

The background of the slide features a close-up 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 husked, revealing its reddish-pink kernels. The corn is set against a deep blue background with faint, stylized outlines of corn leaves and stalks.

# Weed Control in Field Corn 2021

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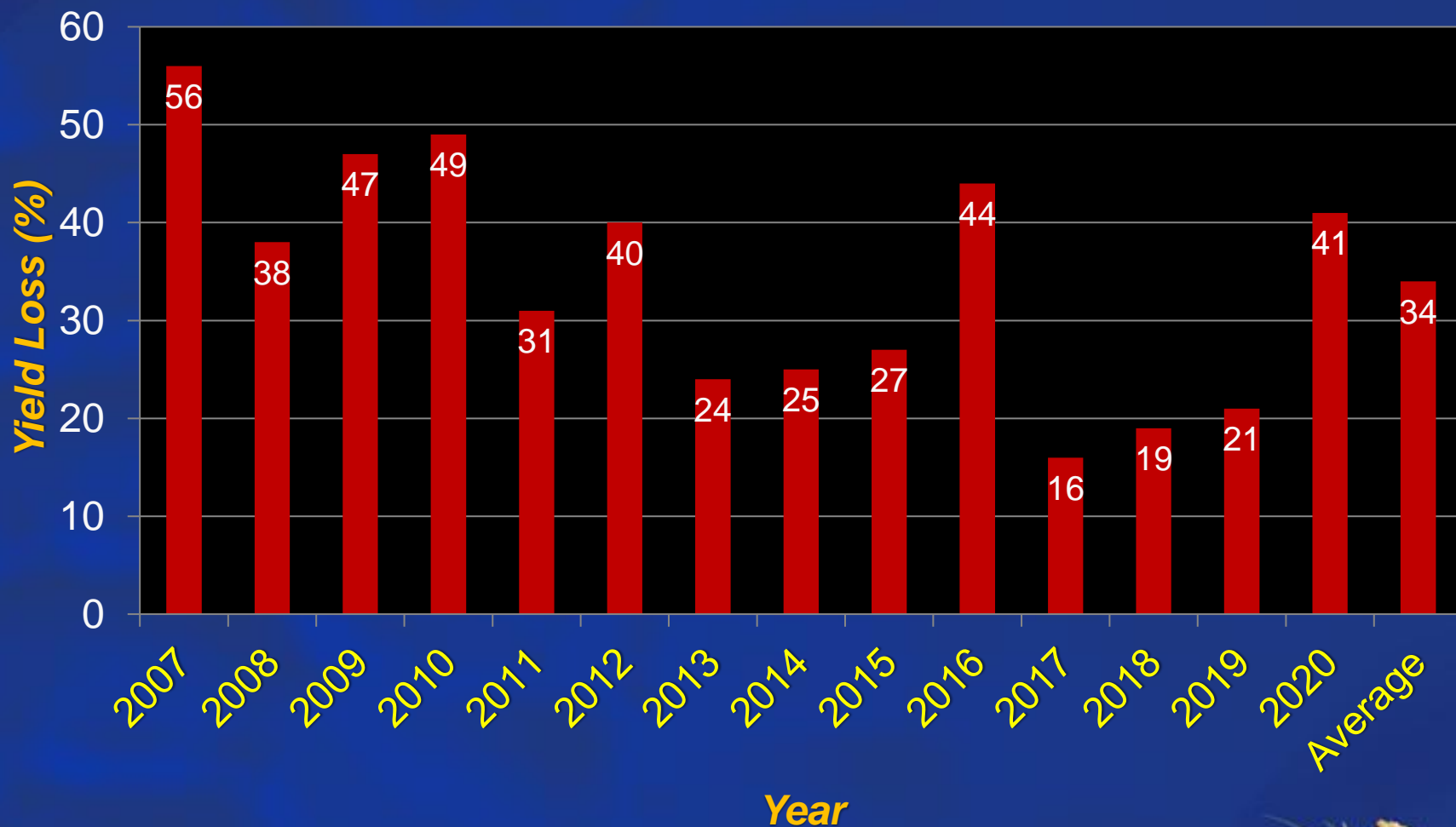
# Herbicide Carryover or Soil pH



*Soil pH = 4.7*

# Field Corn Yield Loss (%) Caused by Uncontrolled Weeds in UGA Weed Science Research Trials (2007-2020).

*Treated vs. Non-treated*



200 Bu/A X 0.34 X \$4.00 = \$272/A

What about harvest?

What about next year?

# Field Corn Weed Control

## *Questions for you?*

- What technologies are you planting?
  - *RR, LL, Conventional, Enlist (2,4-D)?*
  
- Do you need Counter?
  
- Is atrazine still working for you on pigweed?
  - *Lets assume it does not*
  
- What will be planted after the field corn?



# A general plan of attack?

- ❑ MUST START CLEAN!
- ❑ Use 1 qt/A of Atrazine 4L PRE (or Dual II Magnum, or Warrant, or Outlook)
- ❑ Follow up with a **timely** POST program (V3-V5 stage) that includes an additional 1.5 qt/A of Atrazine 4L
  - ❑ *Roundup + Atrazine probably not good enough anymore!*
- ❑ Lots of options depending upon how you answered previous questions?
  - ❑ *Liberty, Laudis, Impact/Armezon, Halex GT, Callisto, Acuron, dicamba, 2,4-D*



# Herbicide Timing Effects on Spray Coverage - 2020



- *JD 4630*
- *90' boom length*
- *20" nozzle spacing*
- *10 GPA*
- *32 PSI*
- *11 MPH*
- *8003EVS*
- *Roundup + Atrazine + Quest + Grounded*

CN-06-20  
Miller Co.  
30 DAP  
April 16

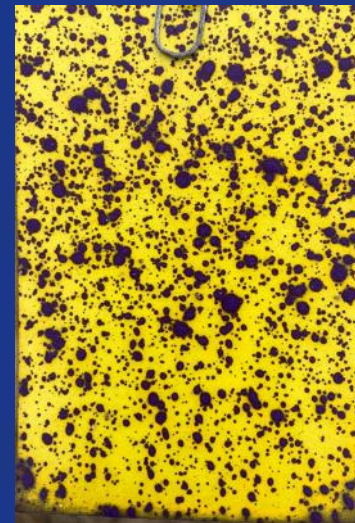
# Herbicide Timing Effects on Spray Coverage in Field Corn - 2020

2"



V4: 9-10" tall  
20 DAP

6"

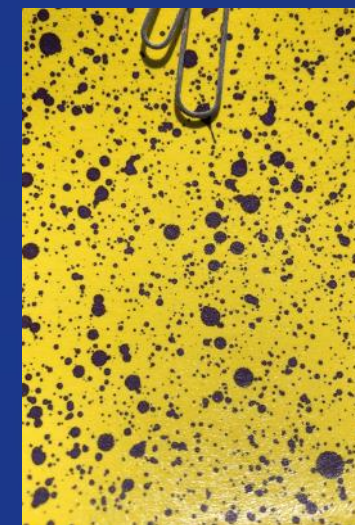


2"



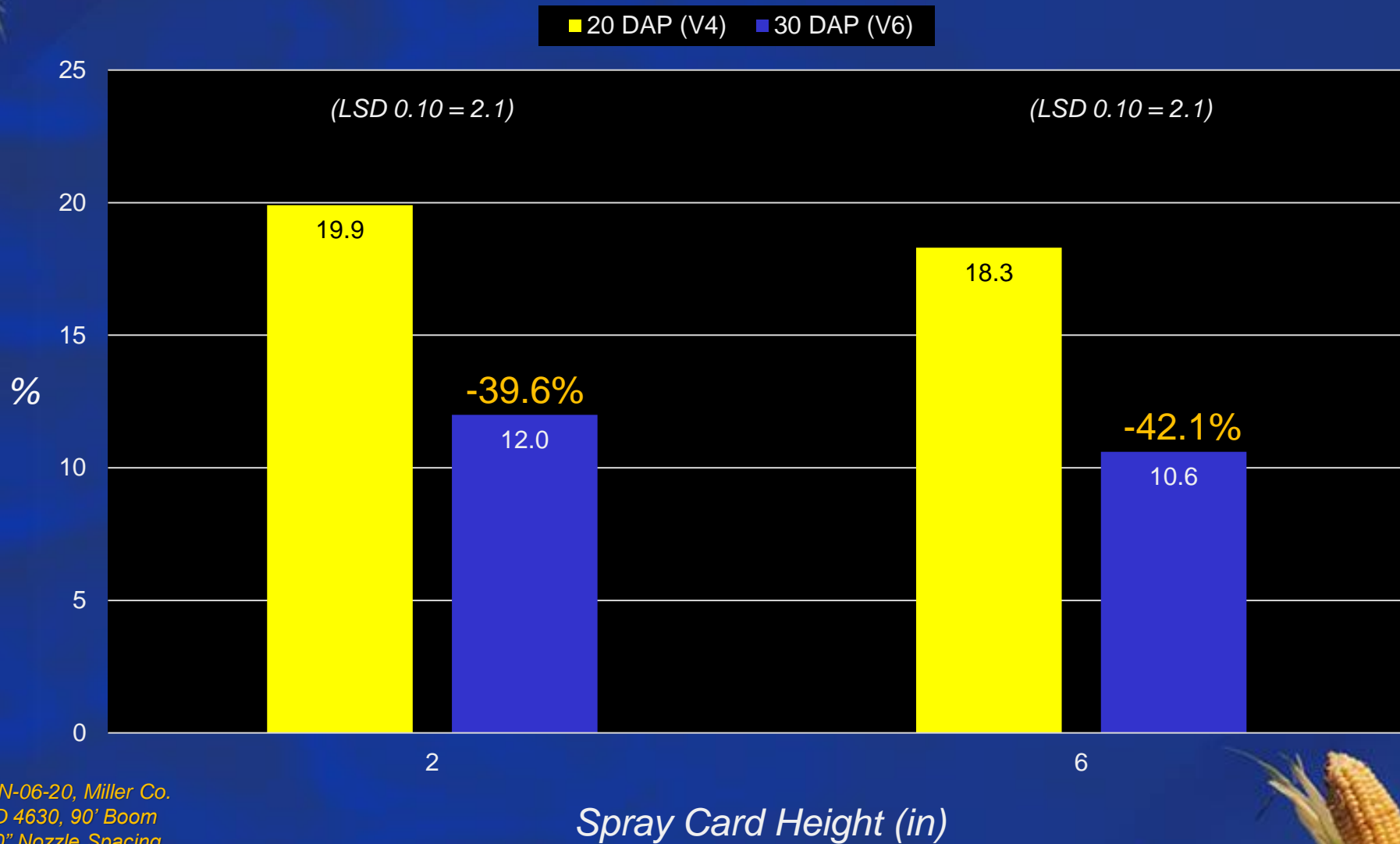
V6: 14-16" tall  
30 DAP

6"



CN-06-20  
JD 4630, 90' Boom  
20" Nozzle Spacing  
10 GPA, 32 PSI  
11 MPH  
8003EVS Nozzles

# Herbicide Timing Effects on Spray Coverage (%) in Field Corn - 2020

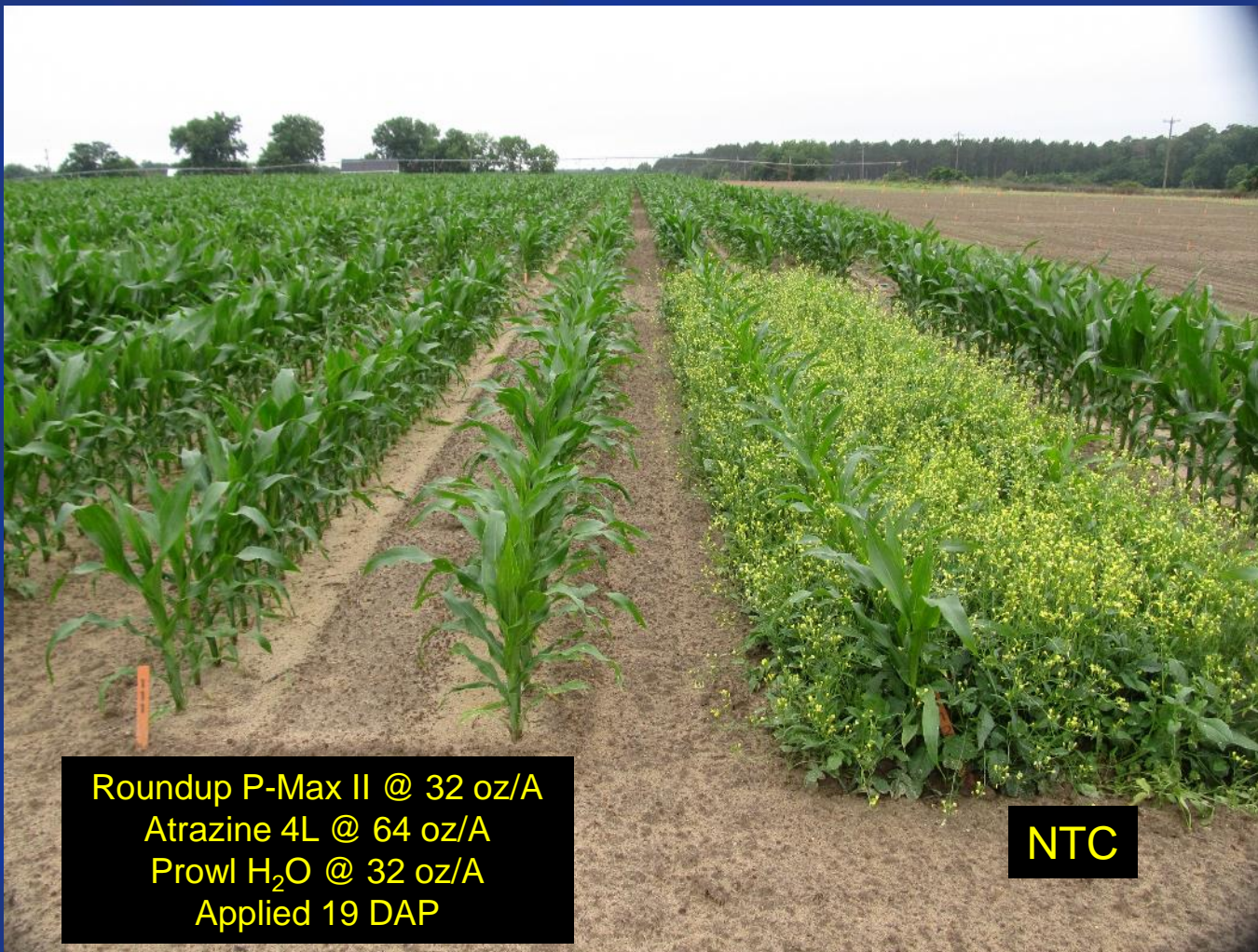


CN-06-20, Miller Co.  
JD 4630, 90' Boom  
20" Nozzle Spacing  
10 GPA, 32 PSI  
11 MPH, 8003EVS Nozzles

Spray Card Height (in)



# Roundup + Atrazine + Prowl Works Great For Me But.....



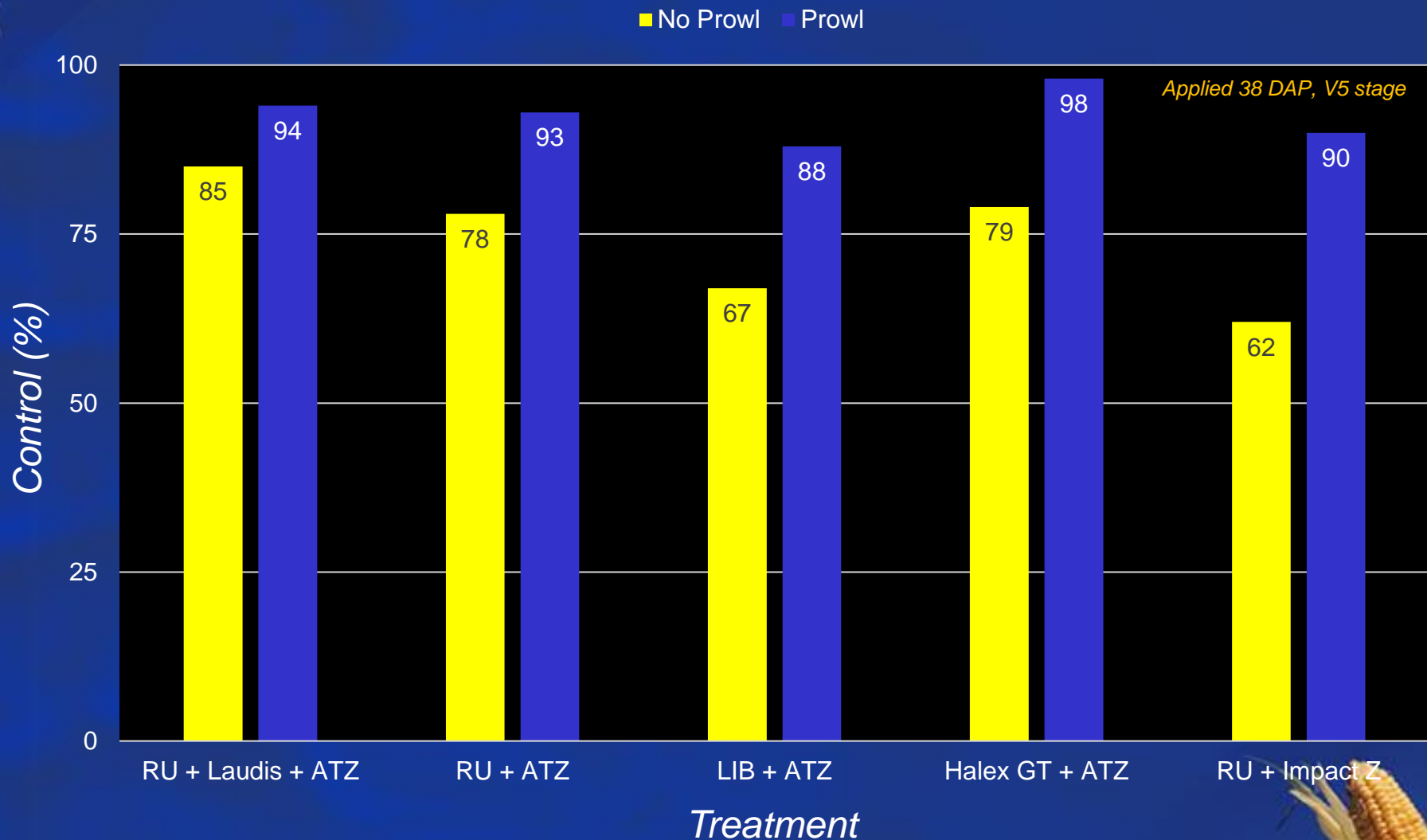
CN-08B-20  
May 21  
23 DAT

# Field Corn Weed Control - 2020



CN-14-20  
May 15  
10 DAT

# Texas Panicum Control in Field Corn – 2020 (49 DAT)

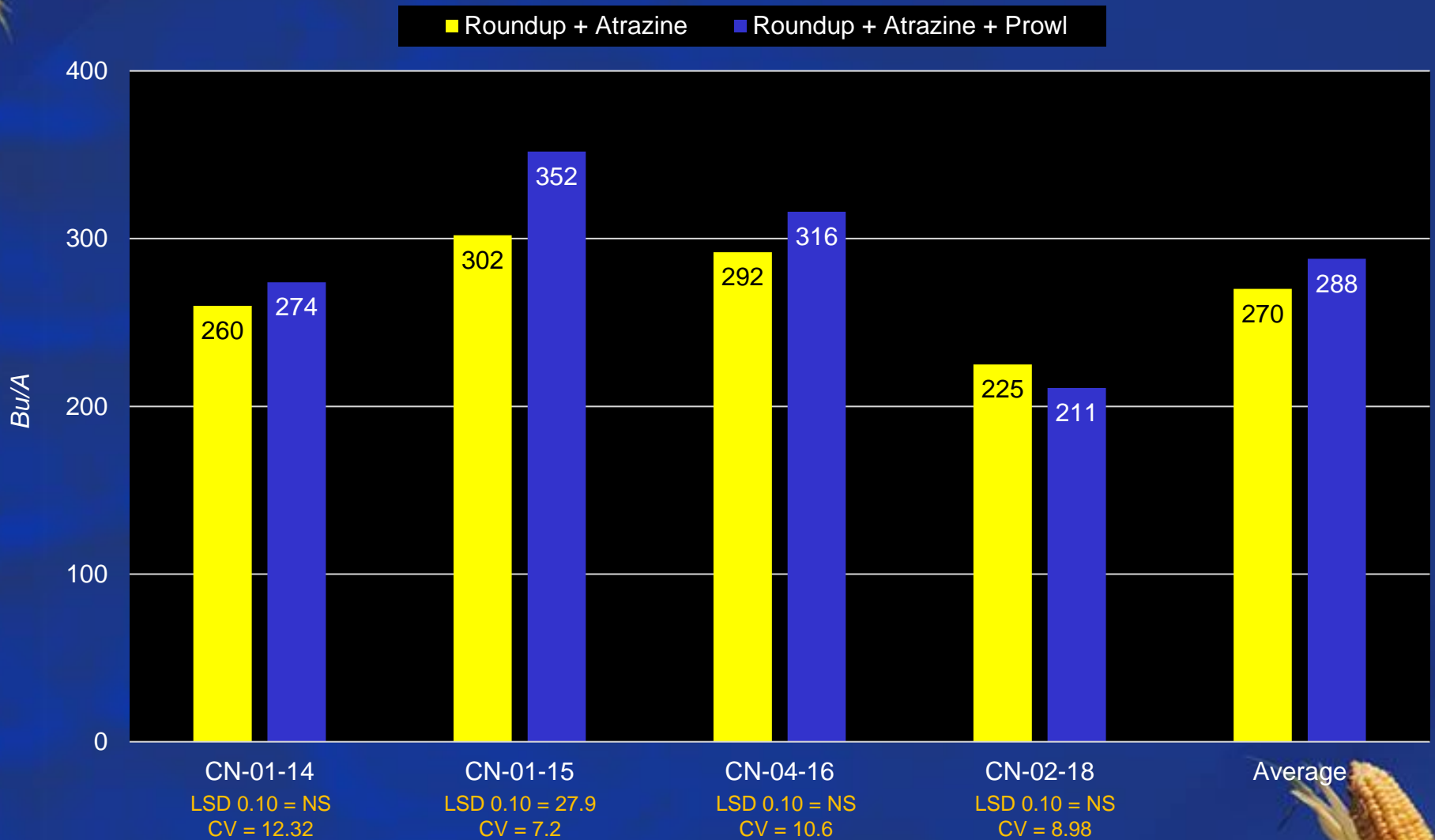


LSD 0.10 = 9.2

CV = 8.89

Source: C. Cahoon (NCSU)

# Does POST Applied Prowl Cause Field Corn Yield Loss???



# Field Corn Weed Control - 2020

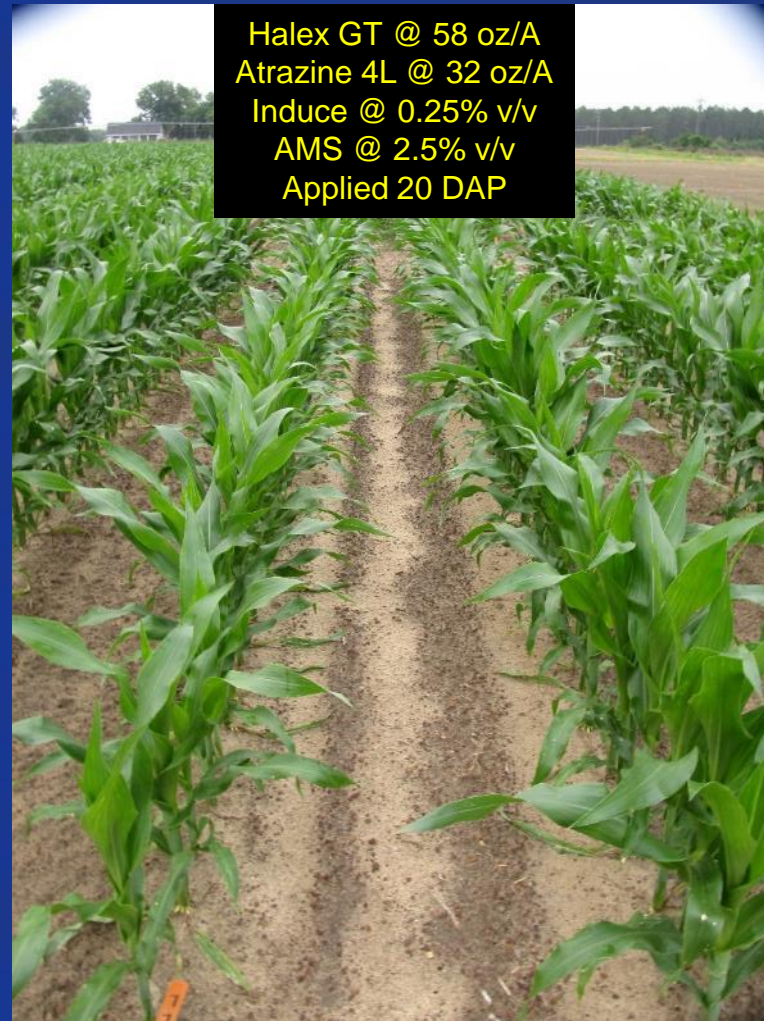


Laudis 3.45SC @ 3 oz/A + Atrazine 4L @ 64 oz/A +  
Dual Magnum 7.62EC @ 16 oz/A + MSO @ 1% v/v



CN-02-20  
April 21  
7 DAT

# Field Corn Weed Control - 2020



CN-09B-20  
May 21  
22 DAT

# Field Corn Weed Control - 2020



CN-07B-20  
May 18  
20 DAT



# Field Corn Weed Control – 2020

*Roundup + Liberty????*



**NTC**

Roundup Powermax II @ 32 oz/A  
Liberty @ 32 oz/A  
Atrazine @ 64 oz/A  
Prowl H<sub>2</sub>O @ 32 oz/A  
Applied 19 DAP

# Field Corn Weed Control – 2020

*Roundup + Liberty????*



**NTC**




Roundup Powermax II @ 32 oz/A  
Liberty @ 32 oz/A  
Atrazine @ 64 oz/A  
Prowl H<sub>2</sub>O @ 32 oz/A  
Applied 19 DAP

PE-15-20  
June 16  
68 DAP



# New(er) Products Being Tested

- **Sinate** (glufosinate + topramezone)
    - *AMVAC*
  
  - **Impact Core** (topramezone + acetochlor)
    - *AMVAC*
  
  - **Acuron GT** (bicyclopyrone + s-metolachlor + mesotrione + glyphosate)
    - *Syngenta*
  
  - **Shieldex** (topyralate)
    - *Summit Agro USA*
- 

# Sinate - 2020



Sinate 2.57SL @ 21 oz/A  
Atrazine 90DF @ 9 oz/A  
MSO @ 1% v/v  
AMS @ 3 lb/A  
Applied 19 DAP



# Impact Core - 2020



Impact Core 7.15EC @ 30 oz/A  
Atrazine 4L @ 32 oz/A  
NIS @ 0.25% v/v  
AMS @ 2.5 lbs/A  
Applied 19 DAP

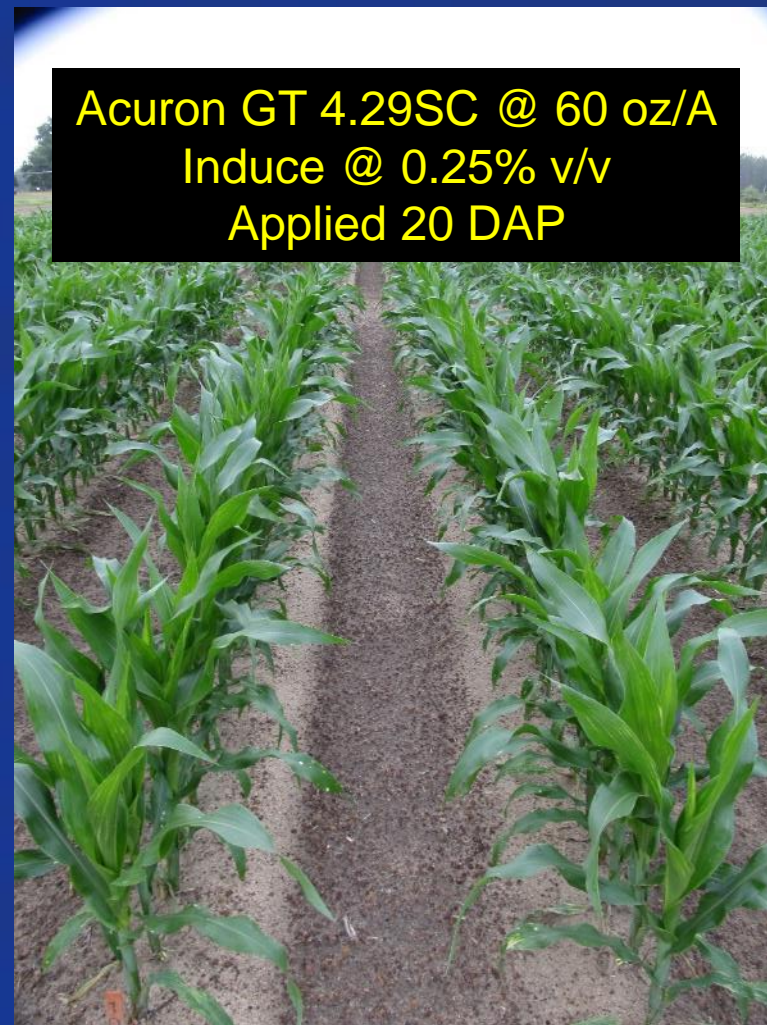


Impact Core 7.15EC @ 40 oz/A + Atrazine 4L @ 32 oz/A + Induce @ 0.25%v/v + AMS @ 2.5 lb/A



CN-07B-20  
April 30  
2 DAT

# Acuron GT - 2020



# Shieldex - 2020



Bicep Lite II Magnum 6SC @ 53 oz/A (PRE)

Shieldex 3.33SC @ 1 oz/A (26 DAP)

Atrazine 4L @ 16 oz/A (26 DAP)

AgriDex @ 1% v/v (26 DAP)



CN-14-20

May 27

47 DAP



# Field Corn Lay-By

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



# Post-Harvest Palmer Amaranth Populations Must be Managed!



# Palmer Amaranth Burndown - 2019 (AMAPA 1-6" tall)



NTC



Gramoxone 3SL @ 32 oz/A  
Tricor 4L @ 8 oz/A  
Induce @ 0.25% v/v

NC-01-19  
May 30  
10 DAT

**Tropical Spiderwort/Benghal Dayflower (TSW/BD) After Corn Harvest  
(need tillage and/or 2 apps of Gramoxone or 2,4-D or Aim)**



# Post-Harvest Control of TSW/BD with 2 Applications (14 d apart) of Gramoxone (paraquat)



# Questions/Comments?



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