



# University of Florida Studies

## EMPIRE Research – Fertilization, Deficit Irrigation and Nutrient Leaching Study

### Results

- EMPIRE maintained acceptable color and overall turfgrass quality with only 2 – 3 lb of N/1,000 sq ft/year = Saves \$, reduces potential pollution and reduces thatch
- In all four fertilization regimes, EMPIRE maintained better color and overall turfgrass quality than St. Augustine Cultivars
- EMPIRE requires less mowing and can be mowed with a rotary mower
- EMPIRE comes back faster in the spring or after drought stress

## **EMPIRE Research – Fertilization Study**

- 2000-2002 at SMR Sod Farm in Bradenton
- Applied 0, 3, 6, or 9 lbs N in 3 apps per year
- Low maintenance
- Rated quality, color, density, spectral reflectance
- Floratam, Empire, Bahia

## **EMPIRE Research – Deficit Irrigation Study**

- Glasshouse research , Ph D student project
- Objective to look at different grasses under deficit irrigation rates over time
- Maintained grasses at 100, 80, 60, or 40% ET
- Floratam, Palmetto, Sea Isle 1, Empire, Argentine bahiagrass
- Wide range of physiological measurements as well as visual ratings

## **EMPIRE Research – Nutrient Leaching Study**

- Part of a FDEP \$3.5 million grant to study nutrient leaching in lawn grasses
- At new turf research facility in Citra
- Apply different N rates to newly planted and established grasses
- Measure visual quality, physiological responses, and nitrate and phosphate concentration in leachate