

The background of the slide features a close-up photograph of several ears of corn. One ear in the foreground is partially husked, showing its golden-yellow kernels. Behind it, another ear is more fully covered in its green and yellowish husks. The corn is set against a solid, deep blue background. The overall composition is vertical, with the corn occupying the left and center portions of the frame.

2019 Field Corn Weed Management Update

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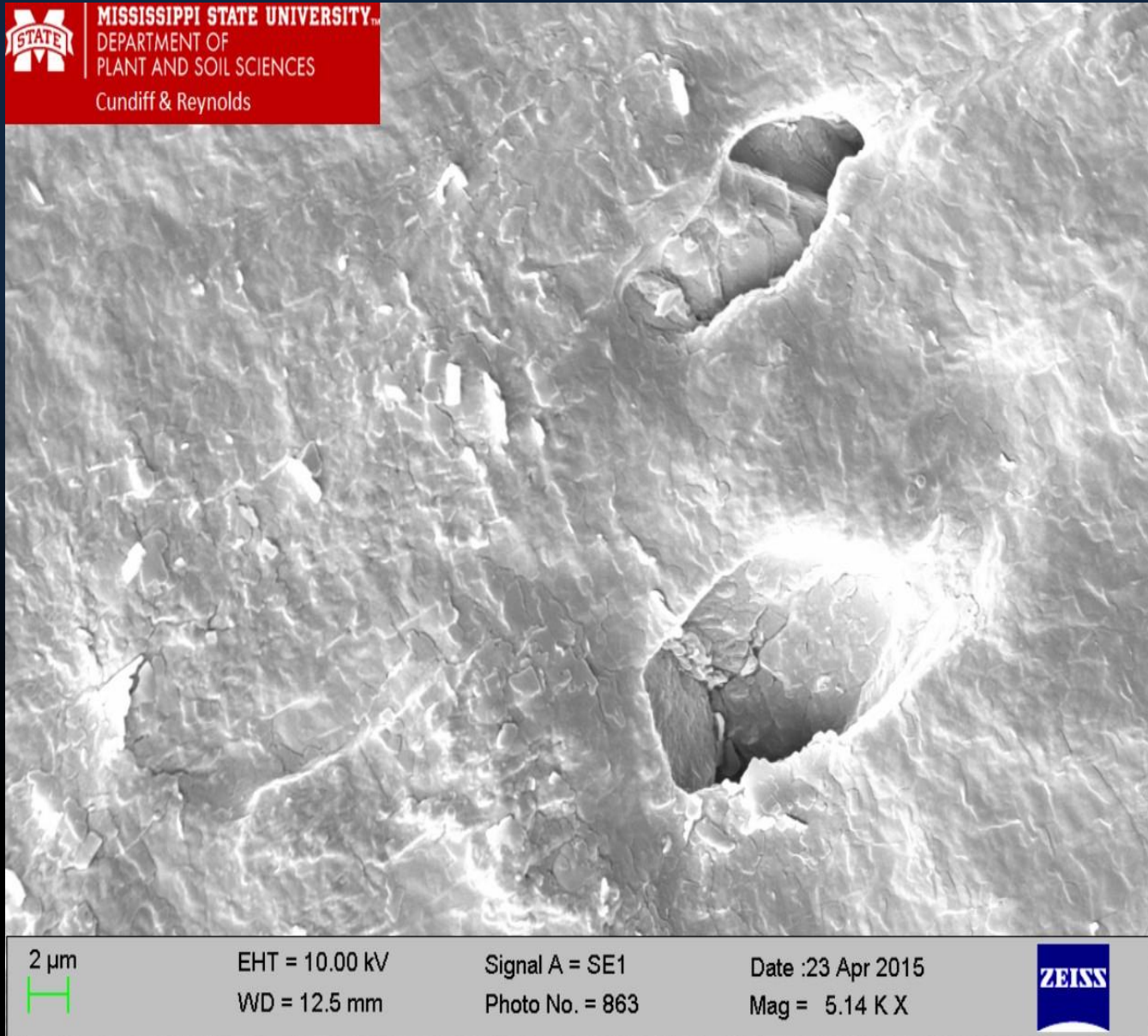
UNIVERSITY OF
GEORGIA

College of Agricultural &
Environmental Sciences

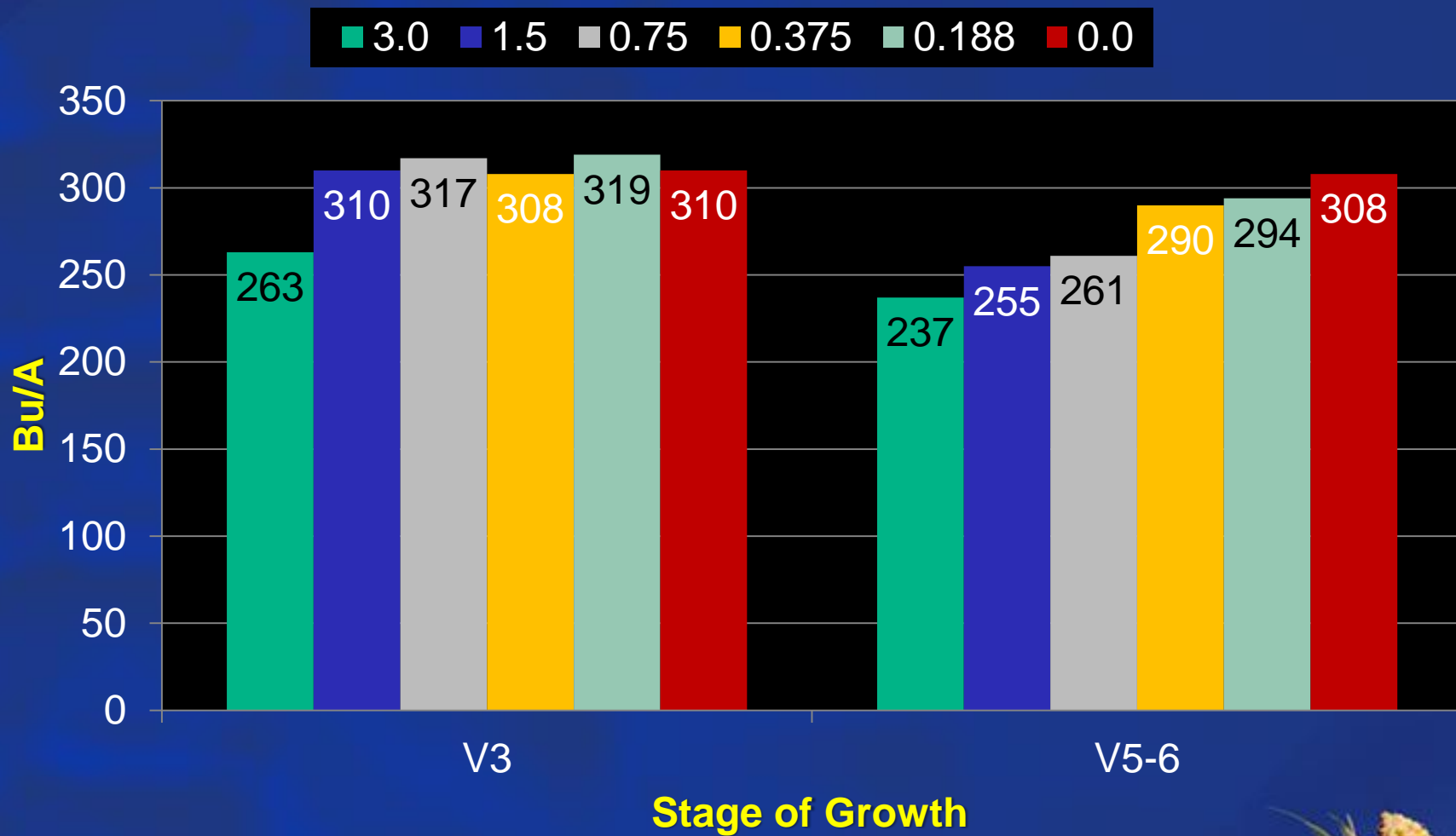
Valor Tank-Cleaning Problems - 2018



Scanning electron micrograph of a new Goodyear Hose (Black/Versigard Synthetic Rubber)



Field Corn (Pioneer 1794) Yield Response to Valor 51WG (oz/A) - 2015



CN-10-15
LSD 0.10 = 16
CV = 4

Halex GT Mixing Problems



- May 9, 2018
- Mixing Sequence Issue
 - *Atrazine + Halex GT + Interactive + FoamBuster*
 - *Interactive should have been first*
 - *10 GPA*



Halex GT Mixing Sequence

Halex GT Mixing Order Recommendation

When adding products to the spray tank, make sure each product is added separately and thoroughly agitated before adding the next product.

1. Fill tank 1/3 to 1/2 full of clean water and start agitation
2. OPTIONAL - Add ammonium sulfate (AMS)
3. Add nonionic surfactant (NIS) - 0.5% recommended
4. Add atrazine – make sure atrazine is fully dispersed before other products are added to the mix
5. Add Halex GT
6. If needed add EC products (e.g. insecticides) last. Be aware that adding any EC type product will increase the risk for crop injury
7. Fill tank with water to the desired level

If using an induction tank, add only one product at a time. For example, add water, then add atrazine to the induction tank and transfer to spray tank, rinse induction tank with water, then add Halex GT.

Syngenta Crop Protection, Inc. does not recommend the use of compatibility agents with Halex GT. When used, compatibility agents have been shown to cause excessive crop injury.

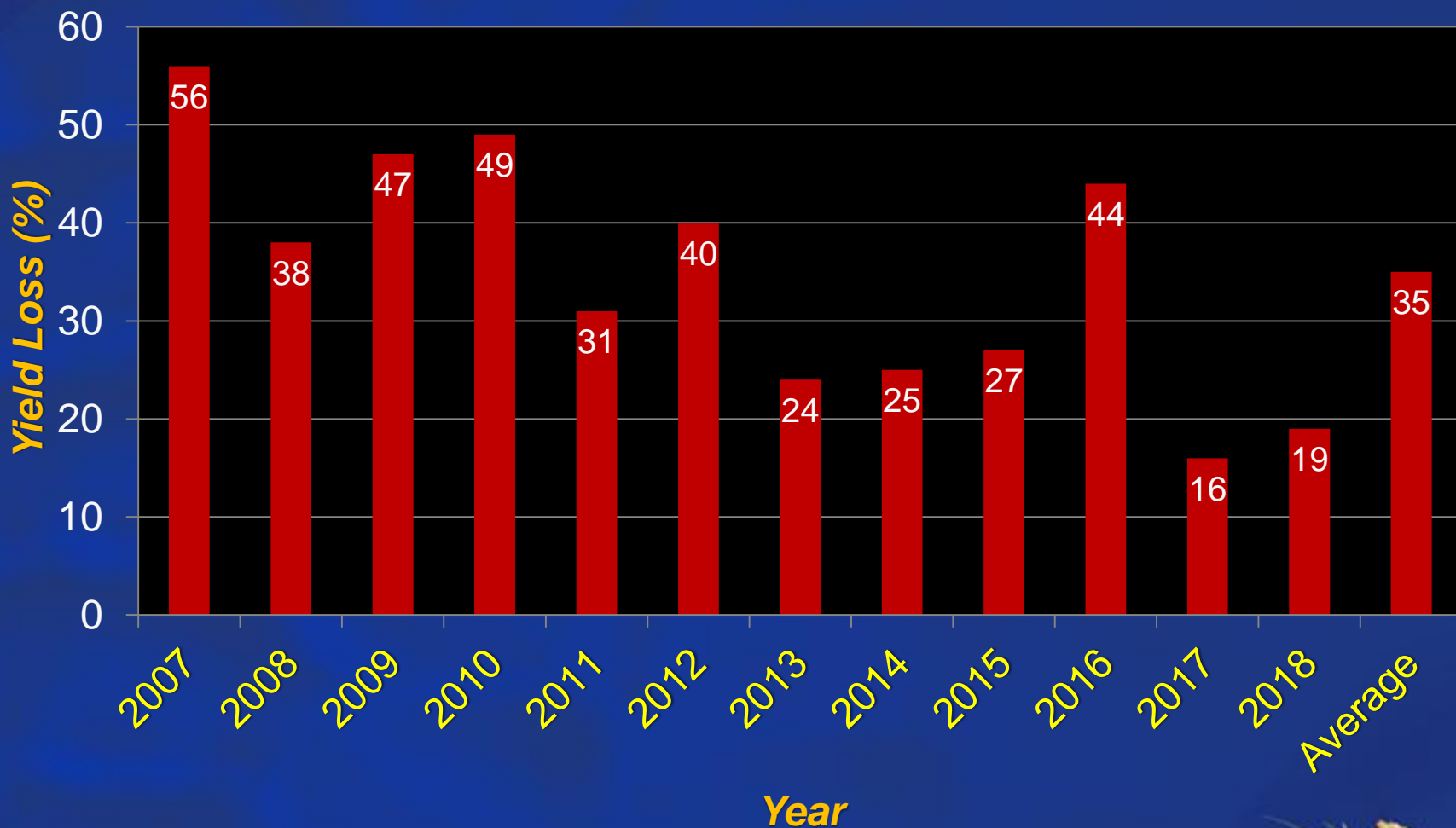


Liberty on DKC 6208



- ❑ Not 100% trait purity in bag
- ❑ Tolerance is ~4%?
- ❑ Old hybrids = LL on male
- ❑ New hybrids = LL on female

Field Corn Yield Loss (%) Caused by Uncontrolled Weeds in UGA Weed Science Research Trials (2007-2018). *Treated vs. Non-treated*



200 Bu/A X 0.35 X \$3.59 = \$251/A

Is Roundup + Atrazine good enough anymore?



- Roundup + Atrazine +.
 - *Laudis*
 - *Capreno (?)*
 - *Too hot for GA*
 - *Impact Z*
 - *Status (dicamba)*
 - + *Prowl too?*
 - *Counter INFR, Crop Rotations????*
 - *Double-crop soybeans*
- Other options?
 - *Liberty, Halex GT, Revulin Q, Enlist????*

Roundup + Atrazine + Prowl - 2018



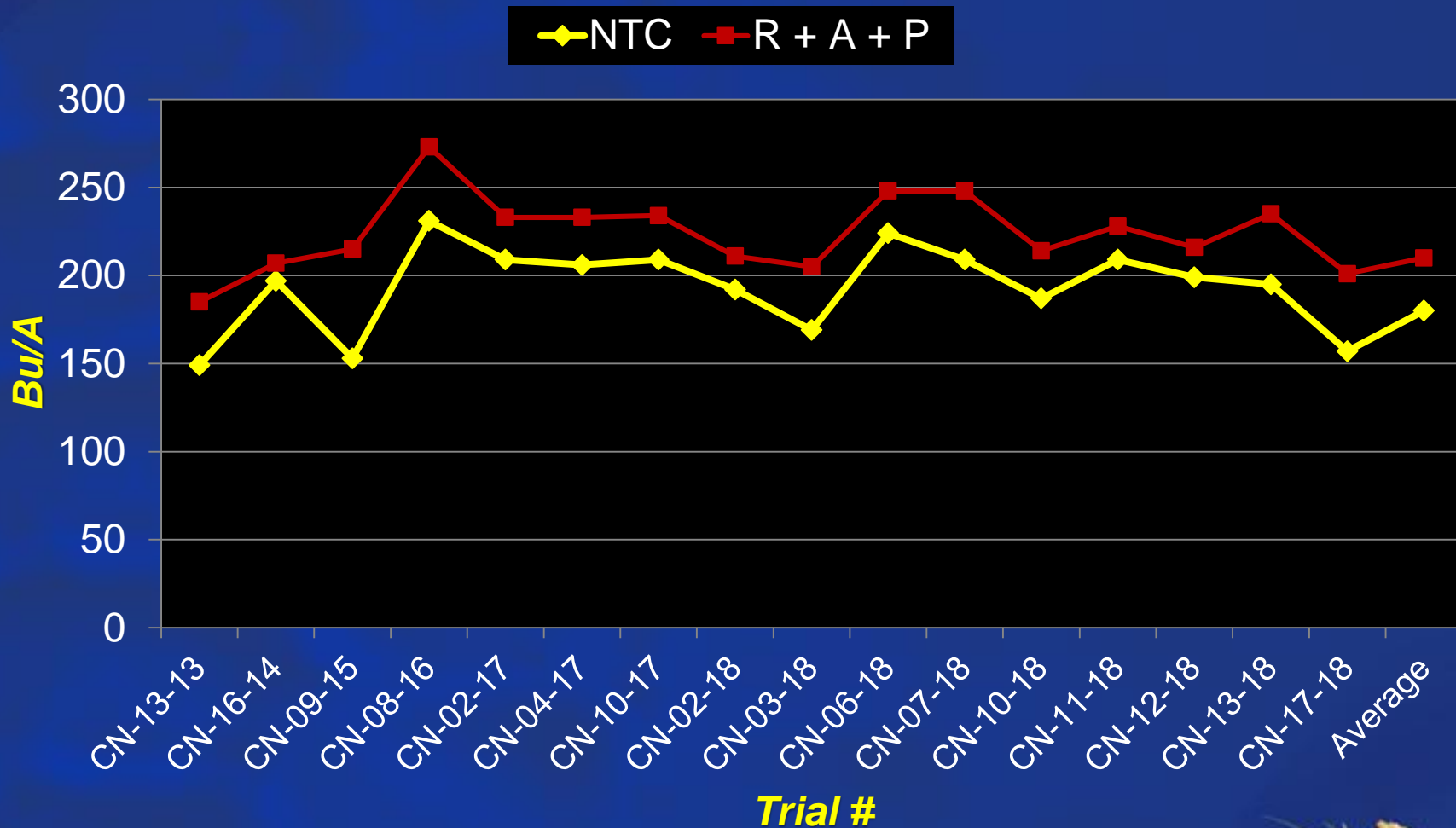
NTC



Roundup Powermax 5.5SL @ 32 oz/A
Atrazine 4L @ 64 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
Applied 21 DAP

CN-12-18
June 6
70 DAP

Roundup (R) + Atrazine (A) + Prowl (P) Effects on Field Corn Yield (16 trials)



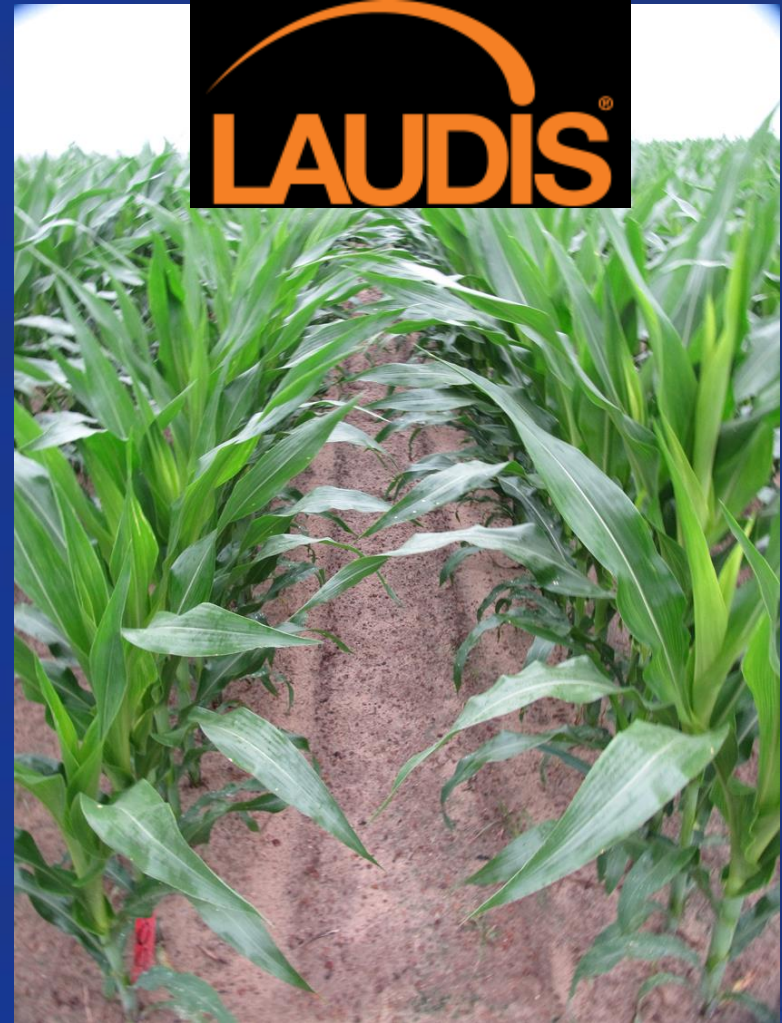
NTC = non-treated check (weedy)

Roundup + Atrazine + Laudis - 2018



NTC

CN-06-18
May 16
22 DAT

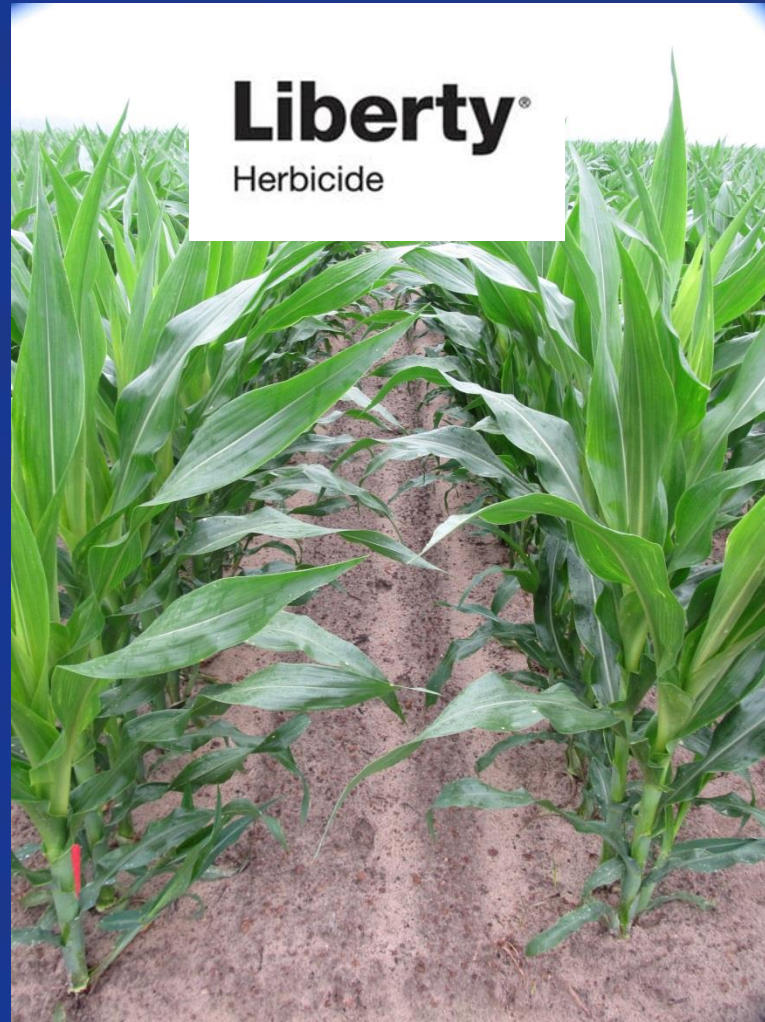


Roundup PowerMax 5.5SL @ 32 oz/A (28 DAP)
Atrazine 4L @ 64 oz/A (28 DAP)
Laudis 3.5SC @ 3 oz/A (28 DAP)

Field Corn Weed Control - 2018



NTC



Liberty @ 29 oz/A
Atrazine @ 64 oz/A
Prowl H₂O @ 32 oz/A
(Applied 28 DAP)



Impact/Impact Z/Armezon

- POST
- AMVAC, BASF
- Topramezone
- HPPD
- Need to tank-mix with something
- Impact Z
 - Includes ATZ
 - 4 lbs/gal



IMPACT **Z**
Herbicide™



Impact Z - 2018



NTC




Roundup P-MAX @ 32 oz/A
Impact Z @ 8 oz/A
Prowl H₂O @ 32 oz/A
Applied 28 DAP

Halex GT


Sale, use, and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited. PULL HERE TO OPEN ►

GROUP 15 | 9 | 27 HERBICIDES



Halex[®]GT

Herbicide



A Postemergence Herbicide for Weed Control in Glyphosate Tolerant (GT) Corn

Active Ingredients:	
S-metolachlor*	20.50%
Glyphosate, N-(phosphonomethyl) glycine	20.50%
Mesotrione**	2.05%
Other Ingredients:	56.95%
Total:	100.00%

Active ingredients per U.S. gallon: S-metolachlor 2.09 pounds, glyphosate acid 2.09 pounds and mesotrione 0.209 pounds.


*CAS No. 87392-12-9
**CAS No. 104206-82-8

KEEP OUT OF REACH OF CHILDREN.
CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1282 EPA Est. No. 100-LA-001
SCP 1282A-L4B 0615
4055250

2.5 gallons
Net Contents



- Syngenta
- POST
 - 58 oz/A
- glyphosate + s-metolachlor + mesotrione
- Tank-mix with ATZ
- Will cause bleaching and buggy whipping
 - rate
 - weather
- Tank-mix order is important

Halex GT - 2018

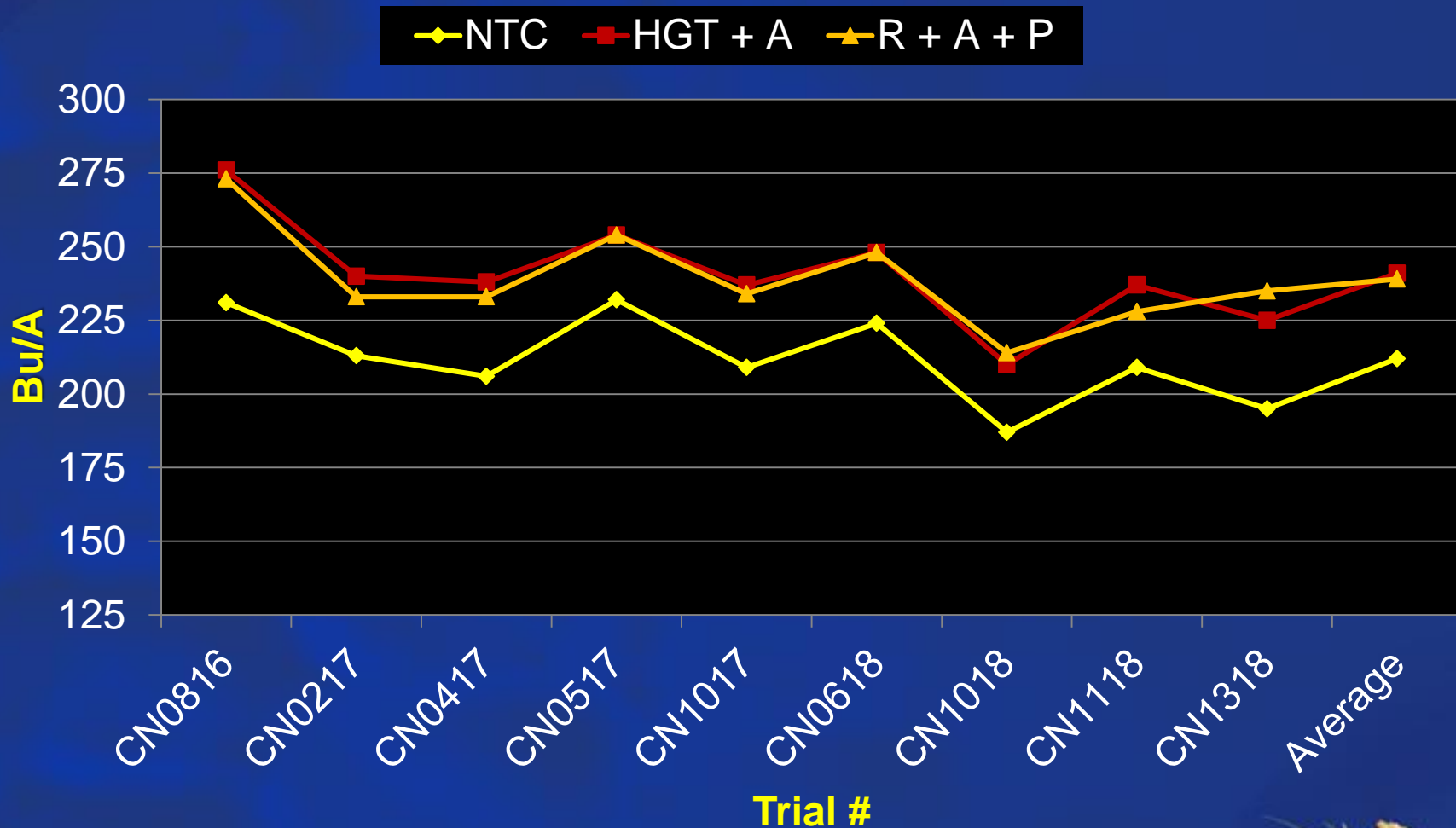
NTC



Halex GT @ 58 oz/A
Atrazine 4L @ 64 oz/A
NIS @ 0.25% v/v
Applied 28 DAP



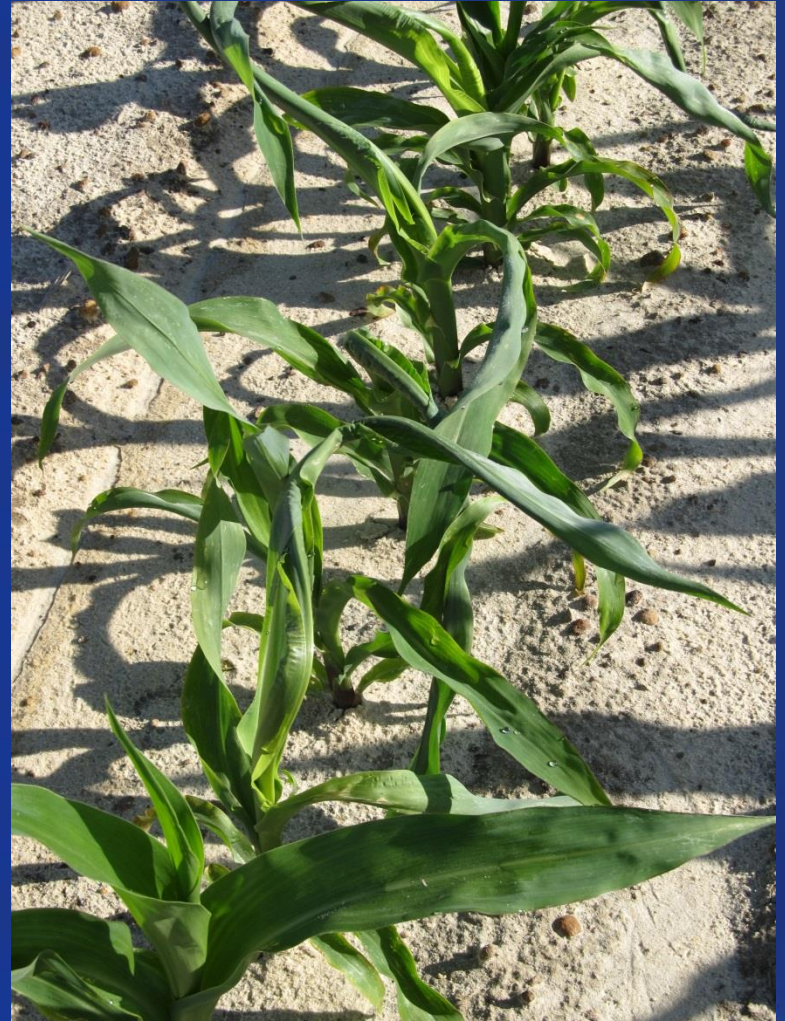
Roundup (R) + Atrazine (A) + Prowl (P) vs. Halex GT (HGT) + Atrazine – Corn Yields



NTC = non-treated check (weedy)

Halex GT (1X) + Atrazine + Induce

Applied V2 Stage – 15 DAP



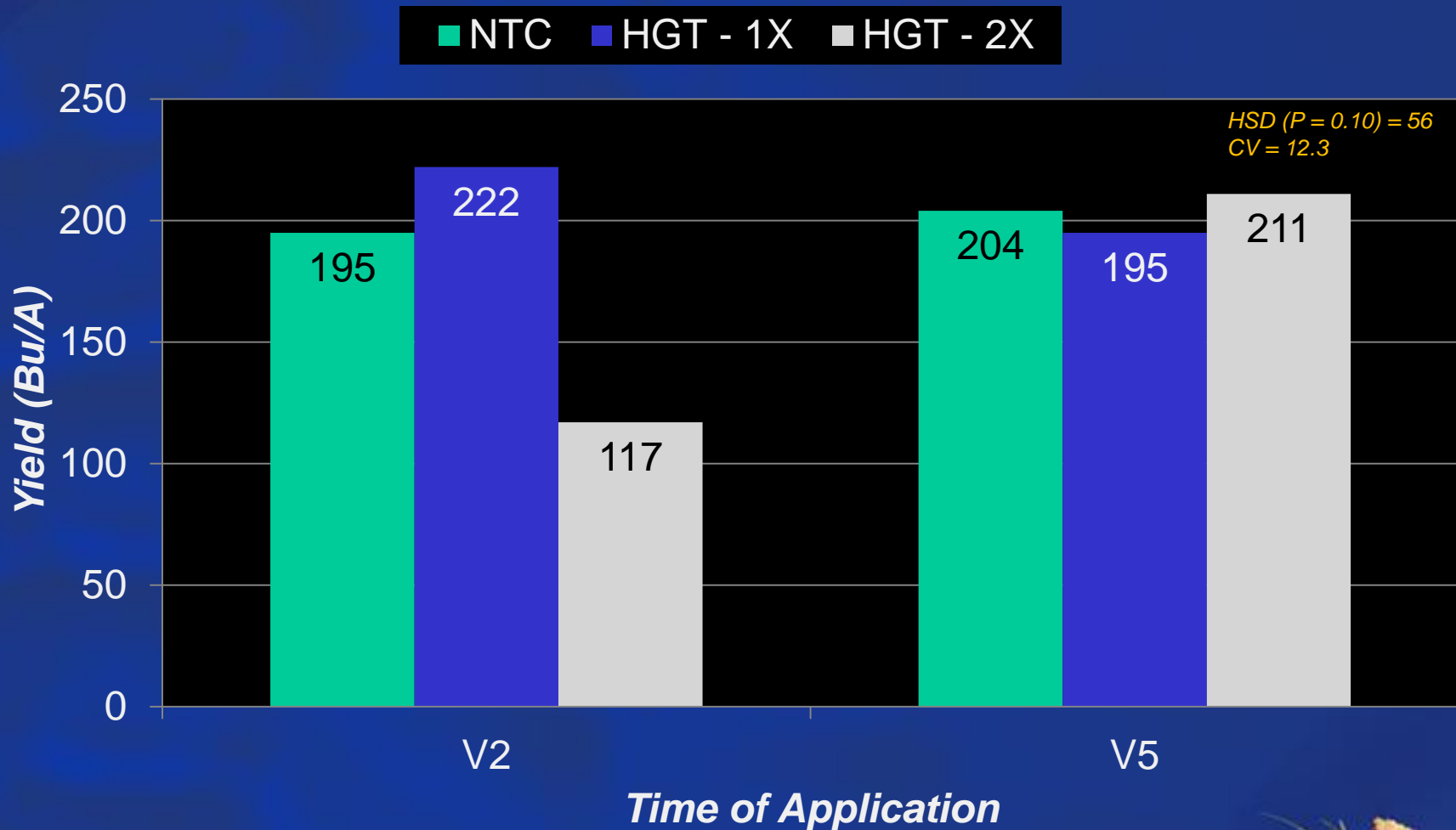
CN-04-18
May 2
21 DAT
Pioneer 1870YHR

Halex GT (2X) + Atrazine + Induce Applied V2 Stage – 15 DAP




CN-04-18
May 2
21 DAT
Pioneer 1870YHR

Halex GT (HGT) Effects on Field Corn Yield - 2018





ALS Herbicide Carryover to Field Corn? (Cadre, Staple, Strongarm)

- usually not a problem in GA due to high rainfall/irrigation and sandy/low OM soils
 - *Herbicide differences?*
 - *Hybrid differences?*
 - follow label restrictions
 - Carryover looks like nematode damage or fertility issues
- 

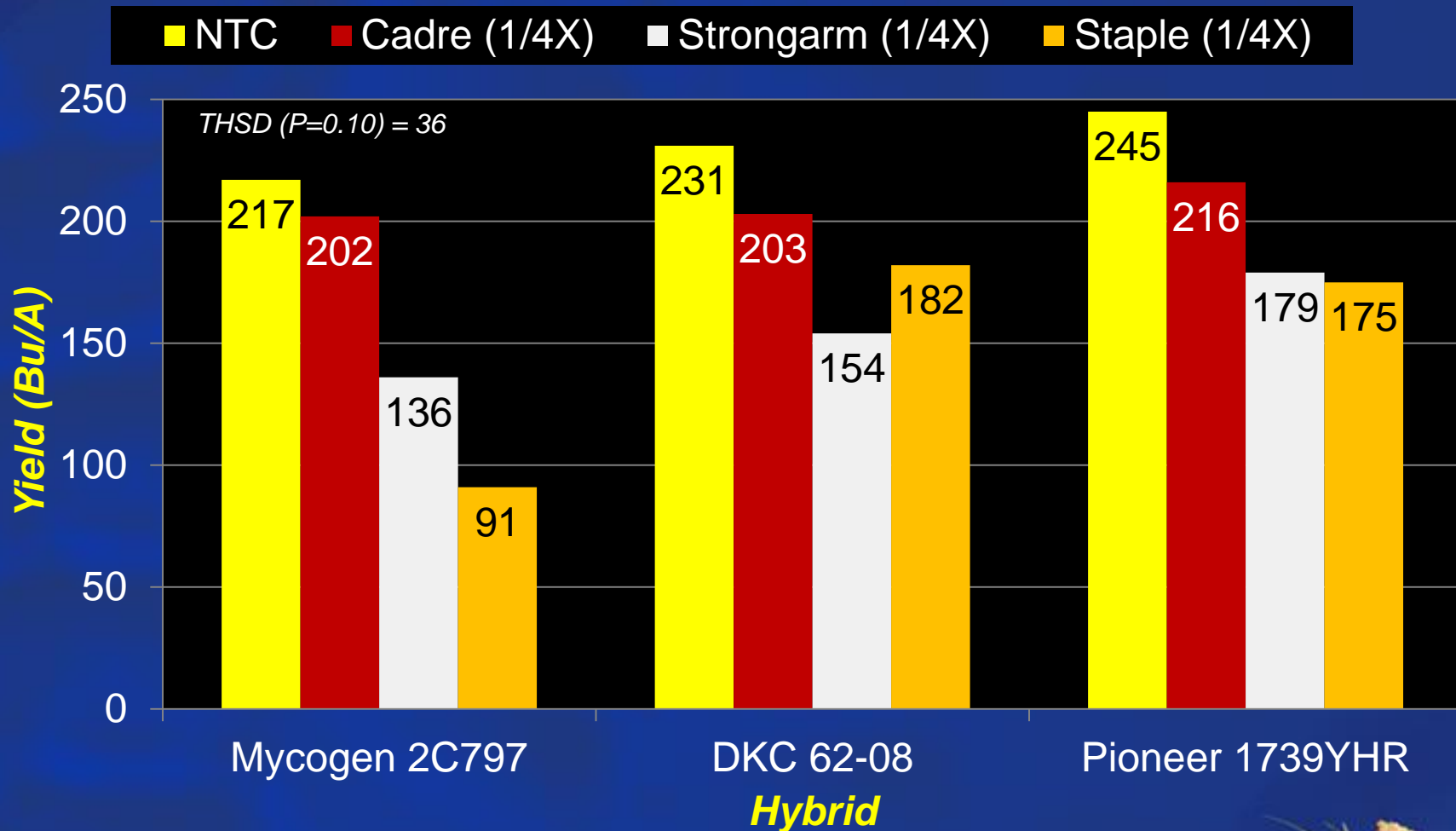
Staple LX @ 1/4X – Pioneer 1739 YHR



CN-01-18
April 23
26 DAT



Field Corn Hybrid Yield Response to Soil Applied ALS Herbicides - 2018



Revulin Q – 2018 (Accent + Callisto)



Enlist™ Herbicide Tolerant Corn

Robust Tolerance

- Robust tolerance to PRE and POST applications of 2,4-D
- Post application from emergence to V8
- Robust tolerance to FOP herbicides for breeding selection

2240 g ae/ha 2,4-D 2 DAT 2X max. use rate

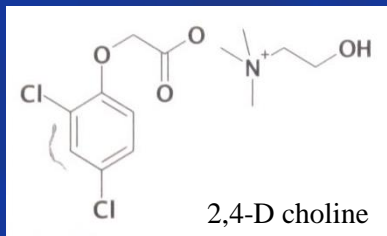


Brace Root Injury
2,4-D 2240 g ae/ha



Dow AgroSciences
SCIENCE. YIELD. SUCCESS.™

- tolerance to 2,4-D and Assure + GLY
- Trait was deregulated in September 2014 and herbicide in October 2014. U.S. launch in 2018 (SE??).
- Colex-D™ technology
 - 2,4-D choline
 - lower volatility
 - lower drift potential
 - enhanced handling/mixing characteristics
 - reduced odor
- 1 PRE application + 2 POST applications (30" or V8 stage)
- Enlist™ Duo
 - DMA-Glyphosate (1.71 lb ae/gal) + 2,4-D choline (1.63 lb ae/gal)
- Enlist™ One
 - 2,4-D choline (3.8 lb ae/gal)



Field Corn Weed Control – 2018

Enlist System (Hybrid: MY13C99 - 217 Bu/A)



NTC



Enlist One 3.8SL @ 24 oz/A
Roundup P-Max 5.5SL @ 32 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
Applied 21 DAP

Field Corn Lay-By

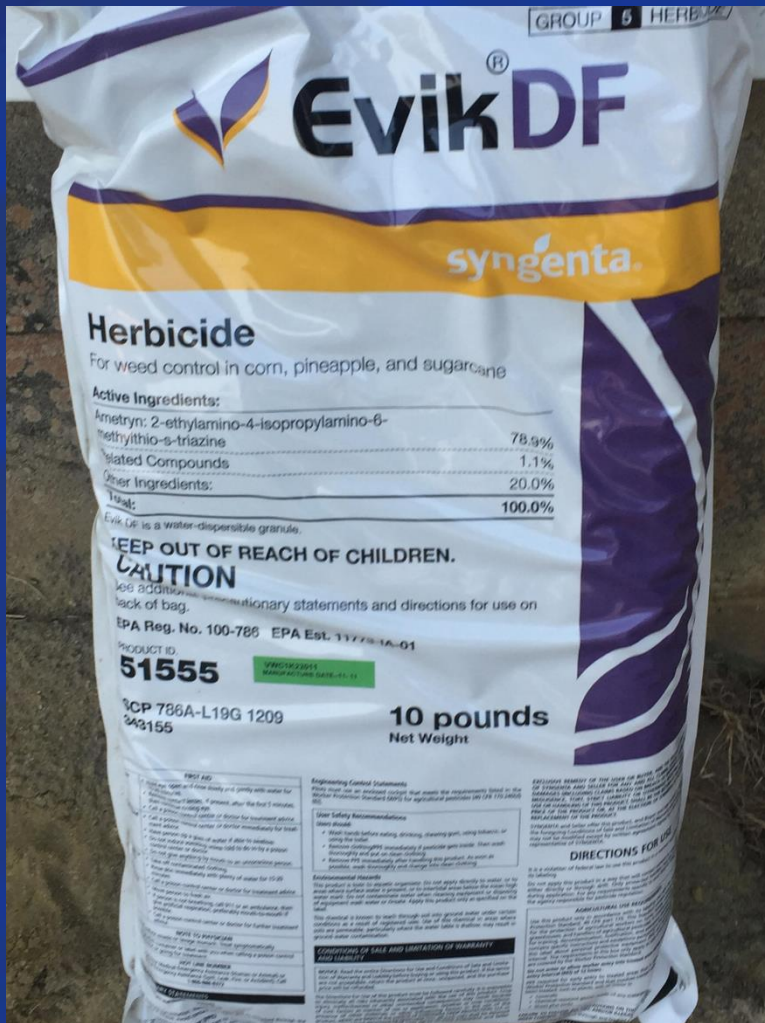
(16 GPA, 30 PSI, 3.7 MPH, Floodjet TK-VS2)



Field Corn Lay-By



Great Herbicide but Crappy Formulation!



- ❑ Product age
- ❑ 20 GPA
- ❑ Pre-slurry
- ❑ **STRONG** agitation



Roundup Powermax II @ 32 oz/A + Evik 80DF @ 2 lbs/A – 36 DAT (June 15)



16 GPA
30 PSI
3.7 MPH
V7-V8
24" tall

FloodJet
TK-VS2

Field Corn Lay-By Test Mitchell Co. – May 11, 2018



Mitchell County Corn Lay-By

August 15, 2018 (96 DAT)



Laudis @ 3 oz/A
Broadcast



Roundup P-Max @ 22 oz/A
Laudis @ 3 oz/A
Post-Directed

Questions/Comments?

