



# AGRINOS TECHNOLOGY

**iNvigorate®** is produced by a fermentation process utilizing a consortium of microbes that creates a highly productive microbial system in the soil.

### Features:

- Enhanced nutrient uptake
- Increases fertilizer use and efficiency
- Stimulates root growth and plant development
- Increase soil organic matter & microbial community

### Benefits of iNvigorate®

- Stimulates root biomass formation resulting in a more vigorous root system.
- Enhances crop quality and yield under both favorable and stressful growth conditions



**B Sure®** is a liquid nutrient solution derived by microbial fermentation that increases the activity of multiple critical metabolic pathways in the crop.

### Features:

- Bioavailable nutrients to elicit and support photosynthesis
- Source of bioavailable nitrogen complementing inorganic nitrogen

### Benefits of B Sure®

- Boosts plant metabolism, increases photosynthesis and stimulates plant growth
- Enhances crop quality and yield under both favorable and stressful growth conditions.



**Uplift** is a unique fertility solution derived by microbial fermentation that increases crop productivity and supports soil health.

**Uplift** contains organic, biologically-extracted chitin, amino acids and other crucial plant nutrients.

### Benefits of Uplift

- Improves root structure to support plant growth and productivity
- Strengthens plant function to increase tolerance to environmental stresses
- Enhances soil health to support plant well-being





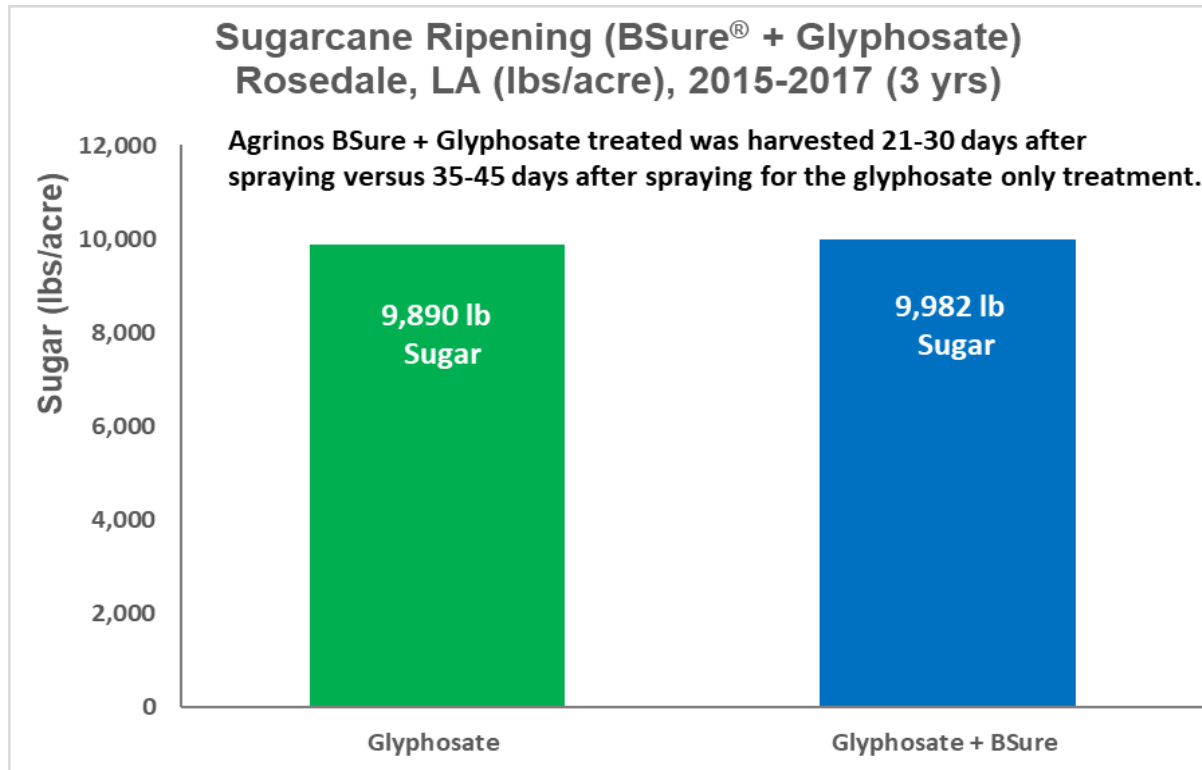
# Sugarcane Ripening Trials 2015 to 2017



# USA – Sugarcane ripening time decreased with BSure<sup>®</sup> with no effect on sugar yield

2015-2017 Louisiana : 3 Year study

BSure<sup>®</sup>



<b>Period</b>	Treatments sprayed in September / October each year
<b>Crop / Hybrid</b>	Sugarcane L01-299
<b>Location</b>	3 locations in Louisiana over 3 years of trialing
<b>Products / Rates</b>	Glyphosate applied at 5.3 oz/acre BSure <sup>®</sup> applied at 16 oz /acre
<b>Field Size / Replications</b>	Plot size = 2.2 acres
<b>Trial performed by</b>	<i>Sugar samples processed at each mill site</i>
<b>Method Comments:</b>	<ul style="list-style-type: none"><li>• Sugarcane sprayed each year with 5 gallons water/acre</li><li>• No differences in yield</li><li>• The Glyphosate + BSure<sup>®</sup> treatment (-14 days) signifies that sugarcane can be harvested 21-30 days after treatment, normal ripened cane was harvested 14 days later</li></ul>

**BSure<sup>®</sup> mixed with Glyphosate can reduce the time to harvest without affecting sugar yield. Over a 3 year study this resulted in 14 fewer days to ripen cane.**



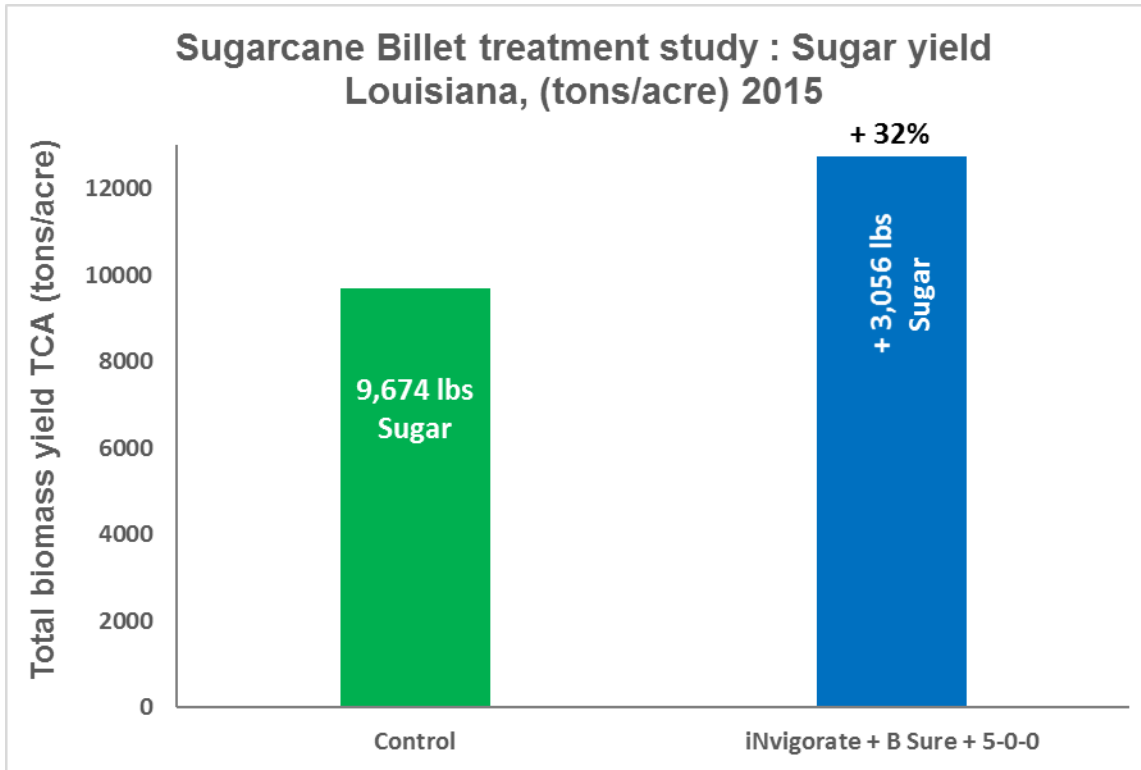
# Sugarcane Billet Treatment Trial Results

## 2015 to 2016



# USA – Sugarcane Billet Treatment Trial

2015 Louisiana



<b>Period</b>	Planted September 2014 Harvested December 2015
<b>Crop / Hybrid</b>	Sugarcane L01-299
<b>Location</b>	Rosedale, Louisiana
<b>Products / Rates</b>	iNvigorate® @ 2qt/acre + BSure® @ 2 qt/acre + Agrinos 5-00 @ 1 lb/acre  Only control billets treated with 10 fl.oz. Azoxystrobin and Propiconazole fungicide
<b>Field Size / Replications</b>	Large acreage strip plots Agrinos 12 acres Control 1.2 acres 2 reps in study
<b>Trial performed by</b>	<i>Agrinos with grower</i>
<b>Method Comments:</b>	Billets were planted with a Louivere planter with a slat conveyor system that had billets dropping through a sprayed treatment solution

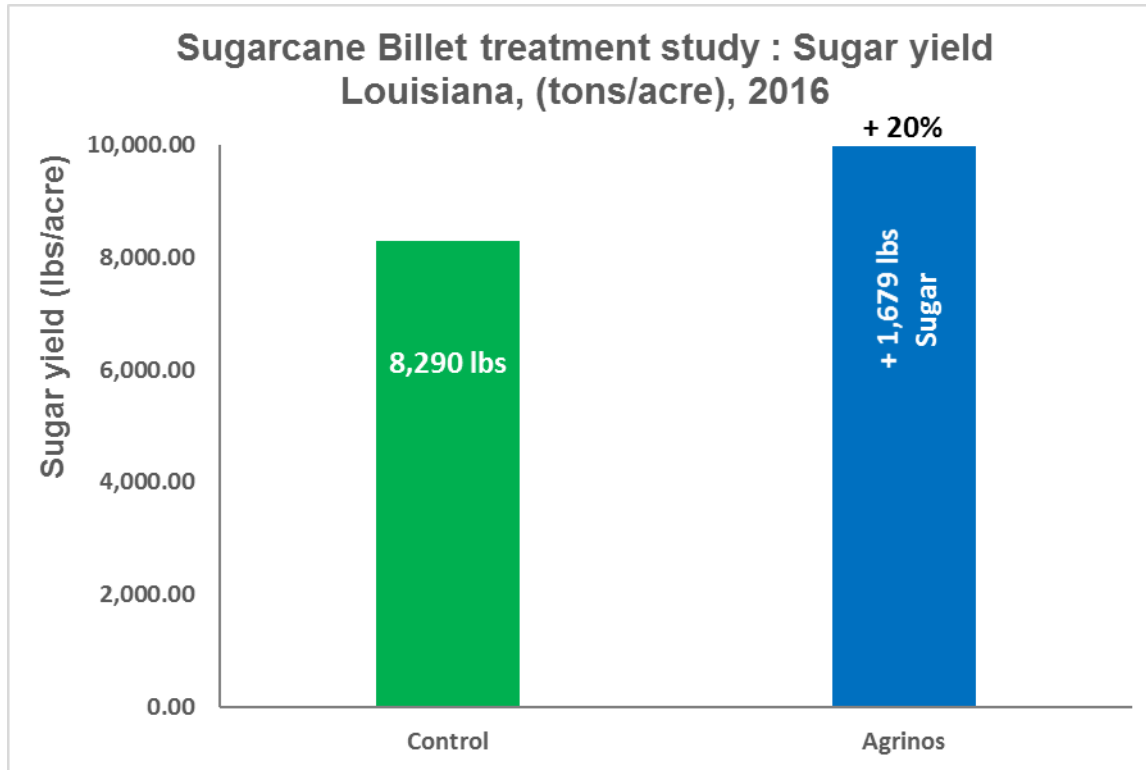


**Agrinos plots yielded 32% greater sugar yield than the standard farmers control.**



# USA – Sugarcane Billet Treatment Trial

2016 Louisiana



<b>Period</b>	Planted September 2015 Harvested 2016
<b>Crop / Hybrid</b>	Sugarcane L01-299
<b>Location</b>	Bunkie, Louisiana
<b>Products / Rates</b>	iNvigorate® @ 2qt/acre + BSure® @ 2 qt/acre + Agrinos 5-00 @ 1 lb/acre & All billets treated with Azoxytobin and Propiconazole fungicide
<b>Field Size / Replications</b>	Large acreage strip plots Agrinos 40 acres Control 27 acres 2 reps in study
<b>Trial performed by</b>	<i>Agrinos with grower</i>
<b>Method Comments:</b>	Billets were planted with a Traube (Costa Rican) planter (dipped treatment style)



**Agrinos plots yielded 20% greater sugar yield than the standard farmers control.**

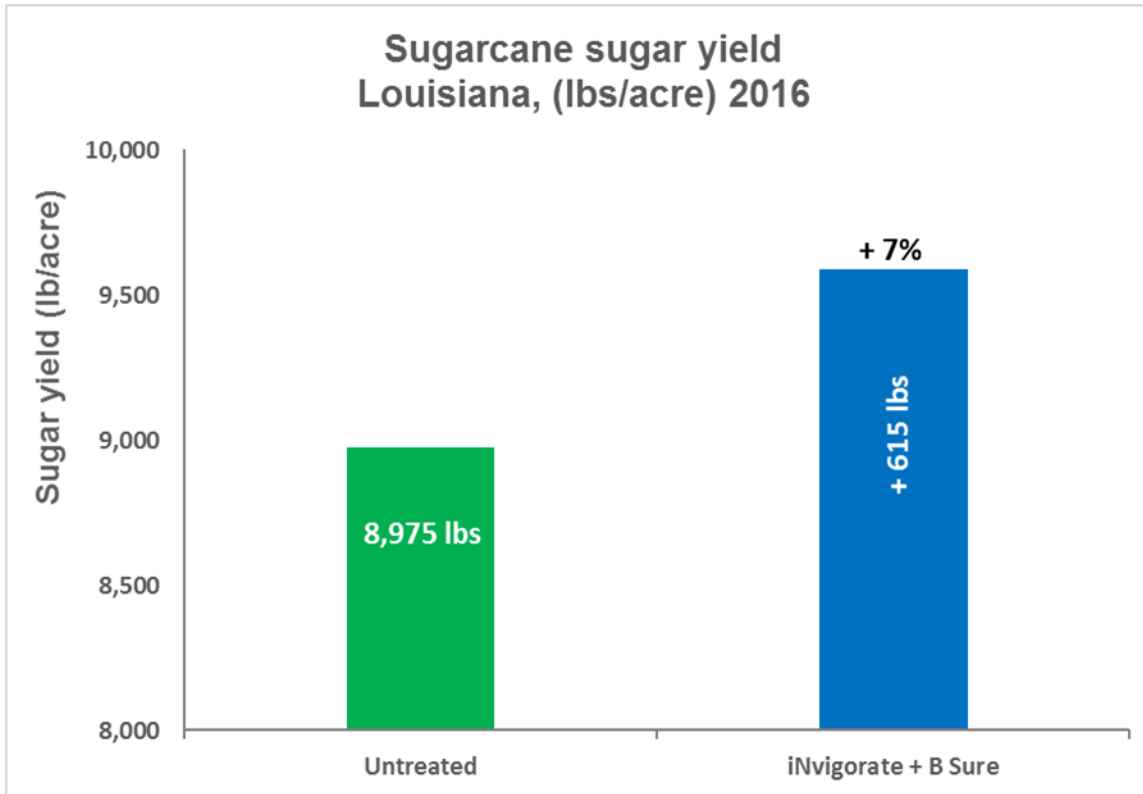


# Sugarcane Residue Reduction Trial Results 2016



# USA – Sugarcane iNvigorate + B Sure residue trial

2016 Louisiana



<b>Period</b>	Applied 11 December 2015 Harvested 19-21 Dec 2016
<b>Crop / Hybrid</b>	Sugarcane HoCP96-540
<b>Location</b>	Breaux Bridge, Louisiana
<b>Products / Rates</b>	iNvigorate® @ 1qt/acre + BSure® @ 1 qt/acre mixed and sprayed over the trash/shuck on harvested rows
<b>Field Size / Replications</b>	Plot size = 5 acre plots 4 reps
<b>Trial performed by</b>	<i>Agrinos with grower</i>
<b>Method Comments:</b>	<ul style="list-style-type: none"><li>• iNvigorate® + BSure® were mixed together and applied with 17 gallons water/acre rate</li><li>• Crop was harvested 1 year after application</li></ul>



**Agrinos plots yielded 7% greater sugar yield than the standard farmers control.**



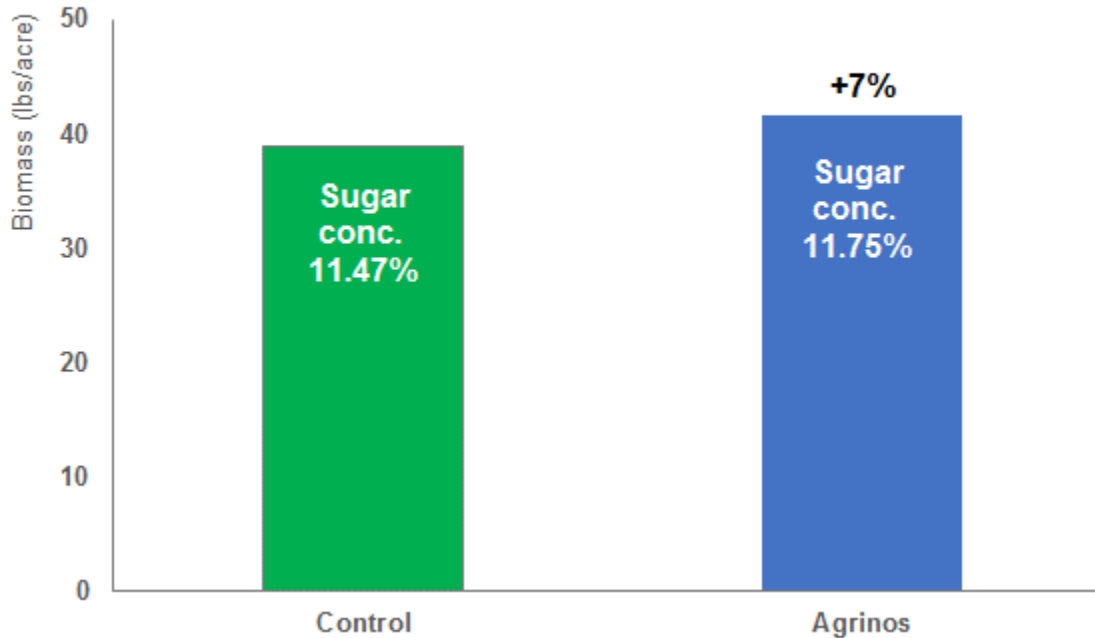
# Combined Sugarcane Trial Results 2016



# Sugarcane – Yield Trial Results

2016 Louisiana, USA

**Sugarcane Yield Trails - 2016**  
(Louisiana, USA, Tons/Acre)



<b>Planting / Harvest</b>	2016
<b>Crop / Hybrid</b>	Sugarcane
<b>Location</b>	17 trial plots in total
<b>Products / Rates</b>	<ul style="list-style-type: none"> <li>• iNvigo - 2 qt/acre</li> <li>• B Sure - 2 qt/acre</li> <li>• Agrinos 5-0-0 -1 lb/acre</li> <li>• Applied at planting</li> </ul>
<b>Field Size</b>	Large strip plots
<b>Trial Performed By</b>	Agrinos in cooperation with: Edgard Farms, HMC Farms, B&A Cane Inc., Tee&Sons Farms, Ted Brousard Farms
<b>Method Comments:</b>	
<ul style="list-style-type: none"> <li>• Trails planted in strip plots</li> <li>• No irrigation</li> <li>• Of the 17 trial plots measured 88% had higher sugar/acre yields than the farmers control.</li> <li>• Average sugar increase across all trial plots was 838 lbs/acre greater than the control</li> </ul>	

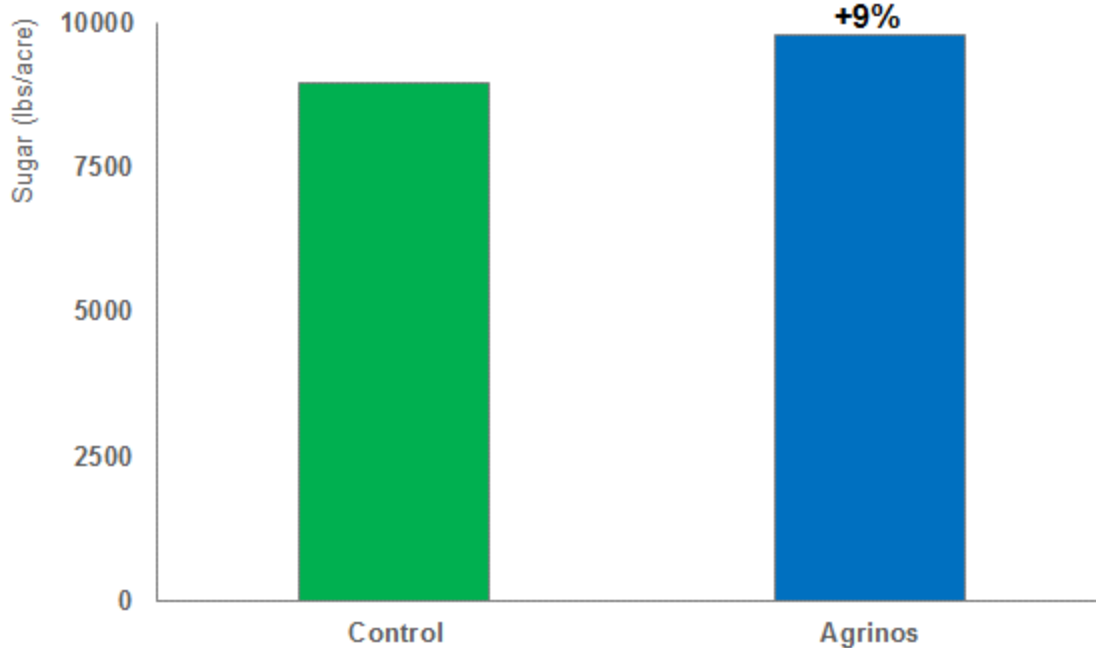
**➔ Agrinos increased biomass yield by an average of 2.76 tons/acre**

# Sugarcane – Raw sugar yield results

2016 Louisiana, USA



**Sugarcane Raw Sugar Yield - 2016**  
(Louisiana, USA, Lbs/Acre)



<b>Planting / Harvest</b>	2016
<b>Crop / Hybrid</b>	Sugarcane
<b>Location</b>	17 trial plots in total
<b>Products / Rates</b>	<ul style="list-style-type: none"> <li>• iNvigorate - 2 qt/acre</li> <li>• B Sure - 2 qt/acre</li> <li>• Agrinos 5-0-0 -1 lb/acre</li> <li>• Applied at planting</li> </ul>
<b>Field Size</b>	Large strip plots
<b>Trial Performed By</b>	Agrinos in cooperation with: Edgard Farms, HMC Farms, B&A Cane Inc., Tee&Sons Farms, Ted Broussard Farms
<b>Method Comments:</b>	
<ul style="list-style-type: none"> <li>• Trails planted in strip plots</li> <li>• No irrigation</li> <li>• Of the 17 trial plots measured 88% had higher sugar/acre yields than the farmers control.</li> <li>• Average sugar increase across all trial plots was 838 lbs/acre greater than the control</li> </ul>	



**Agrinos increased sugar yield by an average of 838 lbs/acre**