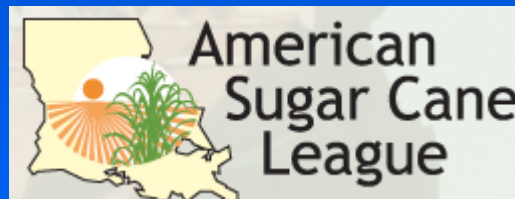


Promising Alternatives to Conventional Ripener Programs

Calvin Viator, Ph.D. and
Associates, LLC



Current Limitations

- **Glyphosate- consistent and effective.**
 - **Glyphosate not labeled in plant cane.**
 - **Limits on grower flexibility:**
 - **Heavy land**
 - **Inconsistent daily quotas**
 - **Potential carryover on stubble when coupled with stress such as mulch.**
-

Alternatives

- **Brazil and Australia tank-mix ripeners.**
 - **Reports of increased stubbling with Moddus.**
 - **Can we tank mix glyphosate and Moddus?**
 - **Increase cane quality/ no tonnage reduction?**
-

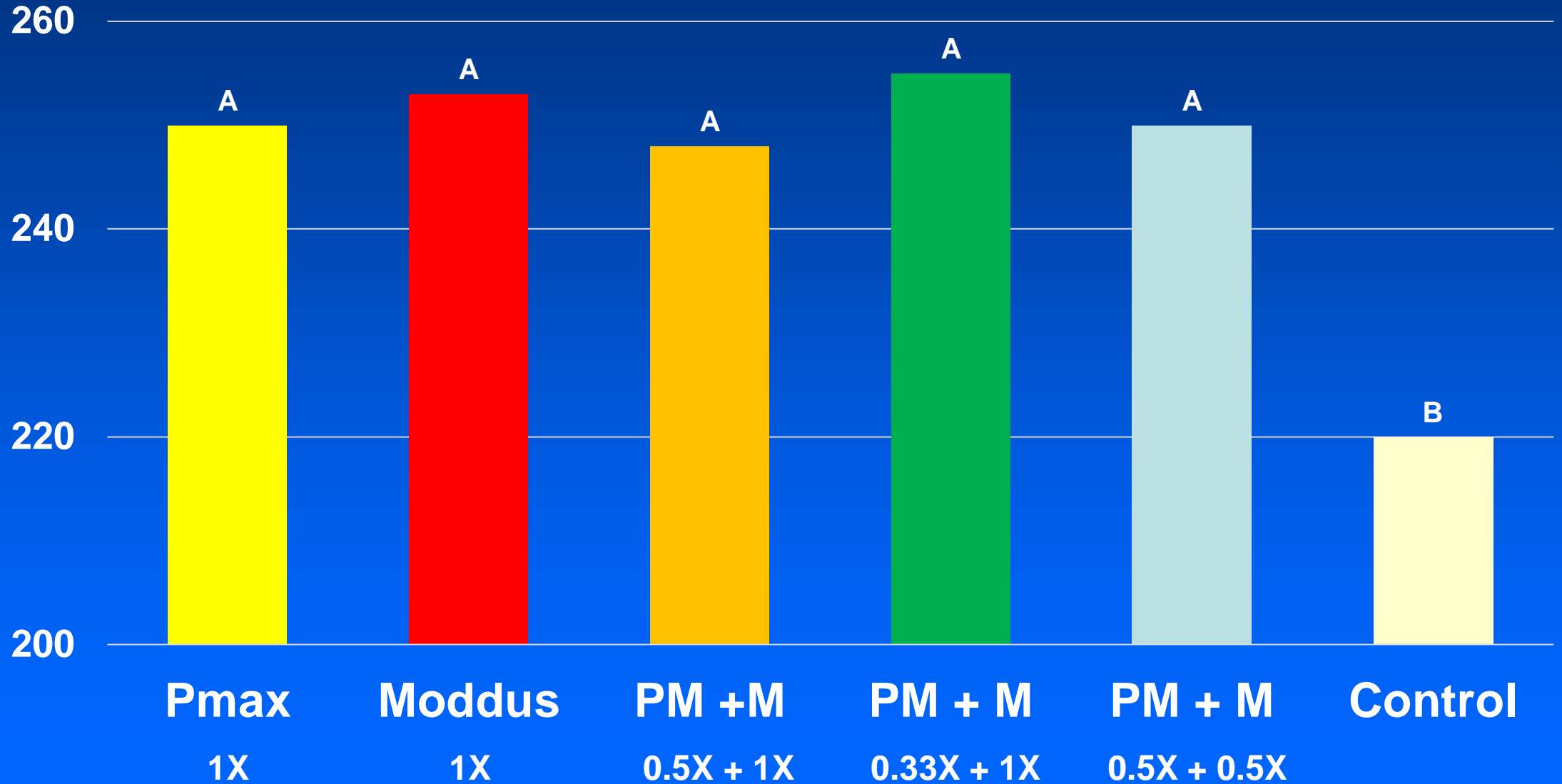
Methods

- **Treatments:**
 - ✓ **Roundup PowerMax 5.3 oz/A (1X)**
 - ✓ **Moddus 11 oz/A (1X)**
 - ✓ **0.5X PowerMax + 1X Moddus**
 - ✓ **0.25X PowerMax + 1X Moddus**
 - ✓ **0.5X PowerMax + 0.5X Moddus**
-

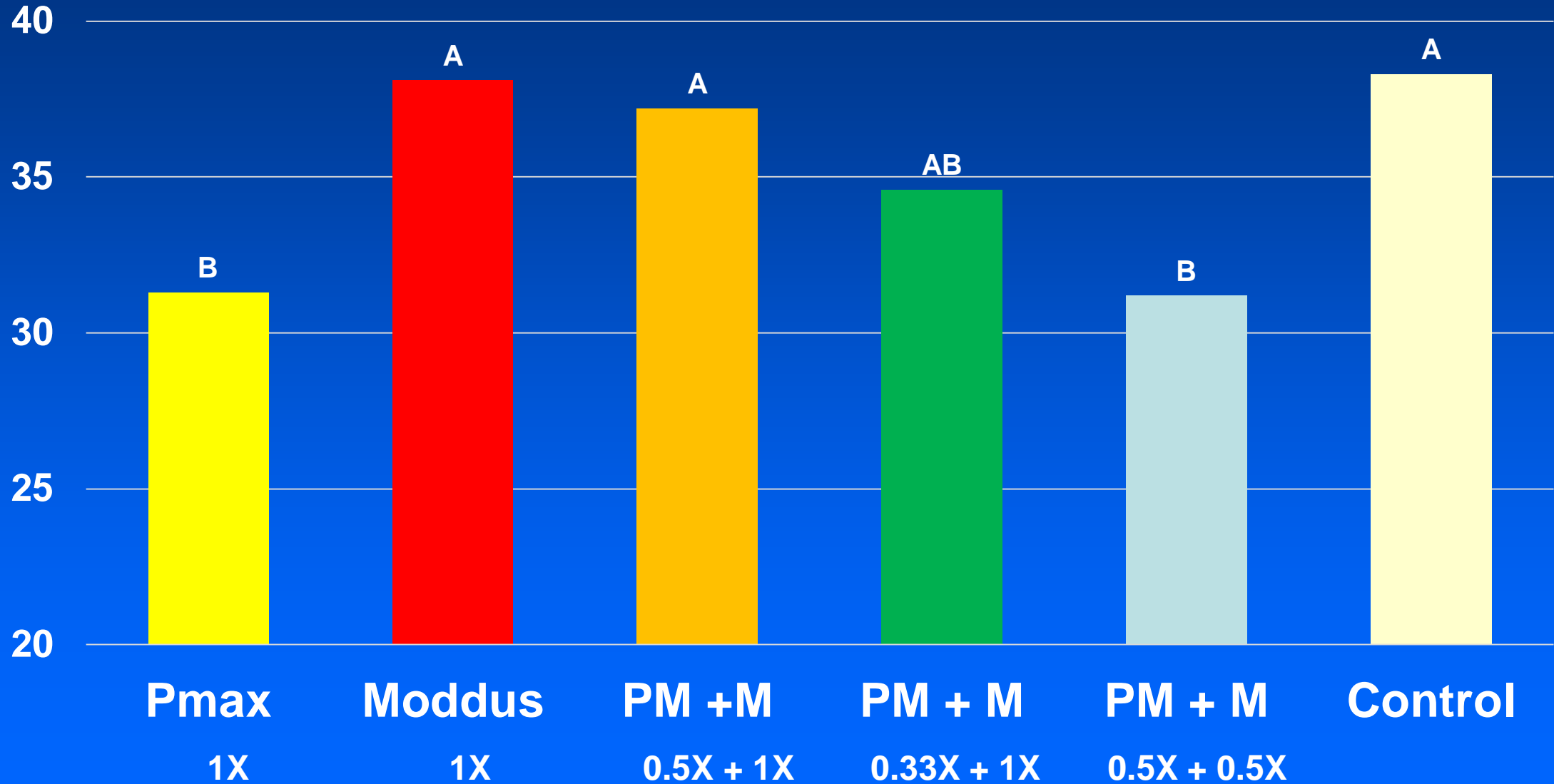
Methods

- **First stubble HoCP 96-540**
 - **Small plots: 3 rows, 40 feet long**
 - **Hand cut samples**
-

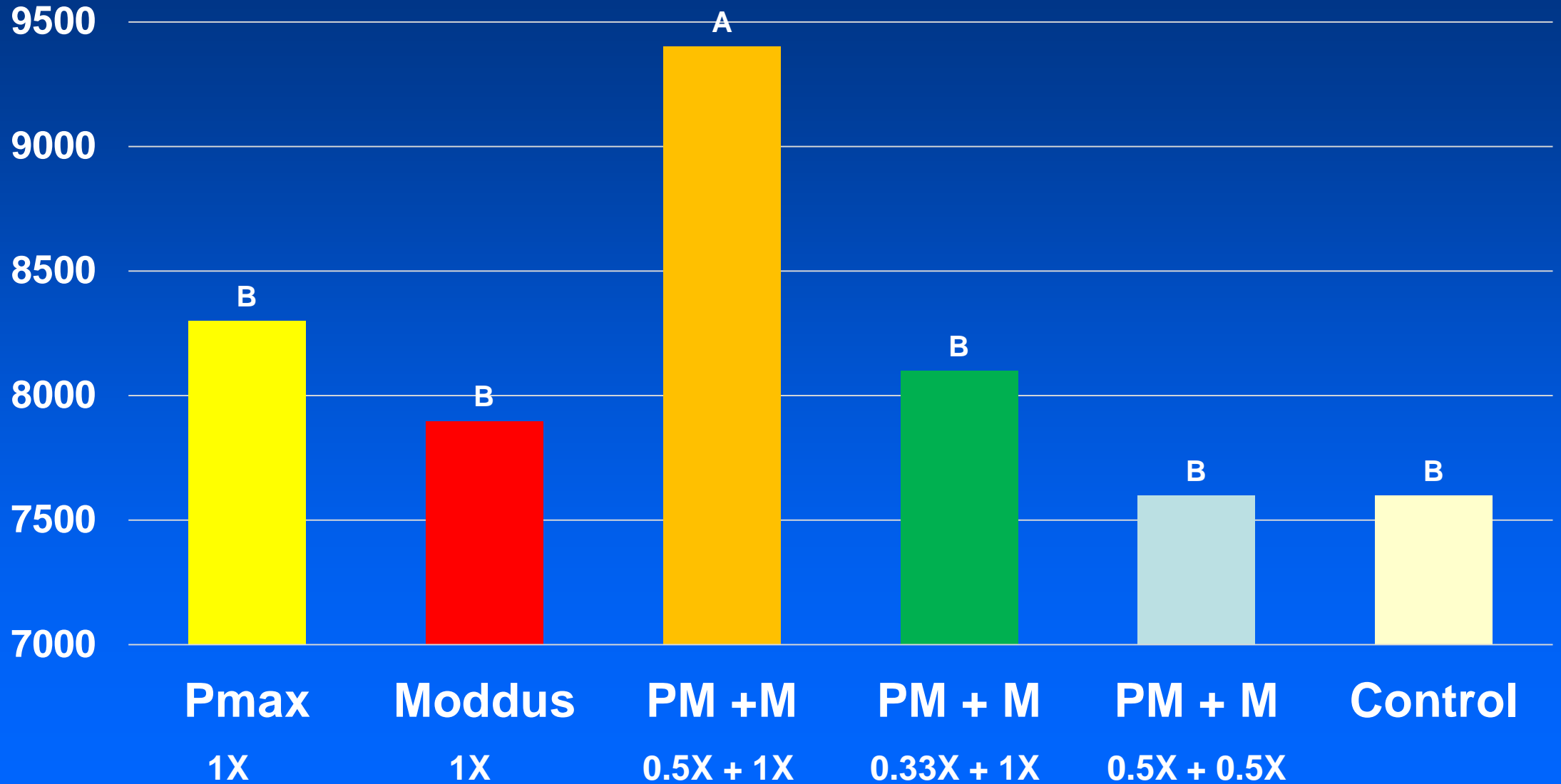
TRS: 6 WAT



Cane Yield: 6 WAT



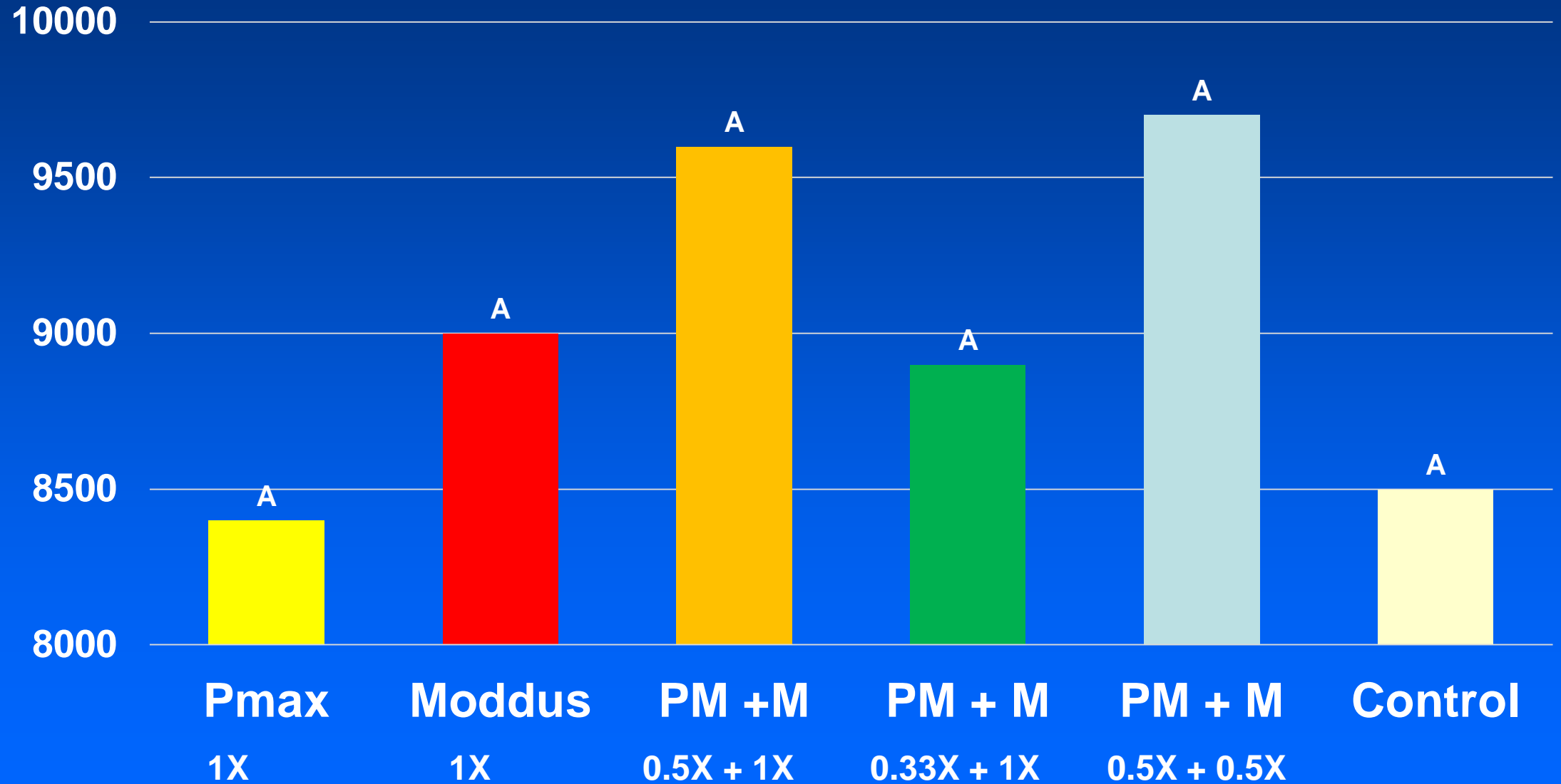
Sugar Yield: 6 WAT



Methods

- **Machine harvested at 10 WAT.**
 - **Subsequent second stubble harvested.**
 - **Worst case scenario for potential carryover.**
-

Sugar Yield: Subsequent Year



Methods

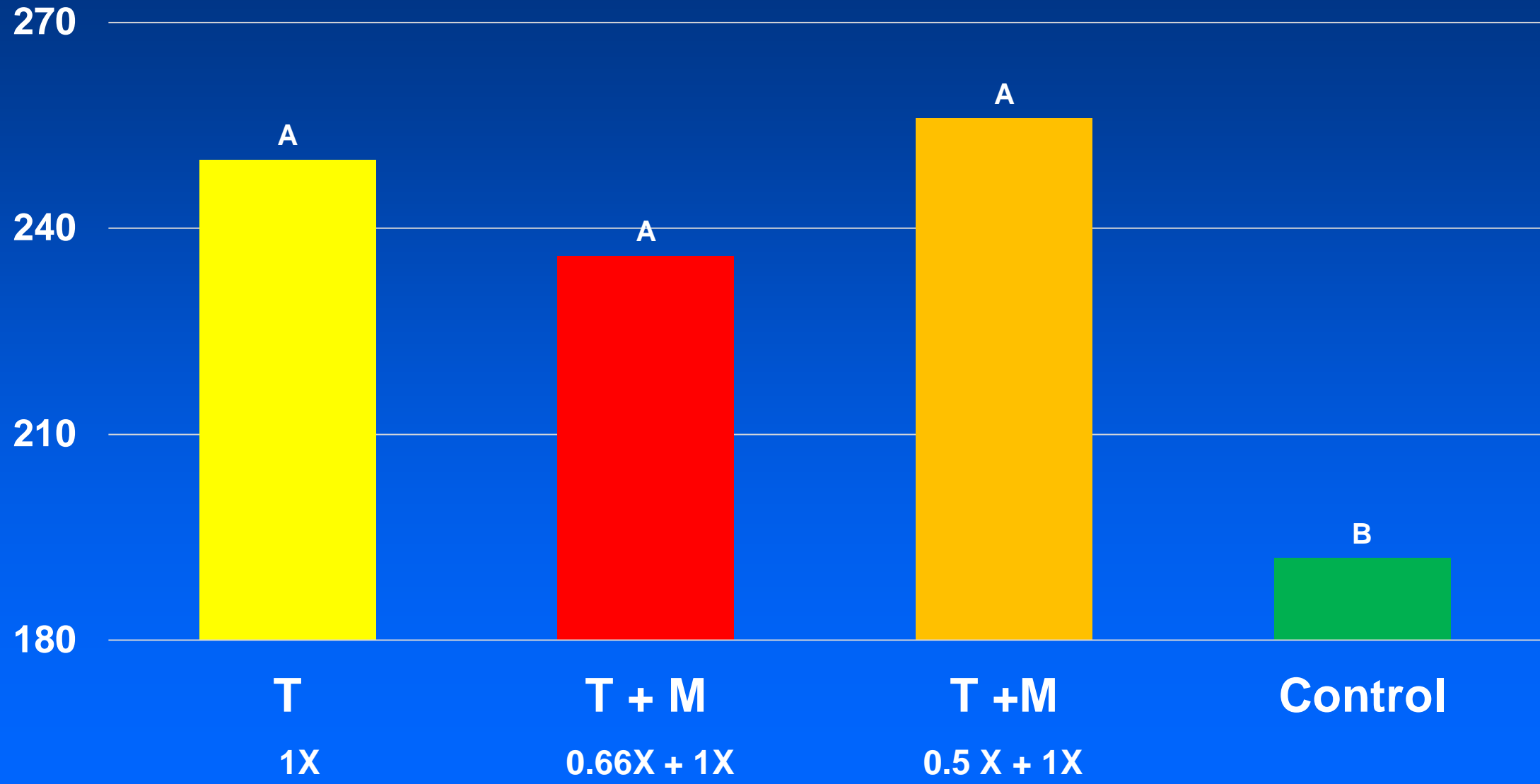
- **Treatments:**
 - ✓ **Touchdown 9 oz/A (1X)**
 - ✓ **0.66X Touchdown + 1X Moddus (11 oz)**
 - ✓ **0.5X Touchdown + 1X Moddus**
 - ✓ **Untreated control**
-

Methods

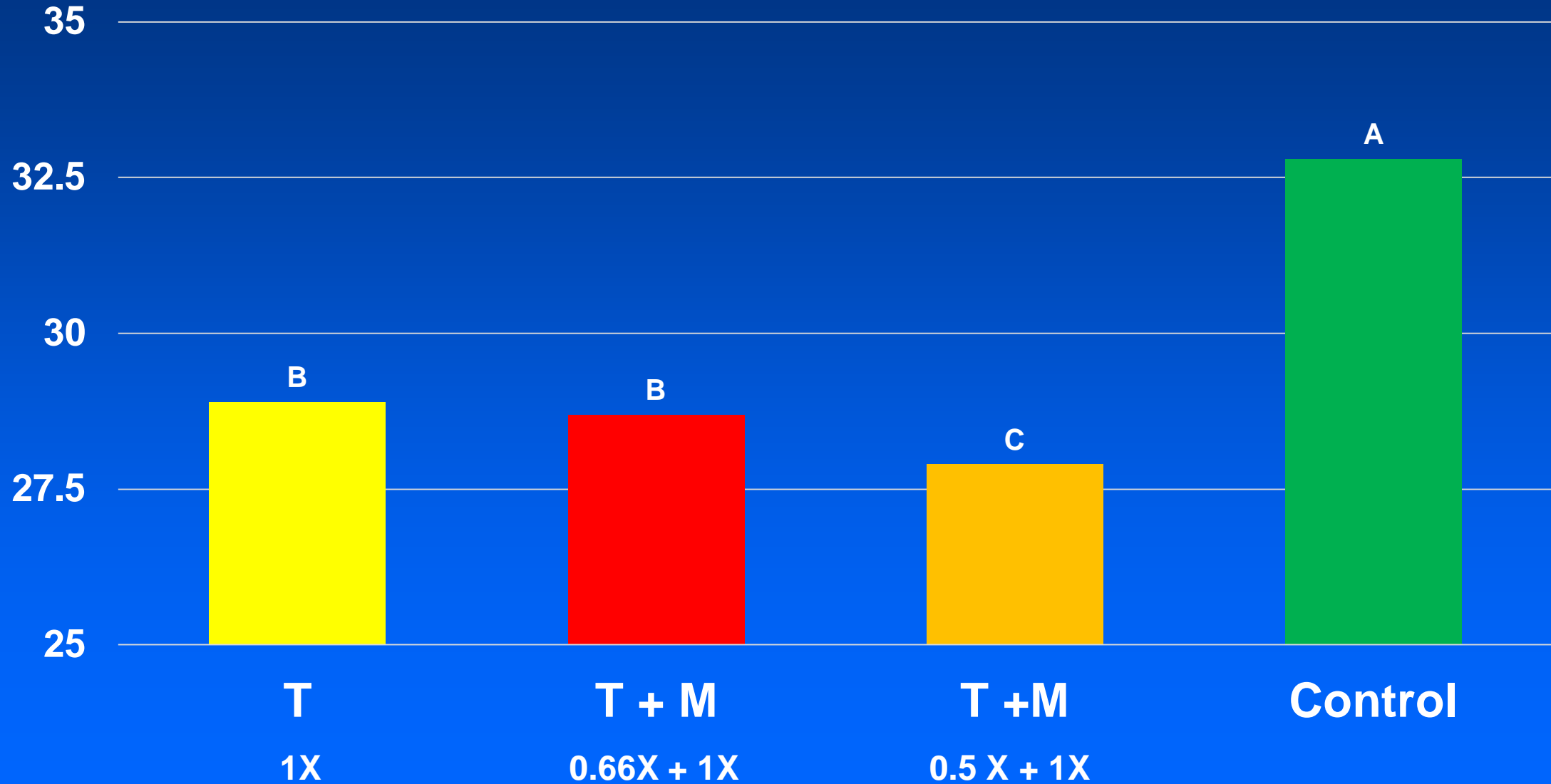
A yellow combine harvester is shown in a field of tall green grass. The harvester's long, rusted metal header is visible, extending across the frame. The background is a dense field of green grass, suggesting a late-stage crop or a specific agricultural practice.

- HoCP 96-540 second stubble
- Ronald Hebert Farms- St. Mary Parish
- 1 acre plots- 4 replications

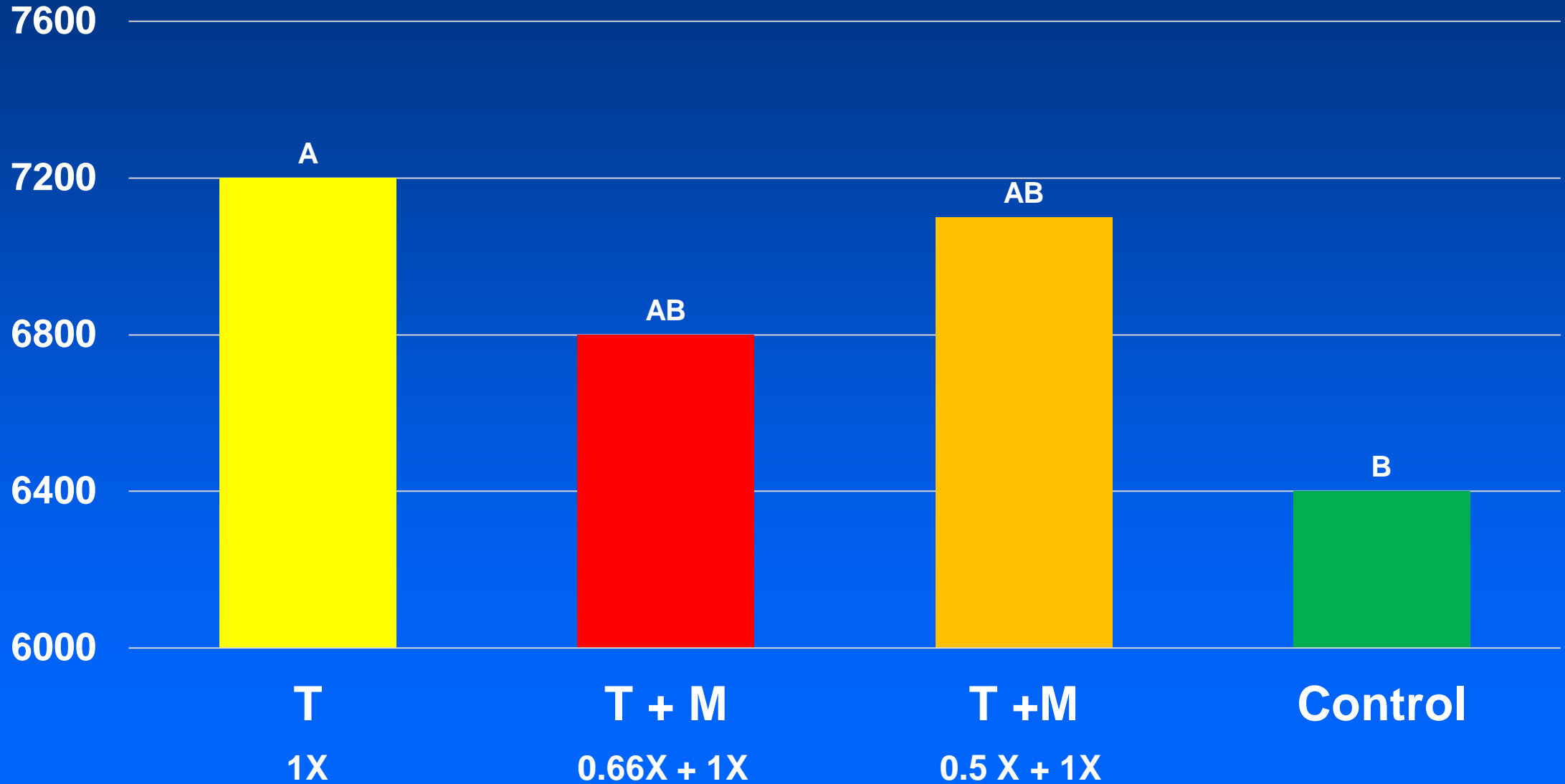
TRS: 6 WAT



Cane yield: 6 WAT



Sugar yield: 6 WAT



2016 Yields???



Other Alternatives



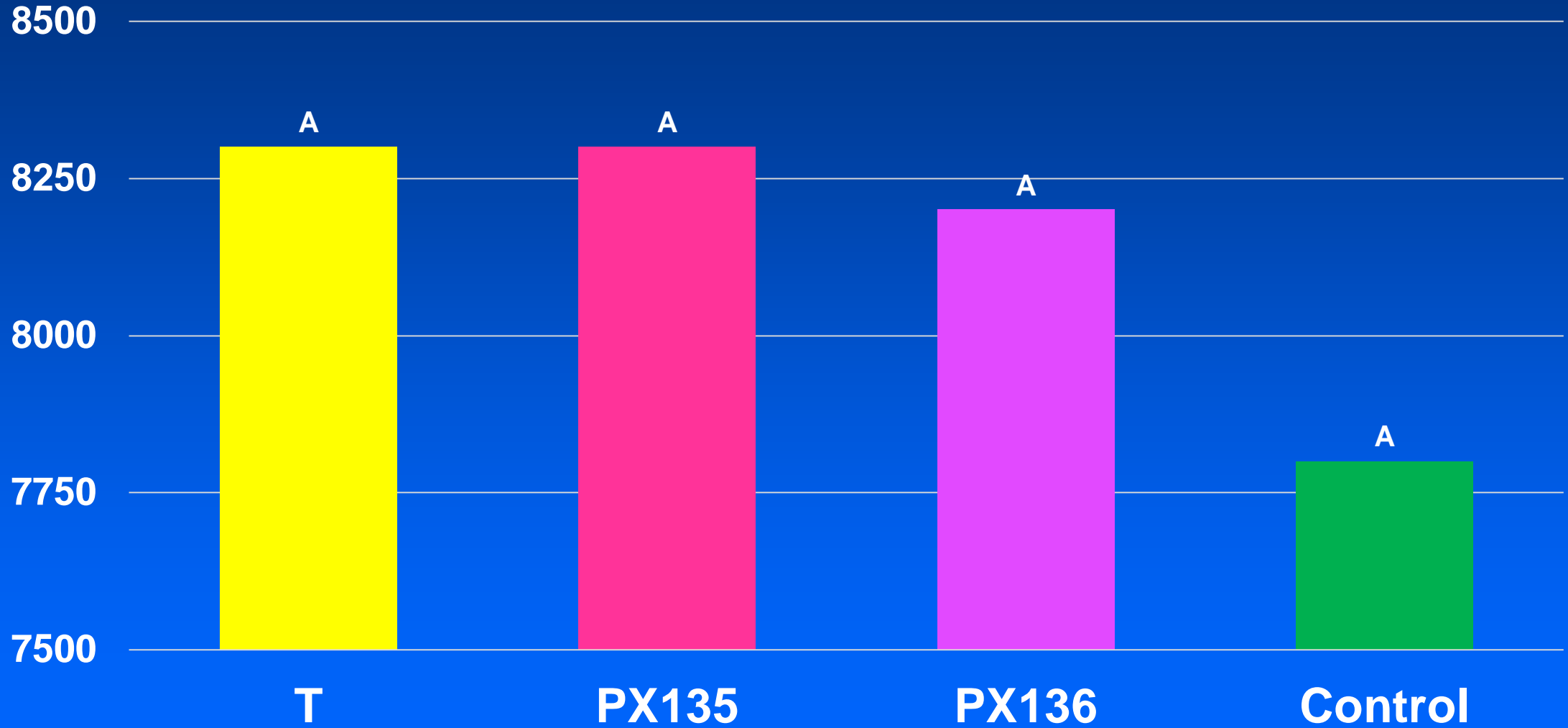
Methods

- **Treatments:**
 - ✓ **Touchdown 9 oz/A (1X)**
 - ✓ **PX135- 2 qts/A**
 - ✓ **PX136 8 oz/A**
 - ✓ **Untreated control**
-



- HoCP 96-540 first stubble
- Northside Planting- St. Mary Parish
- 1 acre plots- 4 replications

Sugar yield: 6 WAT



Summary

- **Tank mixing shows promise:**
 - ✓ **Carryover effects**
 - ✓ **Management flexibility**
 - ✓ **Varietal response**
 - ✓ **Optimum window**
-



Summary

- **Alternative ripeners:**
 - ✓ Carryover effects
 - ✓ Tank mixes
 - ✓ Rates
 - ✓ Optimum timing



Lagniappe

- **NIR system compared to Press system**
 - ✓ **HoCP 96-540 hand cut**
 - ✓ **Stripped and partitioned**
 - ✓ **0, 5, 10, 25, 50, 100% trash added back**
 - ✓ **25 lb samples**
 - ✓ **Analyzed both methods**
-

Correlations

- **Press fiber and percent trash= 0.43**
 - **NIR fiber and percent trash= 0.82**
-

