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Updates to the Urban Turf Fertilizer Rule

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In December 2007, the Florida Department of Agriculture and Consumer Services (FDACS) adopted a rule that regulates labeling on bags of fertilizers used on home lawns. The Urban Turf Fertilizer Rule [RE-1.003(2) Florida Administrative Code] regulates what can be sold and marketed as an urban turf fertilizer and requires specific wording on the fertilizer bag. The rule is in effect on fertilizer bags weighing less than 50 pounds. The rule was enacted in response to concerns over potential pollution of water resources resulting from the nitrogen (N) and phosphorus (P) in these fertilizers. The rule was updated in January 2015 to change the allowable N rates, particularly for the maintenance of turf in parts of the state where a summertime ban on application of N and P exist. The change in the rule is based on University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS) research results on nitrate-N leaching from turfgrass. The new rule allows for use of up to two pounds of nitrogen per 1000 square feet for spring or summer applications. Annual N application rates must still follow the UF/IFAS recommendations.

Regulations regarding application of fertilizer to urban turfgrass are commonplace throughout much of Florida through local city and county ordinances. These ordinances are passed in an attempt to reduce nonpoint source pollution of water bodies within local jurisdictions. Many of the ordinances do not follow the science on nitrate leaching from urban turfgrass and many of them include a 4-month (June–September) ban on fertilization with products containing nitrogen (N) and phosphorus (P). In some cases, this restriction causes a decline in turf health and cover, which can result in increased soil erosion and less ability of the grass to filter stormwater runoff, both of which may increase nonpoint source pollution. Many of the ordinances also specify the percentage of slow-release N sources that must be used on urban turfgrass and limit annual N application rates, which may or may not be consistent with the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS) recommendations.

To provide guidance for local fertilizer ordinances, the Florida Department of Environmental Protection (FDEP) developed a Model Fertilizer Ordinance in 2003. The Florida Legislature identified a model ordinance as a minimum to be followed for local ordinances. Local ordinances may be stricter and more inclusive than state laws. The model ordinance does not have a summer fertilizer ban and has been adopted by a number of local governments statewide as their fertilizer ordinance. This model follows the UF/IFAS guidelines that are part of the Green Industries Best Management Practices, which limit application of soluble N to 0.5 lb N/1000 ft^2 per application.

Also related to concerns over nonpoint source pollution resulting from applications to urban turfgrass, the Florida Department of Agriculture and Consumer Services (FDACS) adopted a rule that regulates labeling on bags of fertilizers used on home lawns. The Urban Turf Fertilizer Rule (RE-1.003(2) Florida Administrative Code) was initiated in 2005 at the direction of Florida's governor to reduce P loading into Lake Okeechobee. It was adopted in 2007 and regulates labeling requirements for urban turf fertilizers and requires specific wording on the fertilizer bag. The rule follows UF/IFAS research for providing directions for fertilizer application. The rule is in effect on fertilizer bags for specialty turf, meaning those that weigh less than 50 lb.

In 2015, FDACS held public workshops to address changes to the rule. The changes were deemed necessary based on the UF/IFAS research finding on nitrate leaching from urban turfgrass and due to concerns about declining turfgrass health over the growing season where fertilizer bans were in effect. The following were the specific points in the rule that were changed:

- Inclusion of a definition for "actively growing turf". This was defined as turf that needs mowing at least every two weeks to maintain the height of cut recommended by UF/IFAS for each species. This definition was included since this is the time that turfgrass can best assimilate and use nutrients with low or no potential for leaching loss (Fig. 1). The risk of loss is greatly increased during periods of dormancy or reduced growth (Fig. 2). The time of active growth will differ depending upon geographical location in the state.

Several specific changes were updated to seasonal and annual fertilization recommendations based on research results.

- The rule now allows for single applications of up to 2 lb N/1000 ft^2 in spring and summer (Table 1).
- Of the 2 lb, a maximum of 0.7 lb of soluble N can be applied per 1000 ft^2 at any one time.

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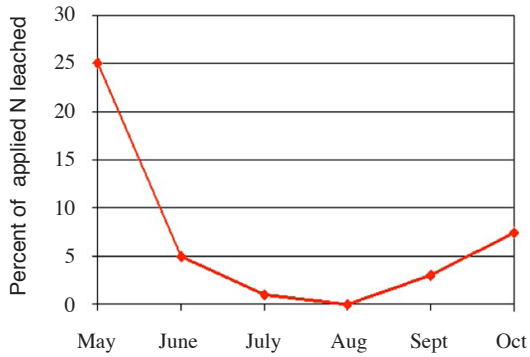

Fig. 1. Nitrogen (N) leaching as influenced by time of year.

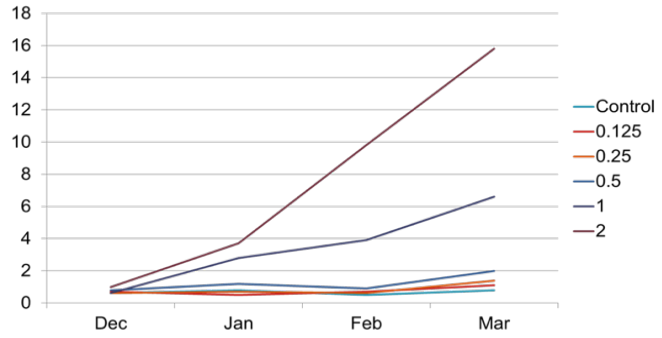

Fig. 2. Cumulative nitrate leached (kg·ha^{-1} of N), as influenced by time of year.

Table 1. Annual fertilization guidelines for established turfgrass lawns in three Florida regions.

Species	Bahiagrass	Bermudagrass	Centipedegrass	St. Augustinegrass	Zoysiagrass
Application Timing	- - - - - - - - - - - - - - Nitrogen Recommendations (lbs N per application per 1000 ft^2) - - - - - - - - - - - - - -				
North region*					
Spring or Summer	2	2	2	2	2
Fall	1	1	1	1	1
Annual Application	2–3	3–5	1–2	2–4	2–3
Central region**					
Spring or Summer	2	2	2	2	2
Fall or Winter	1	1	1	1	1
Annual Application	2–4	4–6	2–3	2–5	2–4
South region***					
Spring or Summer	2	2	2	2	2
Fall or Winter	1	1	1	1	1
Annual Application	2–4	5–7	2–3	4–6	2.5–4.5

* North region of Florida is defined as north of line extending from Cedar Key to Daytona Beach.
**Central region of Florida is defined as south of a line extending from Cedar key to Daytona Beach and north of a line extending from Tampa to Vero Beach.
***South region of Florida is defined as south of a line extending from Tampa to Vero Beach.

- In fall and winter, no more than 1 lb N/1000 ft^2 can be applied at any one time.
- If applying controlled release N sources, no more than 35% of the N can release within the first seven days after application.
- Winter applications are excluded for North Florida
- The annual recommendations are to continue to follow the UF/IFAS guidelines for the various species.

Additional precautionary statements are now included on the labels.

- Apply only to actively growing turf.
- Check with your local Cooperative Extension Agency to obtain specific information on local turf best management practices.
- Check with your city or county government to determine if there are local restrictions on fertilizer use.

This rule is fully supported by UF/IFAS nitrate leaching research conducted under the Florida Department of Environmental Protection (FDEP) research project. It should be noted that the revisions are in contradiction with what FDEP will allow in the Green Industries Best Management Practices (GIBMP) education program, but are fully supported by the science.