



Responsible Fertilizer Use & Calibration

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Responsible Fertilizer Use

- Right time, right place
 - Active growth – mid-March to mid-October
- Fertilize turf and landscaping separately
 - Avoid impervious areas
- Protect the waterfront
 - Use guard, maintain 10' buffer
- Prevent runoff and leaching
 - 1/4" of irrigation after application
- Sweep up spills or blow into grass
- Use slow release nitrogen sources
 - 2% or less phosphorous



Amount of fertilizer:

- Soil test results (won't provide N info)
- Desired level of maintenance
- Amount of nitrogen in the product
- Percentage of nitrogen in product that is a slow-release form

Total lbs N/year

- | | |
|----------------------|---------|
| ○ St. Augustinegrass | 2-5 lbs |
| ○ Bahiagrass | 2-4 lbs |
| ○ Zoysiagrass | 2-6 lbs |

Slow release nitrogen

- >30% SRN = slow release product
 - Up to 1 lb nitrogen/application
- <30% SRN = quick release
 - Up to 0.5 lb nitrogen/application
- Spoon feeding method
 - Slow release over time
 - Smaller amounts, more applications



FERTILIZER

Guaranteed Analysis

TOTAL NITROGEN (N)	16.00%
14.45% Urea Nitrogen (N)*	
SOLUBLE POTASH (K ₂ O).....	26.00%
SULFUR (S) Total.....	19.70%
10.50% Free sulfur (S)	
9.20% Combined sulfur (S)	
IRON (Fe) Total	0.96%
0.19% Water Soluble (Fe)	
MANGANESE (Mn) Total	0.48%
0.1% Water Soluble Manganese (Mn)	
DERIVED FROM: Polymer Coated Sulfur Coated Urea, Sulfate of Potash, Iron Oxide, Manganese Oxide.	
CHLORINE (Cl) Max.....	2.00%
*8.00% Slowly Available Urea Nitrogen from Polymer Coated Sulfur Coated Urea.	

- Total N = 16%
- 8% slowly available form
- $8/16 = 0.5 \times 100 = 50\%$
- **Amount/application?**

Calibrating a spreader

- Square footage
 - $L \times W = \text{area}$
- Determine lbs nitrogen for application

Scenario

- St. Augustinegrass (4,000' sq)
- 4 lbs of nitrogen/year
 - March, May, July, September
 - 16% N – 50% SRN form
 - 1 lb/application
- How much fertilizer do I need/1,000' sq?
- How much do I need to buy total?



Calculations

- Lbs/1,000' sq?
- 1 lb/16 = 0.0625 x
100 = 6.25 lbs
- 6.25 lbs/1,000' sq
- Total lbs?
- 6.25 x 4 = 25 lbs
total
- 25 lbs/application
at 1 lb N/1,000' sq

Only buy and open what you need...

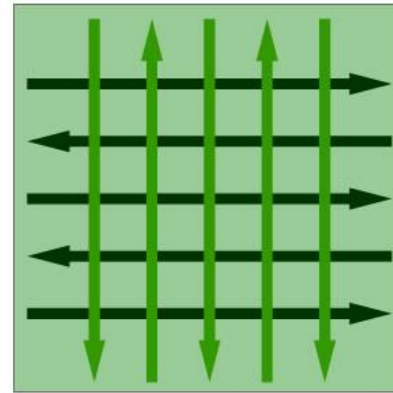
Calibrating a spreader

- Drop spreader
- Rotary/broadcast spreader
 - Cover a lot of area quickly
 - Usually don't get streaks
 - Overlap outer edge of range (1/4)
- Should be calibrated frequently
 - Between uses
 - Between users
 - Between products



Steps

- Mark off 100' x 10' area = 1,000' sq
- Fill hopper with 6.25 lbs of product, apply to marked area
- If product runs out before end of run, decrease setting – redo
- Weigh product left over, if 3 lbs left, open spreader – redo
- Consider cross-hatch pattern
 - Reduce product by half
 - Make two passes
- Close spreader when making turns
- Don't apply to water or impervious areas
- Rinse the spreader after use
- Walk same speed
- Sweep up or blow off product



Demo

- Thank you!
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