

## No need to fertilize newly placed St. Augustinegrass sod, UF study shows

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(PhysOrg.com) -- Florida homeowners and contractors laying St. Augustinegrass sod this spring can save money and help the environment if they wait at least one month before fertilizing, University of Florida experts say.

A UF study published in the current issue of the scientific journal *Crop Science* showed that applying fertilizer to newly installed sod did little to help the grass and boosted the nutrient content of water passing through the soil, said John Erickson, an agronomy assistant professor with UF's Institute of Food and [Agricultural Sciences](#).

“That first 30 days there's limited rooting, so there's that risk of loss of nutrients,” Erickson said.

The results from this study help confirm that healthy turfgrass with established roots will absorb the nutrients from properly applied fertilizer and minimize nutrient loss, said Terril Nell, director of UF's Center for Landscape Conservation and Ecology.

The nutrients nitrogen and phosphorus, found in fertilizer and other materials, can reduce the quality of local surface water and groundwater if present in excessive amounts. So UF scientists are investigating ways to minimize fertilizer use.

Commercial sod has likely been well-fed at the sod farm, so it can grow for at least one month without additional fertilizer, said John Cisar, an

environmental horticulture professor at UF's Fort Lauderdale Research and Education Center and another author of the study.

“It won't be starving,” Cisar said. “Water it, let it take root and you have a good filter.”

The nutrient-filtering properties of established turfgrass are widely studied, but little attention has been paid to nutrient loss from sod, Erickson said. Florida uses more sod than many states because St. Augustinegrass, Florida's most popular turfgrass, is usually established via sod or sprigs.

The UF study involved 36 plots of St. Augustinegrass sod at the Fort Lauderdale center. Each plot was put on one of three schedules—no fertilizer, fertilizer added immediately after the sod was placed, or fertilizer added 30 days after the sod was placed. For 60 days, researchers analyzed the nutrient content of water draining off the plots.

When the study ended, sod that was fertilized immediately after being put down was just as green as sod that wasn't fertilized during the first 30 days. But the immediately fertilized sod lost twice as much nitrogen in water running through the soil.

The study, part of a five-year project to determine the best fertilizer rates for turfgrass throughout the state, is being funded by the state Department of Environmental Protection.

The department is eager to promote recommendations that will minimize nutrient loss when lawns are first established, said Michael Thomas, an agricultural engineer with DEP.

“We are interested because we must know the proper practices to recommend, what works and what doesn't,” Thomas said. “That's why

we do this, that's why it's important.”

Preliminary results from the study were incorporated in the 2008 revision of DEP's Green Industries Best Management Practices manual, he said. The results could be added to ordinances in the future.

Florida homeowners can help protect local water quality by following IFAS fertilizer recommendations, avoiding application of fertilizer to roads, driveways and sidewalks, leaving turfgrass clippings on the lawn and composting other yard waste, said Esen Momol, director of UF's Florida-Friendly Landscaping program. Fertilizer application should also be delayed if heavy rainfall is predicted for the near future.

For more information on Florida-Friendly Landscaping, visit [fyn.ifas.ufl.edu](http://fyn.ifas.ufl.edu) .

Researchers conducted similar studies at the UF main campus in Gainesville and the West Florida Research and Education Center in Jay.

The Gainesville study included zoysiagrass and the Jay study involved centipedegrass, both popular turfgrasses for home lawns.

Early results from those studies also show that waiting 30 days before fertilizing new sod minimized nutrient leaching without reducing turf quality, researchers said.

Homeowners should remember that irrigation is an important factor in nutrient loss from [turfgrass](#), said Bryan Unruh, an environmental horticulture associate professor and leader of the Jay study.

“When you have new sod, the rule is, water more frequently but with less volume,” Unruh said. Soil conditions will dictate the exact watering schedule needed, so homeowners should consult an extension agent for

more information.

And although some online sources suggest applying fertilizer to a yard before laying sod, that's not a good idea, either, said Laurie Trenholm, an ornamental horticulture associate professor who leads the Gainesville study.

“It's fine to incorporate organic matter, like compost. But not [fertilizer](#),” she said.

Provided by University of Florida

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