

Cool Season Forage Fertility

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Hamilton County Agriculture Agent



Why Take a Soil Sample

- To determine the soils pH
- To determine phosphorus levels
- To determine potassium levels
- To determine calcium levels
- To determine magnesium levels

UP **UNIVERSITY OF FLORIDA**
Soil Testing Laboratory

UNIVERSITY OF FLORIDA Analytical Services Laboratory
Soil Testing Laboratory
1000 University Blvd SW, Box 110000, Gainesville, FL 32611-1000

PRODUCER SOIL TEST FORM
ENTER THE SAMPLE AND ANALYSIS INFORMATION

Client Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____

Field No.: _____
Date: _____

Plot No.: _____
Field Name: _____

Field No. (continued on separate sheet): _____

Please fill in appropriate information using the first page only. Use additional forms for more than 11 samples.

Sample No.	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11
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Soil Sampling Basics

- Collect samples from areas with different growth characteristics to compare.
- Use a sampling tube or probe to pull at least fifteen cores, six inches deep.
- Use a bucket to thoroughly mix cores.
- Name each sample that will represent the area tested so you can remember where each sample was taken.

Cool Season Annual Grasses

- At planting apply
 - 30 lbs N/acre
 - All the recommended P_2O_5 (80lbs if low, 40 lbs. if med)
 - 50% of recommended K_2O (80lbs if low, 40 lbs. if med)
- After first grazing apply
 - 50 lbs N/acre
 - Remaining K_2O
- After each additional grazing apply
 - 50 lbs N/acre

Cool Season Annual Grasses (Overseeding)

- After emergence apply
 - 50 lbs N/acre
 - All the recommended P_2O_5 (80lbs if low, 40 lbs. if med)
 - All the recommended K_2O (80lbs if low, 40 lbs. if med)
- After each additional grazing apply
 - 50 lbs N/acre

October 2021 Fertilizer Pricing

- Granular

- 23-5-10

\$575/Ton

- 19-5-19

\$614/Ton

- 20-0-20

\$591/Ton

- 30-0-0

\$511/Ton

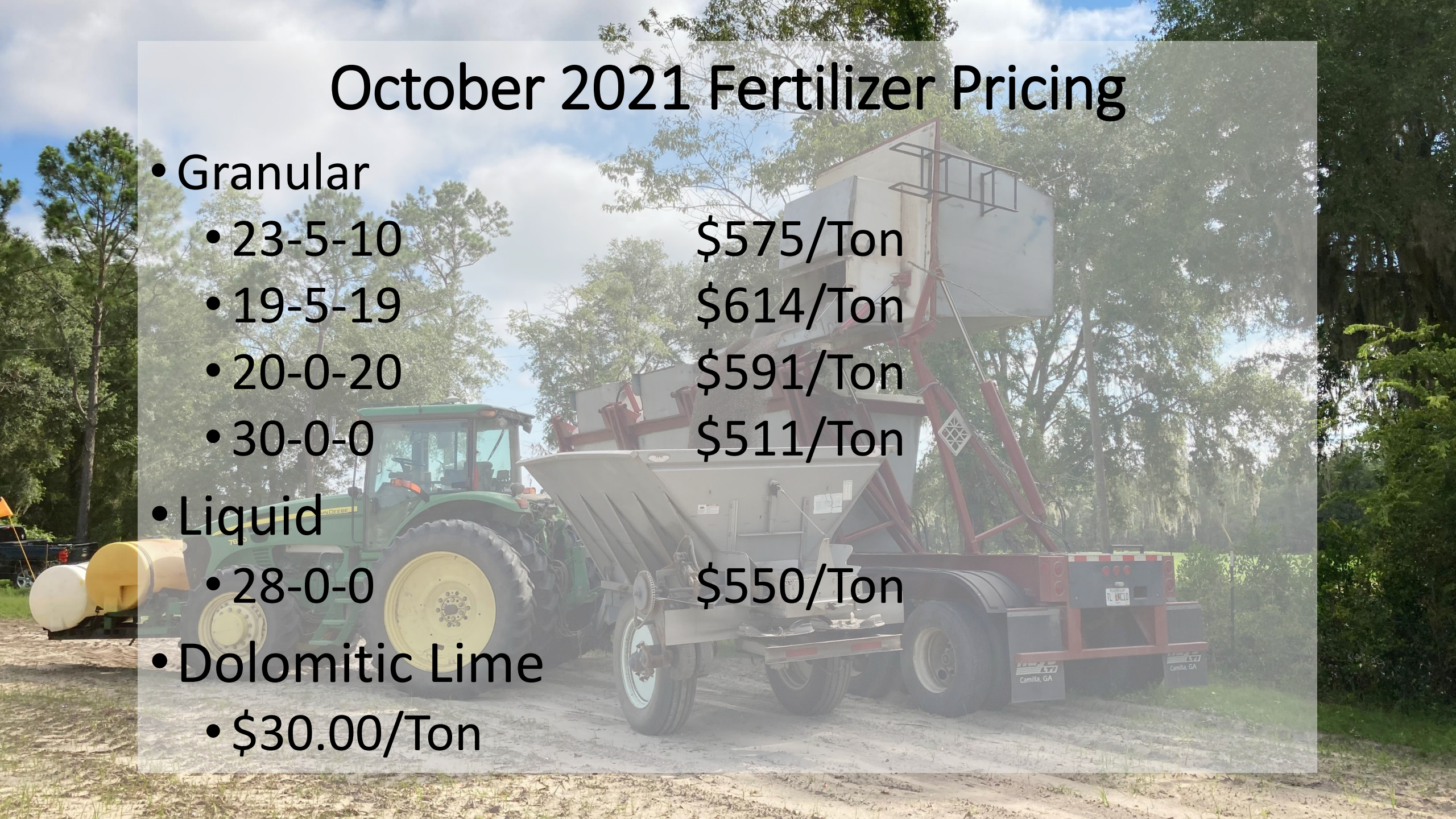
- Liquid

- 28-0-0

\$550/Ton

- Dolomitic Lime

- \$30.00/Ton



Application Prices

- Spreader Rental \$50.00 (Holds 4 tons)
- Applied \$150 minimum (25 acres)
 - Granular \$5.50/Acre
 - Liquid \$5.75/Acre

At-Planting Rye, Oats, Ryegrass

- Need 30 Lbs. N and 40 Lbs. K₂O Per Acre
- Can use 20-0-20
 - How much 20-0-20 would I need?
 - 150 lbs. per acre (30/.20)
 - 150 lbs. of 20-0-20 at \$591/ton
 - \$.2955 per pound would be \$44.33 per acre

After 1st Grazing

- Need 50 Lbs. N and 40 Lbs. K₂O Per Acre
- Can use 20-0-20
 - How much 20-0-20 would I need?
 - 250 lbs. per acre (50/.20)
 - 250 lbs. of 20-0-20 at \$591/ton
 - \$.2955 per pound would be \$73.88 per acre

After Each Additional Grazing

- Need 50 Lbs. Per Acre
- Can use 30-0-0
 - How much 30-0-0 would I need?
 - 250 lbs. per acre ($50/.30$)
 - 167 lbs. of 30-0-0 at \$511/ton
 - \$.2555 per pound would be \$42.67 per acre

At-Planting Rye, Oats, Ryegrass

- Need 30 Lbs. N and 40 Lbs. K₂O Per Acre
- Can use 20-0-20
 - How much 20-0-20 would I need?
 - 150 lbs. per acre (30/.20)
 - 150 lbs. of 20-0-20 at \$591/ton
 - \$.2955 per pound would be \$44.33 per acre
 - \$5.50/acre to have applied (\$44.33 + \$5.50 = \$49.83/acre)
 - \$49.83 x 40 acres = \$1,993.20

After 1st Grazing

- Need 50 Lbs. N and 40 Lbs. K₂O Per Acre
- Can use 20-0-20
 - How much 20-0-20 would I need?
 - 250 lbs. per acre (50/.20)
 - 250 lbs. of 20-0-20 at \$591/ton
 - \$.2955 per pound would be \$73.88 per acre
 - \$5.50/acre to have applied (\$73.88 + \$5.50 = \$79.38/acre)
 - \$79.38 x 40 acres = \$3,175.20

After Each Additional Grazing

- Need 50 Lbs. Per Acre
- Can use 30-0-0
 - How much 30-0-0 would I need?
 - 250 lbs. per acre ($50/.30$)
 - 167 lbs. of 30-0-0 at \$511/ton
 - \$.2555 per pound would be \$42.67 per acre
 - \$5.50/acre to have applied ($\$42.67 + \$5.50 =$
\$48.17/acre)
 - $\$48.17 \times$ 40 acres = \$1926.80

Sources:

- Mylavarapu, R., Wright, D., Kidde, G. (2021), UF/IFAS Standardized Fertilization Recommendations for Agronomic Crops, retrieved from:
[SS163-D2loolso0p.pdf \(ufl.edu\)](https://edis.ifas.ufl.edu/pdf/SS163-D2loolso0p.pdf)
- Newman, Y., Mackowiak, C., Mylavarapu, R., Silveira, M. (2017), Fertilizing and Liming Forage Crops, retrieved from:
<https://edis.ifas.ufl.edu/pdffiles/AG/AG17900.pdf>