nazario-Leary is the Environmental & Community Horticulture Extension Agent for UF/IFAS Extension Alachua County. Contact her at cnazarioleary@ufl.edu or 352-955-2402.

