



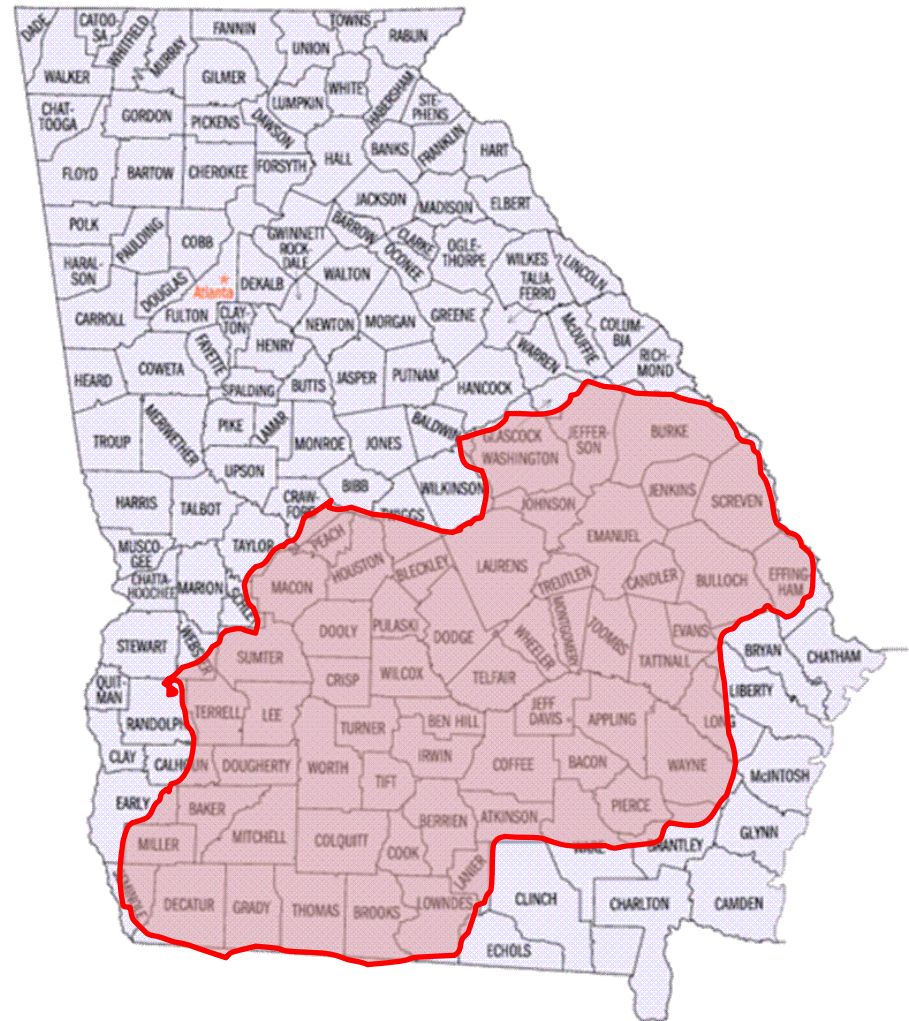
Pecan Management Update

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UGA Horticulture

What Happened to 2015 crop?

- Carry-over of scab inoculum
- Normal temp, wet spring
- Early budbreak
- Heavy scab pressure prior to June
- *Good crop load*
- *Large Nut Size*
- Heavy pressure from mites/black aphids late season
- Cloudy September
- Quality Issues



Oconee



- Exact cause still unknown
- Ruled out insects and disease
- Phys. Problem likely triggered by enviro. conditions at pollination or late water stage
- May be a result of how 'Oconee' handles certain stress factors

Green Shucks, Embryo Rot & Vivipary

- Environmentally induced problem
- Embryo rot and vivipary more severe on young and/or vigorous trees
 - Don't over-fertilize



Pecan Irrigation Schedule

Recommendations for Bearing Orchards

| <u>Month</u> | <u>% Full Capacity</u> | <u>Gallons/acre/day</u> |
|--------------|------------------------|-------------------------|
| April | 17% | 612-680 |
| May | 26% | 936-1040 |
| June | 33% | 1188-1320 |
| July | 40% | 1440-1600 |
| August | 100% | 3600-4000 |
| September | 100% | 3600-4000 |

*If you receive 1" or more of rain from bud-break to the onset of kernel-filling, turn the system off for 3 days.

*Throughout the kernel filling period, apply irrigation daily regardless of rain events up to 2". With a 2" rain during kernel filling, turn the irrigation off for 3 days.

Sandy Soils=Use higher end of rate
Clay Soils=Use lower end of rate

Poor Harvest Conditions October-November

| Year | Precipitation | Rainy Days | Avg Temperature |
|-----------|---------------|------------|-----------------|
| 2015 | 6.63 | 21 | 64.8 |
| 2014 | 8.75 | 12 | 59.9 |
| 2013 | 4.11 | 16 | 61.6 |
| 2012 | 2.84 | 18 | 60.9 |
| 1971-2000 | 5.61 | N/A | 62.7 |

3-5% rot on average, increasing later in season

Leaf Scorch of Young Pecan Trees

- Primarily a problem of poor root establishment
- Limitations to root growth
 - Wet spring
 - Wet/Dry extremes
 - Poor soil
 - Water-logged
 - Planting immed. behind pine trees
 - Hard Pan/High water table
- Fertilization



Fertilization of Young Trees

- Focus on P,K, Zn---not N!

Rate of 10-10-10/per tree

| Year | April | June |
|------|---------|----------|
| 1 | 0 | 0.5-1 lb |
| 2 | 1-2 lbs | 1-2 lbs |
| 3 | 2-3 lbs | 2-3 lbs |
| 4 | 3-4 lbs | 3-4 lbs |

- Apply Zinc Sulfate at 1-3lb per tree for the 1st 3-4 yrs
- 2-3 sprays foliar Zn if deficiency symptoms show
- Mouse Ear Trees:
 - Apply Ni at rate of 1.5 qts/100 gallons

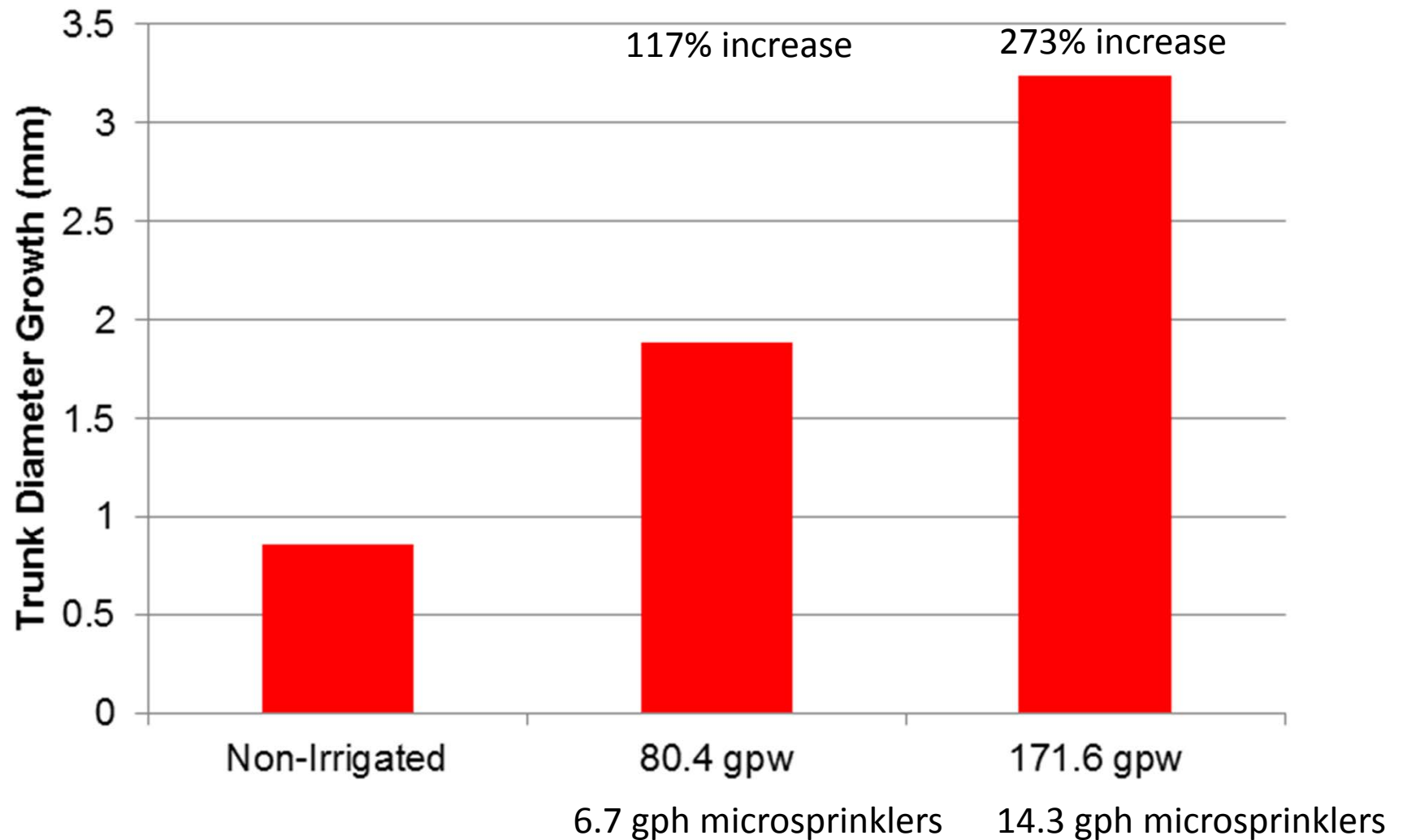
If You Fertigate

Amount of N/acre

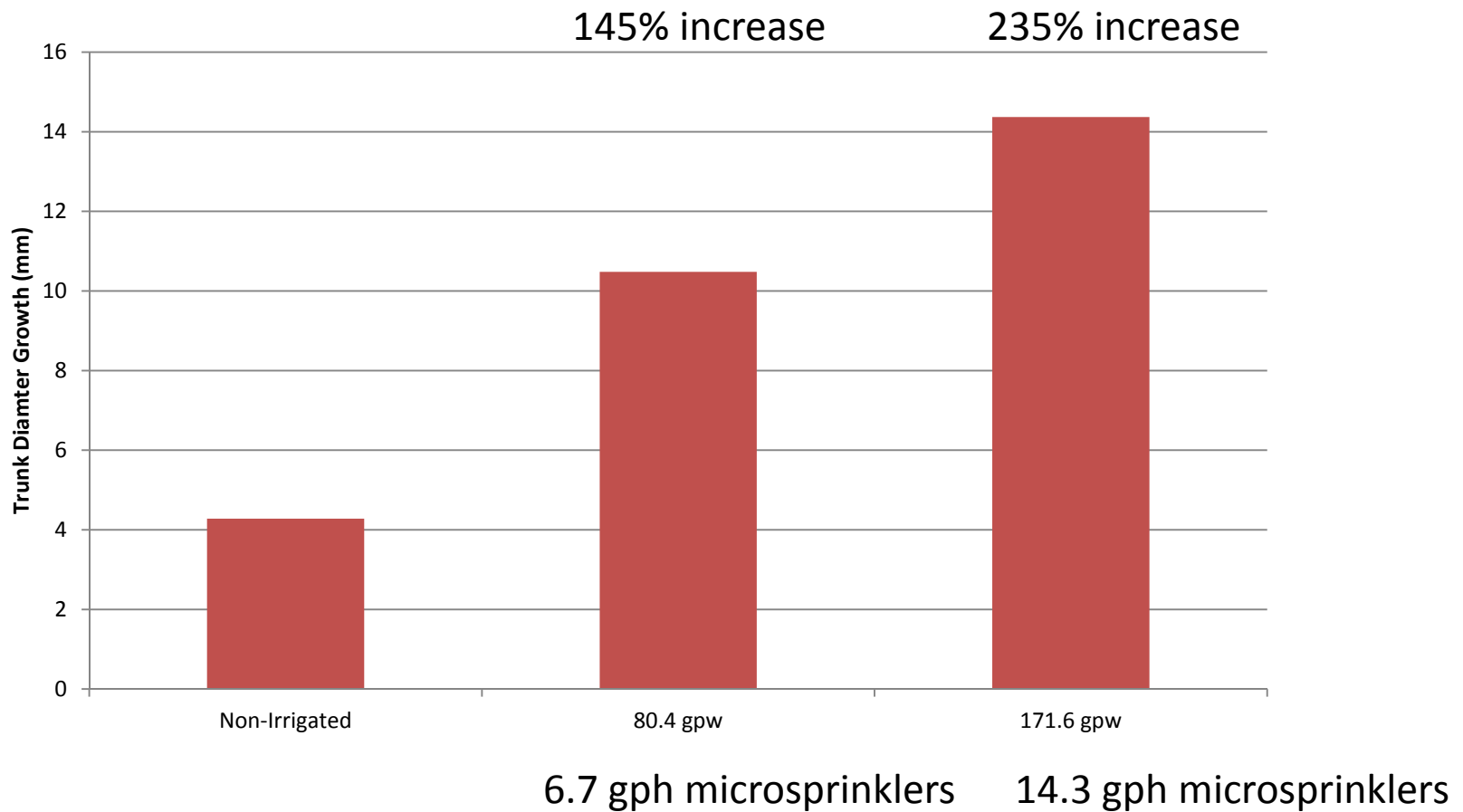
| Year | April | May | June |
|------|-------|-------|---------|
| 1 | 0 | 0 | 5 lbs N |
| 2-4 | 5 lbs | 5 lbs | 5 lbs |

- Apply granular P,K, Zn over the tree row in March or April of years 1 and 2
 - 40 lbs P
 - 40 lbs K
 - 25 lbs Zn Sulfate

Young Tree Irrigation---Year 1

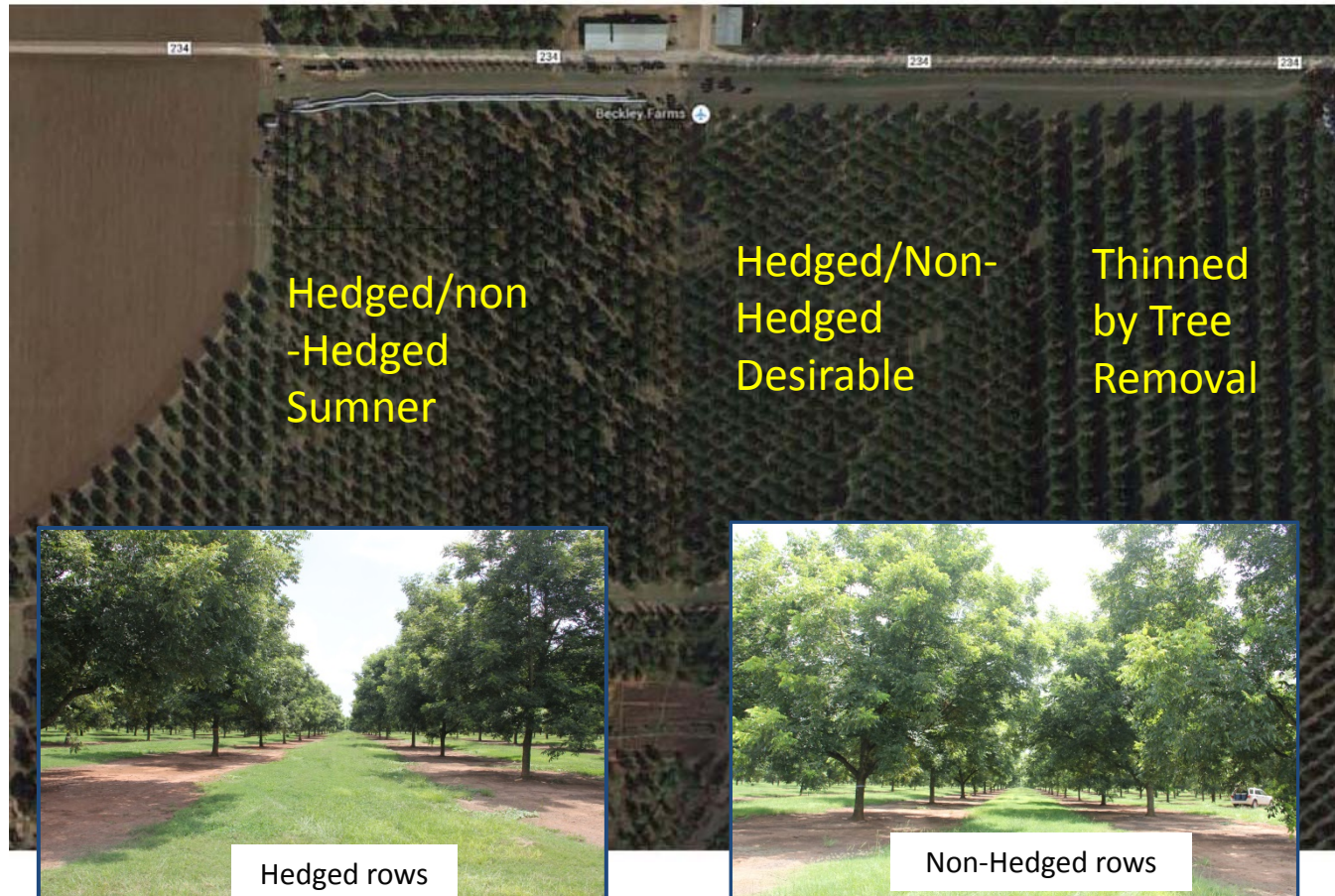


Young Tree Irrigation---Year 2



Hedging Trial – Marshallville, GA

- Desirable trees 14 m (~46 ft) and hedged to 12-14 m (39-46 ft)
- Planted 1996
- Hedged alternate rows - one side March 2013, other side March 2014 (sampled trees hedged on West in 2013, East in 2014)



Hedging Trial

