Iron in the Fire: How Does Bermudagrass **Respond?**

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Background

- Most turf managers use an Fe component in granular fertilizer
- Soil test may or may not recommend applications of Fe in Florida soils
- No consideration is given to the form of Fe

Materials and Methods

Treatments Untreated

- Iron Sulfate
- Iron Sucrate
- Iron Humate
- Iron Chelate (5% EDTA)
- Iron Oxide
- Iron Sulfate Foliar

Rate – 20 lb Fe / A

Locations

- Citra - Princess

- Jay Tifgrand

6 weeks

Iron is an economic concern, not environmental.



- Citra Princess Bermuda
- Trts applied May 7
- No prior fertilization
- Soil pH 7.2
- Turf was not acceptable at initiation

Jay

Site Information

- Tifgrand Bermuda
- Trts applied July 7
- Fertilized 4 weeks prior
- Soil pH 7.3
- Turf was acceptable at initiation



Cumulative Fe Extracted (%)



Rapid Extraction Setup



































- 1h, 4h, 1d, 1wk, 2wk, 3wk

Summary

- Chelate and sulfate produced the highest amounts of extractable Fe
- Foliar sulfate increased turf quality on Princess and Tifgrand
- Tifgrand foliar sulfate and chelate were the only source that increase turf color

1.5

No source influenced yield



Importance Granular Fe increases the cost of granular fertilizer and does not increase turfgrass quality We have observed a response to granular Fe (EDTA & Humate) in 1 of 9 studies! Foliar applications should be considered - 6 studies on 3 different turfgrasses in 2 locations and 2 years - we have observed a response to foliar Fe in every study 1115



