

Science For A Better Life

# Bayer CropScience 2017 Product Update

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Science For A Better Life



# Velum<sup>®</sup> Prime Technical Presentation

Velum<sup>®</sup> Prime is not yet registered for sale or use on all crops in all states.





# Novel Nematicide / Fungicide For Growers



**Velum<sup>®</sup> Prime** improves yields through:

- Broad-spectrum nematicidal activity
- Disease suppression

2017 Crops	Benefits: Higher yields, protected roots, healthier plants
Citrus	<ul style="list-style-type: none"><li>• Nematode suppression (drip/microjet)</li><li>• Alternaria brown spot (drip/microjet)</li></ul>
Tomato Brassica Cucurbit Hops	<ul style="list-style-type: none"><li>• Nematode suppression (drip)</li><li>• Powdery mildew suppression (drip)</li></ul>
Sweet Potato	<ul style="list-style-type: none"><li>• Nematode and early blight and white mold suppression (Overhead chemigation/IFAP)</li></ul>
Potato	<ul style="list-style-type: none"><li>• Nematode and early blight and white mold suppression</li></ul>

*Registration January 2017*

Velum<sup>®</sup> Prime is not yet registered for sale or use on all crops in all states.



# Product Details



- **Active Ingredient:** Fluopyram
- **Chemical class:** Pyridinyl-ethyl-benzamide (SDHI, FRAC 7)
- **Formulation:** Soluble Concentrate (500 SC)
  - Contains 4.16 Lbs. Fluopyram per Gallon
- **Mode of action / Target:**
  - Contact activity in nematodes
  - Selectively inhibits Complex II of the mitochondrial respiratory chain in Nematodes & Fungi
  - Xylem-mobile



## What makes it different?



- **Signal word:** Caution, not a restricted use pesticide.
- **Not a fumigant:** Ease of application, in-season application, and can be used to supplement fumigants for additional nematode management.
- **Xylem-mobile:** Systemic for suppression of nematodes and some foliar diseases. Soil and plant treatment.
- **Brand new MoA against nematodes:** Works quickly to slow and kill a broad spectrum of nematodes.

# Sweet Potato Positioning For Velum<sup>®</sup> Prime



**Benefit:** Suppression of nematodes and disease improves yield.

**Application:** At-plant (in-furrow) is the recommended application method for sweet potato.

**Nematodes:** Despite suppression of root-knot nematode, tuber quality may not be adequately protected. If root-knot nematode is a severe economic pest, the use of other suppression measures should also be employed.

Package size: 4 x1 gallon

Apply 6 – 6.84 oz/ac as an infurrow spray during planting. Can apply with overhead chemigation. Provides suppression of nematodes, white mold and early blight.

MRL's – US, CAN, MEX, UK & EU

Velum<sup>®</sup> Prime is recommended for nematode and disease suppression.

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# Sweet Potato Data

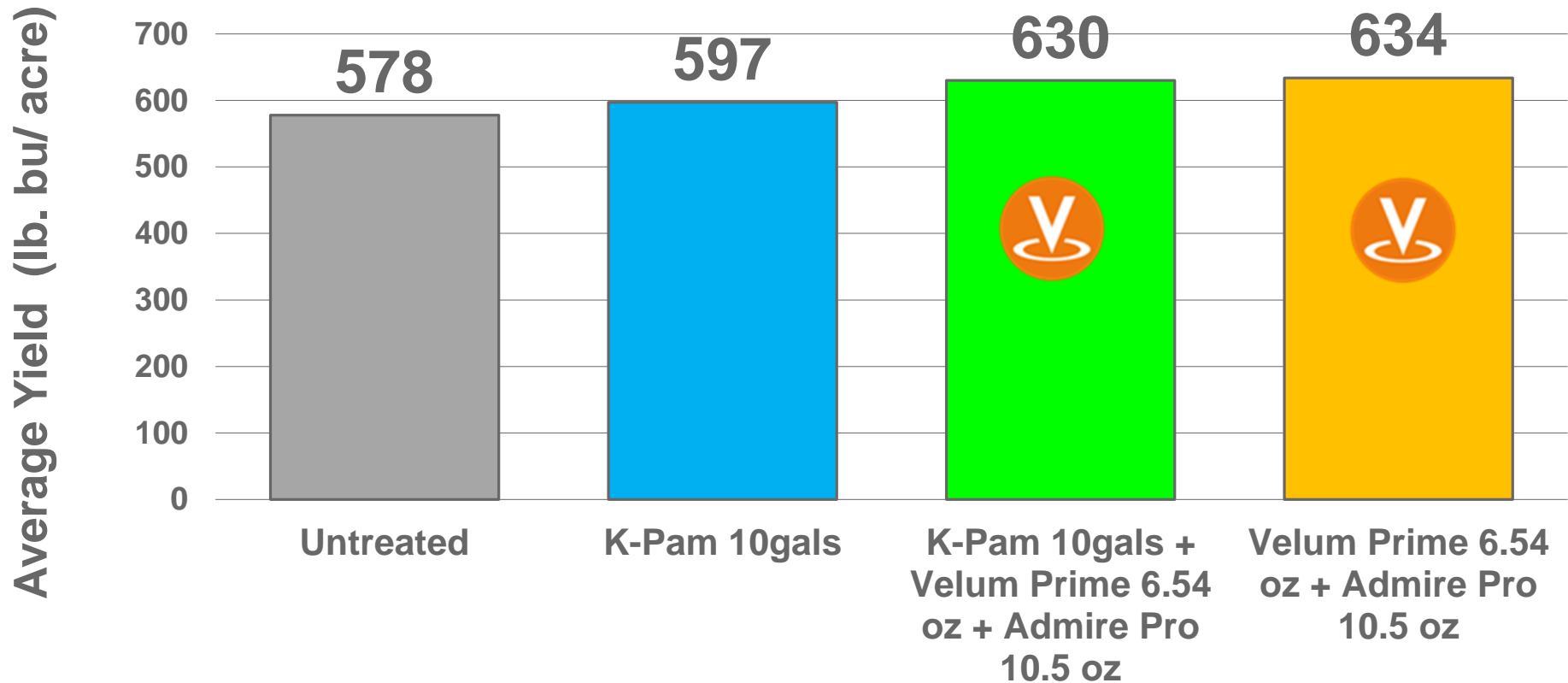
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# 2016 Sweet Potato Yields



## MSU - Pontotoc

### Total Yield



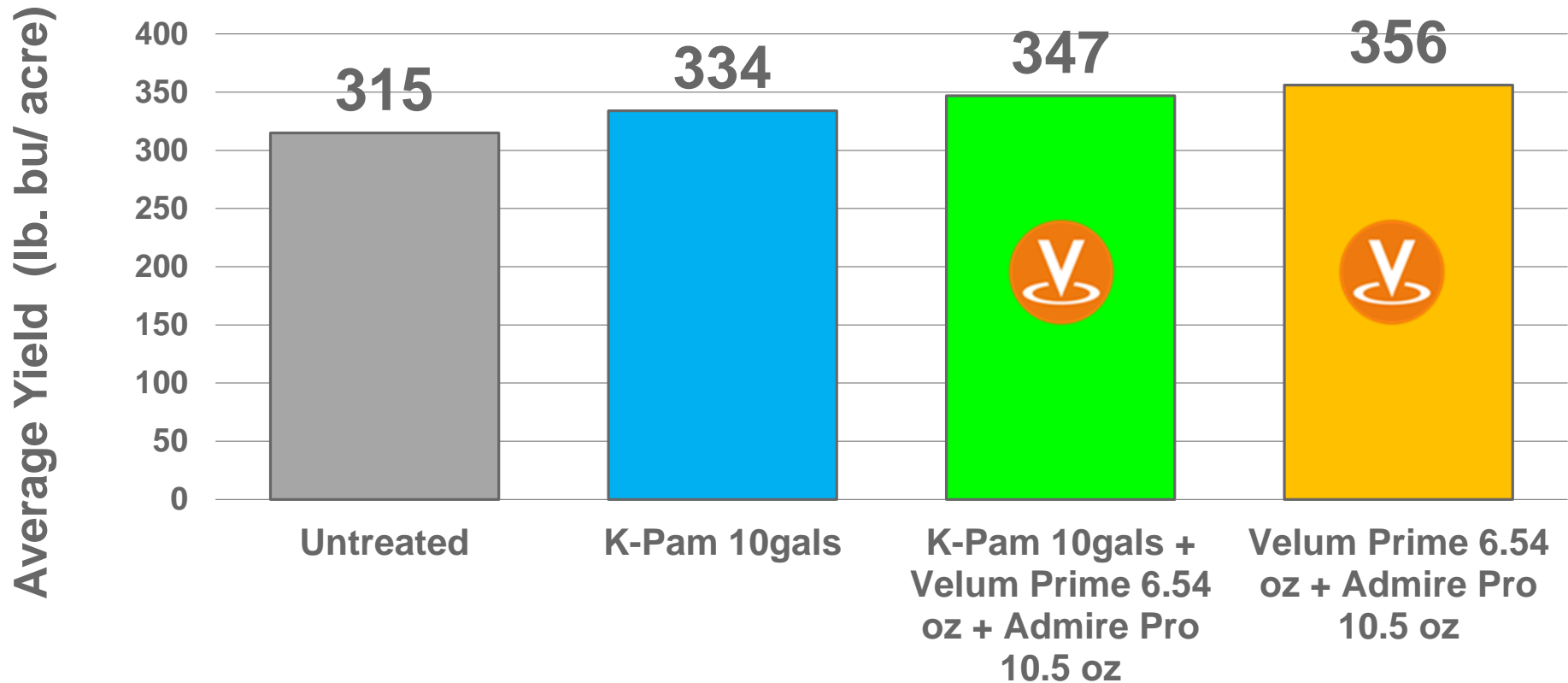


# 2016 Sweet Potato Yields



## MSU - Pontotoc

Yield - Number US#1

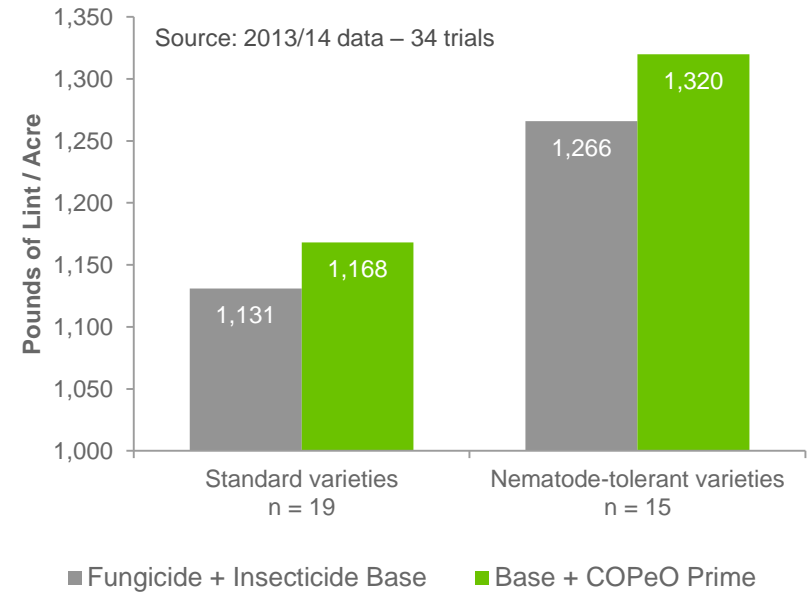
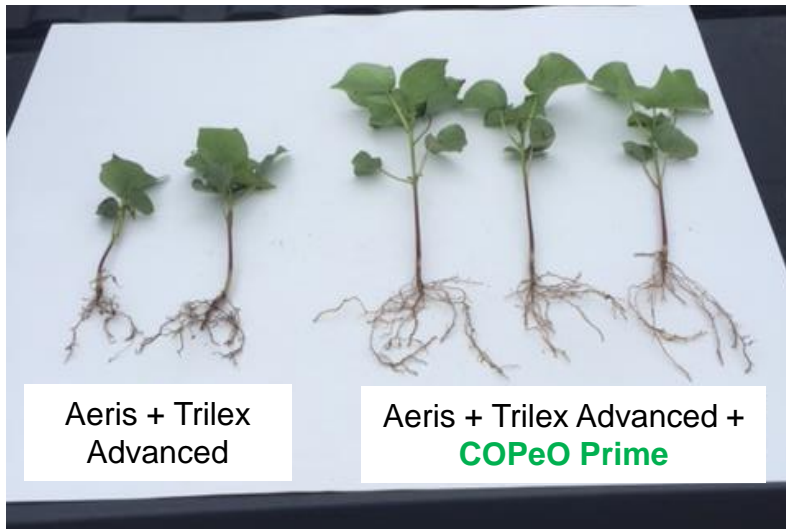


## What is COPeO Prime?

COPeO is a new seed treatment to assist in the control of nematodes. COPeO will be part of the base treatment for all Stoneville varieties sold in the East. Bayer added COPeO to the base treatment without increasing grower cost.

- COPeO Prime Advantages
  - Optimizes yield potential by protecting cotton roots from nematodes
  - Contributes to higher yields both with and without the use of other nematode management measures, such as nematode-tolerant varieties and other nematicidal seed treatments
  - Can be paired with seed-applied technologies such as Aeris insecticide/nematicide or soil-applied technologies like Velum Total for even higher yield potential

## An integrated nematode management program includes Aeris & COPeO Prime



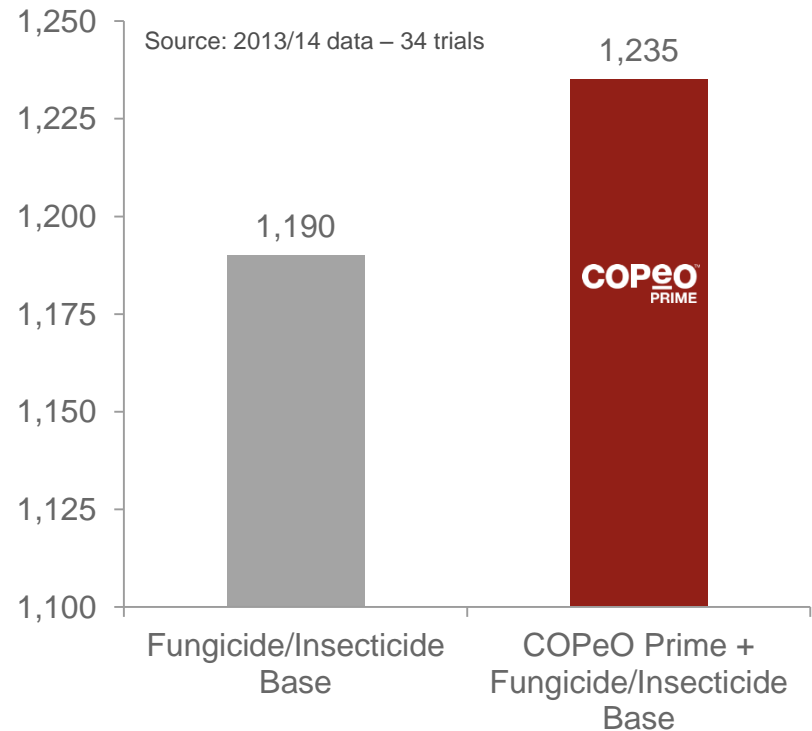
- With Aeris and COPeO Prime together on the seed, we can offer cotton growers
  - 2 MOA against nematodes (thiodicarb & fluopyram)
  - 2 MOA against thrips (imidacloprid & thiodicarb)



Achieve higher yields under nematode pressure with COPeO Prime



- Three years of University and internal testing across the cotton belt have shown that COPeO Prime adds an average of **+45 lbs lint/acre** vs. fungicide/insecticide base.
- 23 trials throughout Carolinas showed **+22 lbs average increase in lint/acre**
- COPeO Prime protects cotton roots from economically-significant nematodes including reniform and root-knot with a **mode of action that is new to cotton seed treatment.**



**In 2017 COPeO Prime will be exclusively available on Stoneville and FiberMax seed**



# Liberty<sup>®</sup>

**LIBERTY  
LINK<sup>®</sup>** 

## The Most Reliable Solution to manage glyphosate-resistant weeds

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**Bayer CropScience**



**Liberty<sup>®</sup>**

Optimizing Liberty<sup>®</sup> Performance On  
Libertylink Crops

**LIBERTY DONE RIGHT!**

# S.T.O.P. weeds with LIBERTY

## **S** tart early with the first application

Begin soon after emergence when weeds are smaller.

## **T** arget < 3" weeds

Small weeds are easier to control.

## **O** ptimize coverage

Follow the correct rate, water volume and droplet size.

## **P** air with residuals

Use multiple effective sites of action for pre- and post-residuals.

### WHY?

Weeds can grow exceptionally fast, such as waterhemp, which grows over an inch a day and can drop hundreds of thousands of seeds.

### WHY?

Weeds like Palmer amaranth can be extremely hard to control with any post-emergent herbicide after three inches.

### WHY?

Liberty® is a contact herbicide, so proper coverage is key to ensure effective control.

### WHY?

The key to preventing resistance is to reduce the pressure on single herbicides.



# FOR EVERY 2" IN HEIGHT / GROWING POINTS DOUBLE!!



GROWING POINTS=9



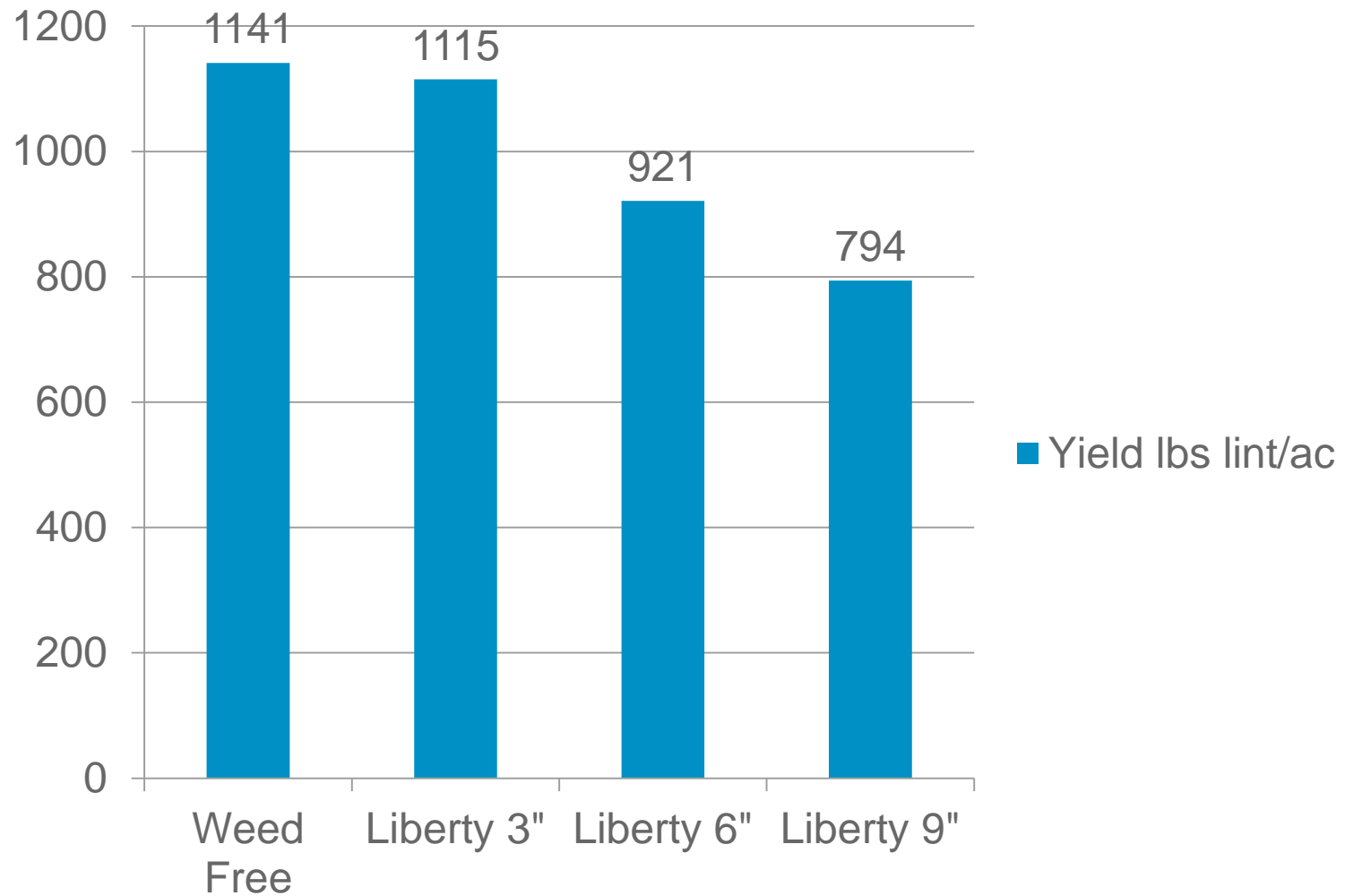
GROWING POINTS=22



# Cotton – Palmer Timing on Yield

2016 Dundee, MS

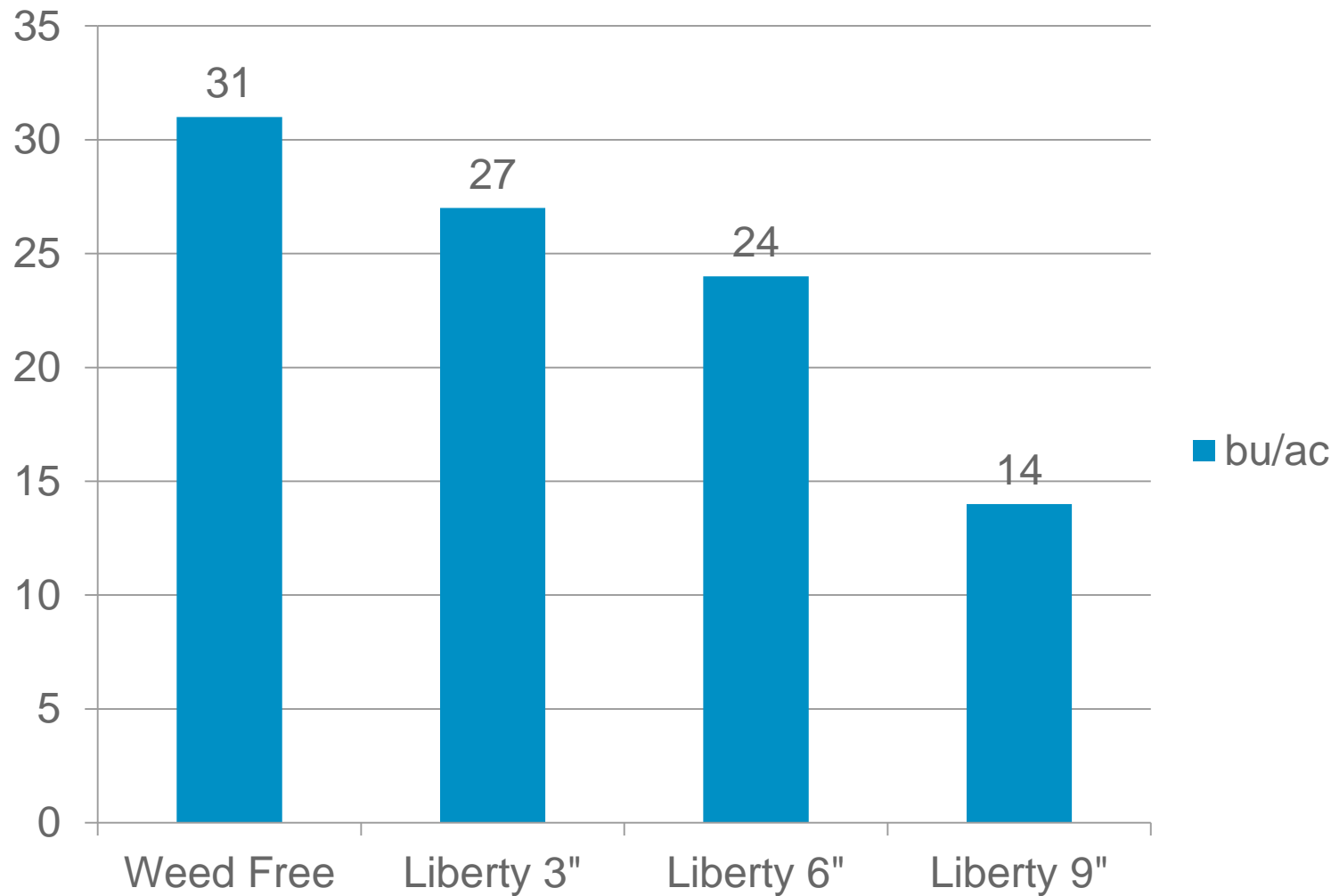
# LIBERTY



# Soybean – Waterhemp Timing on Yield

2016 Starkville, MS

# LIBERTY



## Liberty Guarantee

- New for 2017
- Buy branded Liberty from authorized retailer
- Follow guidelines for resistant management
  - Start early with first application
  - Target <3” weeds
  - Optimize coverage
  - Pair with residuals
- Make 2 applications of Liberty



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THANK YOU