

# Adaption and Management of New Cultivars

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Darrin M. Dodds

Mississippi State University



# Variety Selection

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- **A key factor in producing a successful crop**
- **Variety selection has been identified as a key issue by cotton growers throughout the U.S.**
- **No longer simply choosing a variety to plant**
  - **Trait packages must be considered**
  - **Seed treatments**
  - **Performance**

# Variety Performance

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- **Substantial data exists regarding variety performance**
  - MSU OVT trials: 9 locations
  - MSU on-farm variety trials: 23 locations
  - DP FACT trials
  - DP NPE trials
  - PhytoGen Innovation trials
  - Bayer CAP trials
  - CropLan Answer Plots
  - Jimmy Sanders Opti-Grow
  - Others
- **Data is lacking on management of new varieties**

# Variety Adaption

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- **Adaption defined:**
  - An inherited or acquired modification in organisms that makes them better suited to survive and reproduce in a particular environment
- **Laymen's terms:**
  - The performance of a given variety is influenced by the environment it is grown in

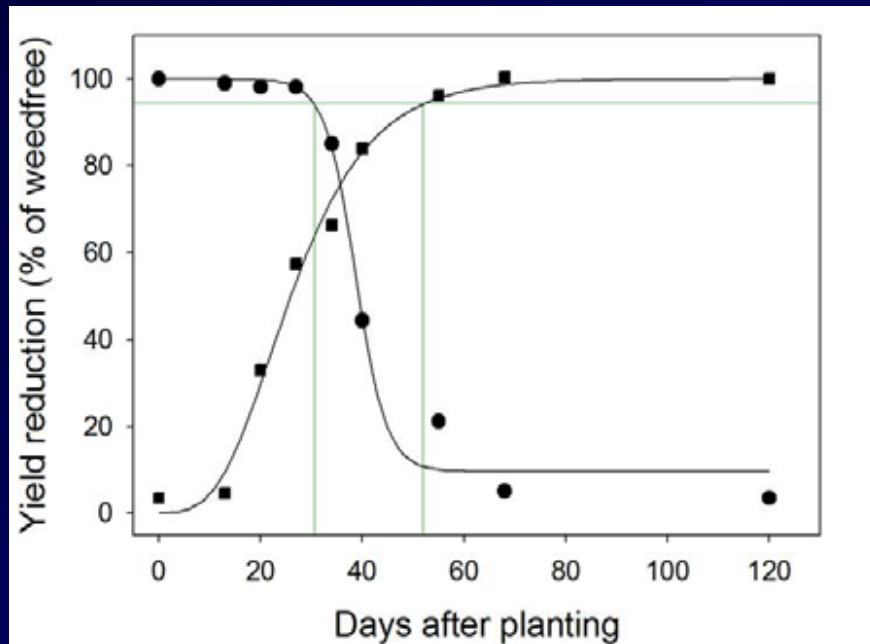
# Where is the Data???

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- **Very difficult to gather data for every possible crop management situation**
- **Goal is to generate reliable data for as many situations as possible**
  - **Crop management differs from pest management**
- **Why is it difficult to obtain data?**
  - **Variety lifespan**
  - **Rate of variety introduction**
  - **Funding for research**

# Crop Management

- Established thresholds for insects
  - 3 plant bugs per 6 row feet for blooming cotton
- Critical period of weed interference

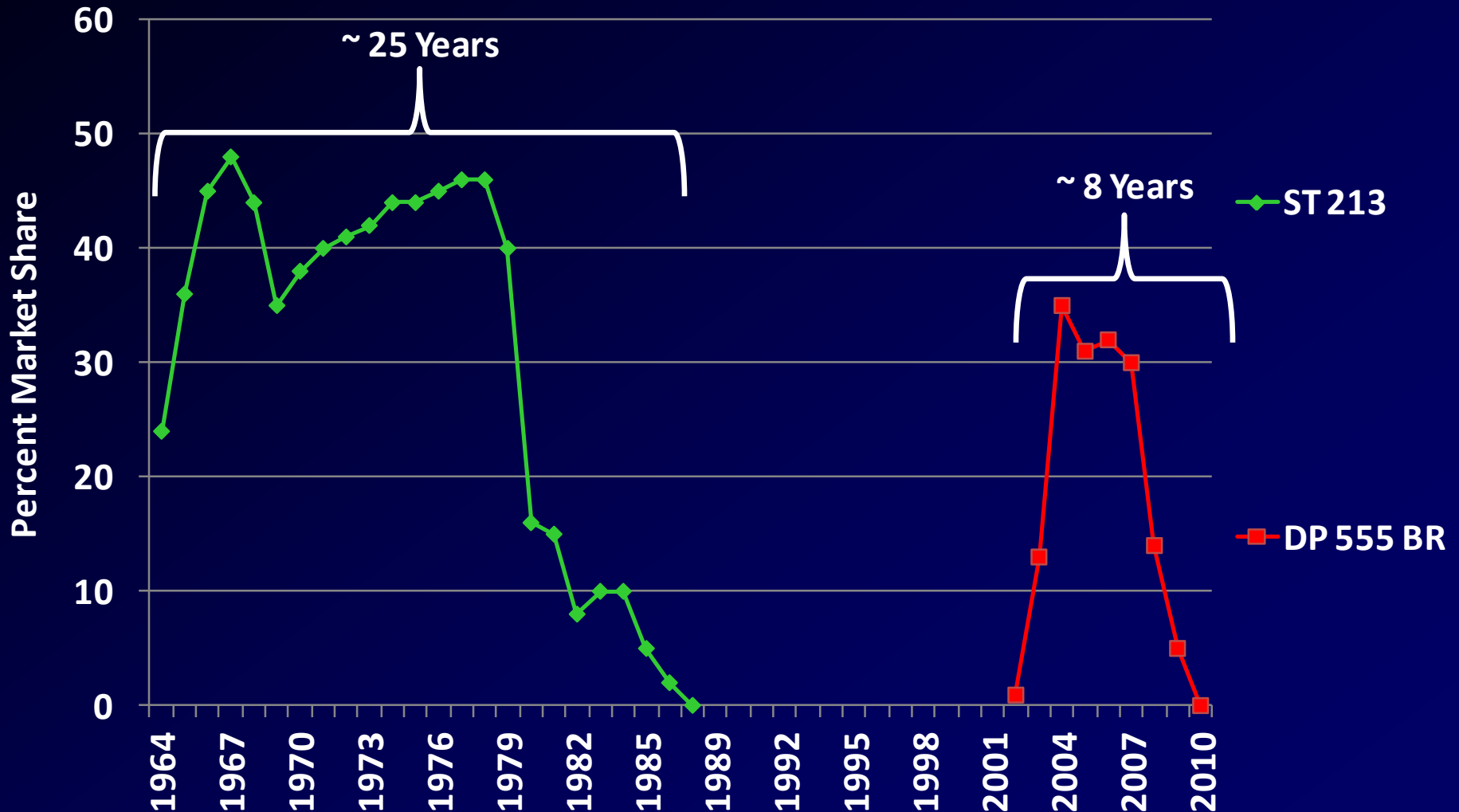


# Where is the Data???

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  - Crop management differs from pest management
- Goal is to generate reliable data for as many situations as possible
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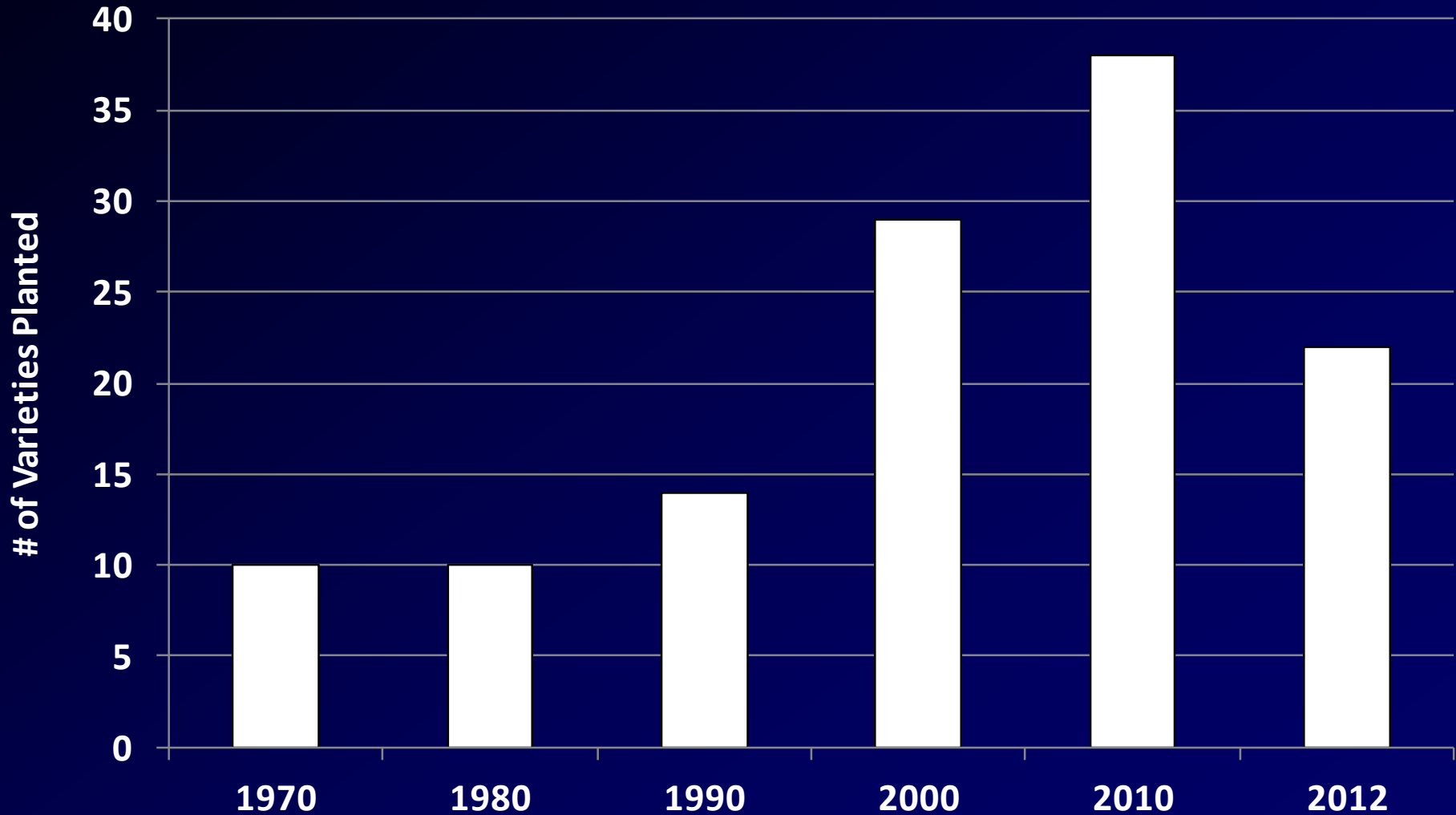
# Varieties Planted in Mississippi





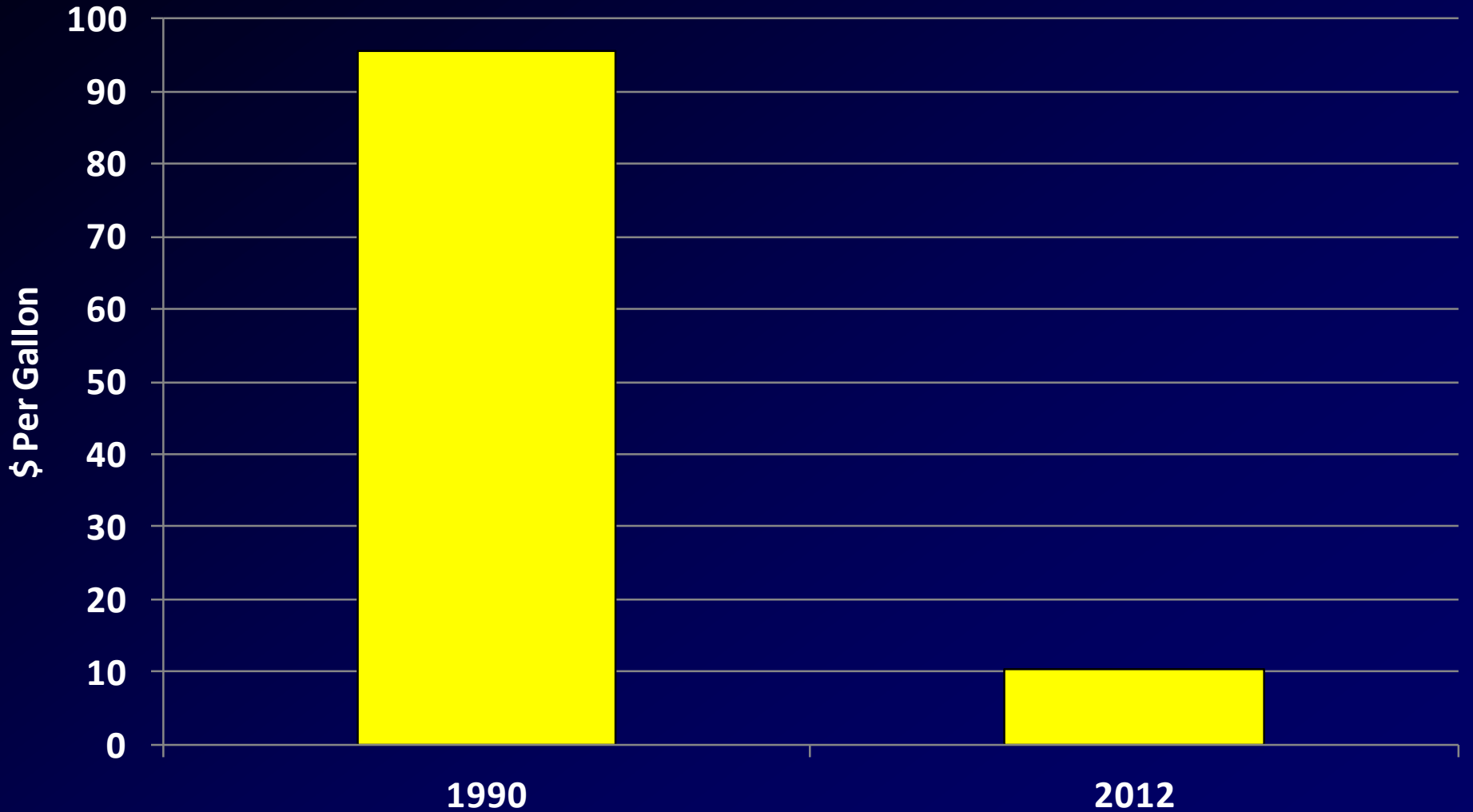
# Variety Turnover

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# Plant Growth Regulator Cost

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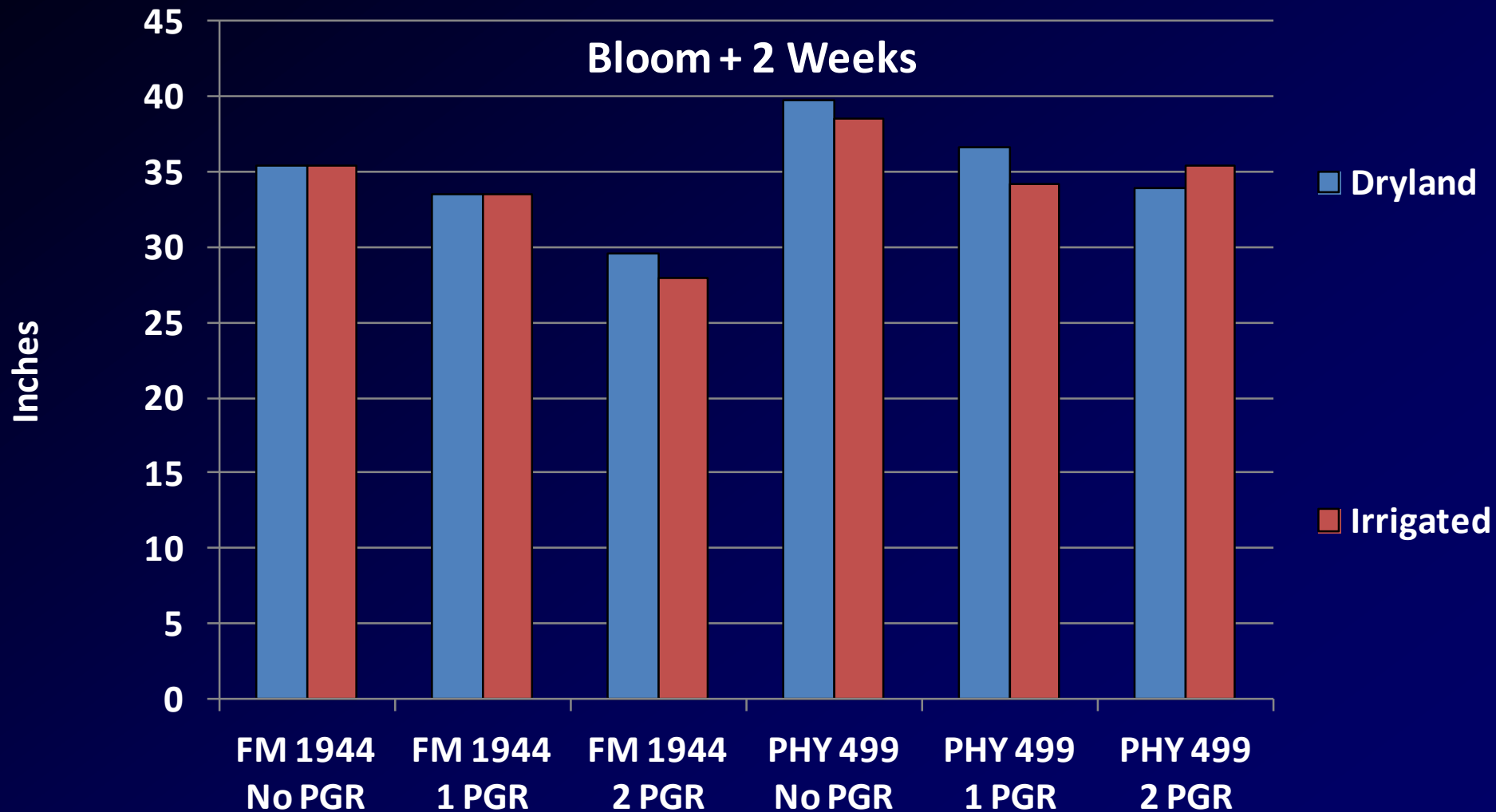


# What is Being Done?

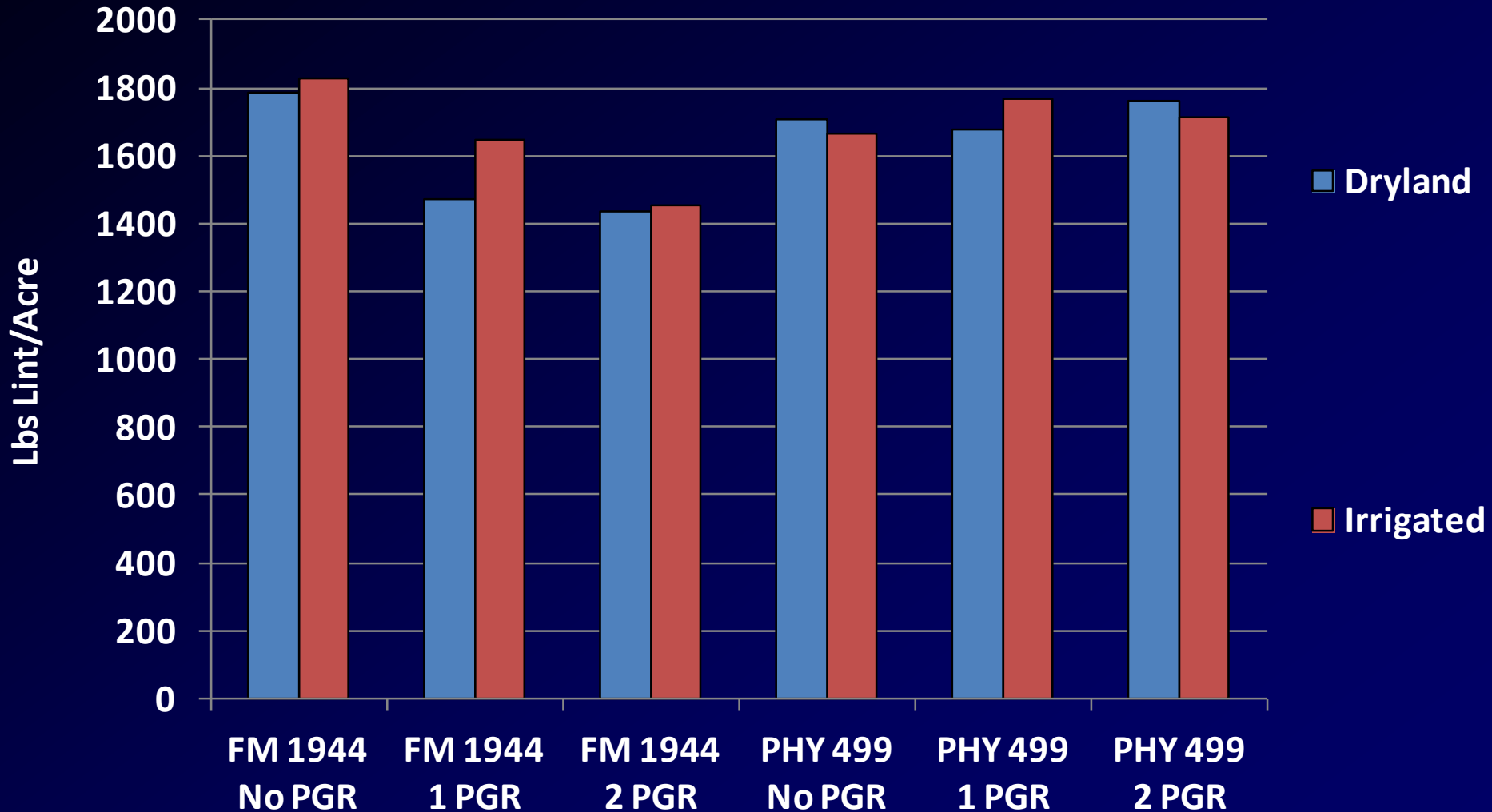
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- **Several university and private industry projects examining variety response to PGR application**
- **Critical need for irrigation management**
- **Collaborative research**
  - **Multi-disciplinary**
  - **Multi-state**

# Management Example – Plant Height



# Management Example – Yield



# Questions

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