

The background of the slide features a close-up, artistic photograph of corn cobs and their husks. The cobs are arranged vertically, with the kernels showing a mix of yellow and reddish-orange hues. The husks are partially peeled back, revealing the cobs. The overall color palette is dominated by the warm tones of the corn against a deep blue background.

2023 Field Corn Weed Control Update

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UNIVERSITY OF
GEORGIA

College of Agricultural &
Environmental Sciences

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?



Preplant Burndowns - 2022



NTC



Roundup P-MAX3 @ 22 oz/A
Aatrex 4L @ 32 oz/A
Agridex @ 1% v/v



Gramoxone 2SL @ 48 oz/A
Aatrex 4L @ 32 oz/A
Agridex @ 1% v/v



Glyphosate Rates

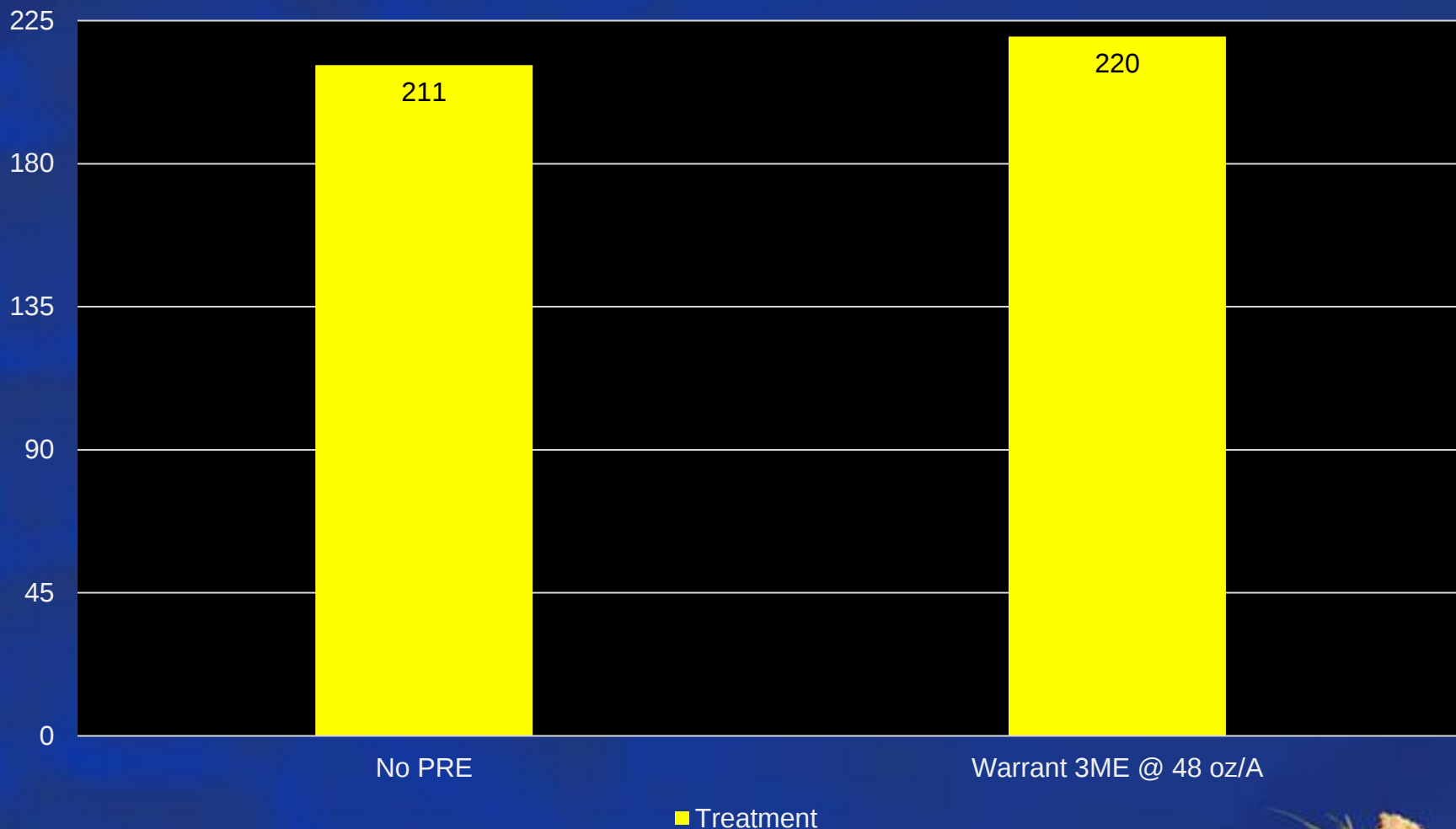
Glyphosate Formulation (lbs ai/gal)	Rate/A (oz) for 1.0 lb ai/A
3.6	35.6
3.64	35.2
3.97	32.2
4.0	32.0
5.07	25.2
5.4	23.7
5.5	23.3
5.83	22.0
5.88	21.8



PRE's in Field Corn?



PRE* Herbicide Effects on Field Corn Yield



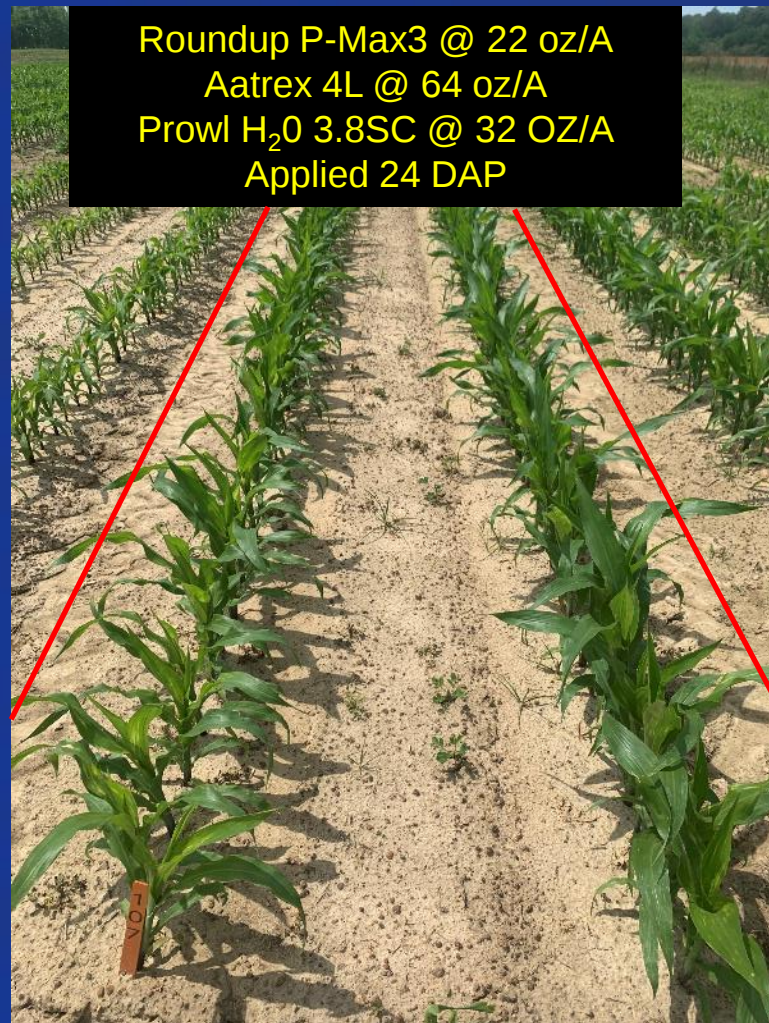
CN-01-22
LSD 0.10 = 6.53
CV = 1.44
*Averaged over 6 POST treatments.

Field Corn Weed Control – 2022

With Roundup



Field Corn Weed Control - 2022



CN-07-22
May 2
35 DAP
11 DAT

Field Corn Weed Control - 2022



NTC



Shieldex 3.33SC @ 1.0 oz/A
Aatrex 4L @ 32 oz/A
Roundup P-Max3 5.88SL @ 22 oz/A
Applied 23 DAP

CN-04-22
May 4
14 DAT

Shieldex @ 1.0 oz/A + Roundup P-Max3 @ 22 oz/A +
Aatrex @ 32 oz/A + Grounded @ 16 oz/A



CN-02-22
May 4
14 DAT

Field Corn Weed Control - 2022



NTC



 **EMPYROS™**

Empyros 3.82L @ 32 oz/A
Aatrex 4L @ 32 oz/A
Roundup P-Max3 5.88SL @ 22 oz/A
Applied 23 DAP

CN-04-22
May 4
14 DAT



Tolpyralate Herbicides for Field Corn

Trade Name	Company	Active Ingredients (lbs/gal)			
		s-metolachlor	atrazine	tolpyralate	nicosulfuron
Katagon™	Helm	--	--	1.0	1.0
Shieldex®	Summit Agro	--	--	3.33	--
Empyros™**	Helena	3.72	--	0.10	--
Empyros™ Triad**	Helena	1.75	1.75	0.043	--
Empyros™ Triad Flex**	Helena	2.47	0.93	0.048	--

***All Empyros formulations include a corn safener (benoxacor)*



Field Corn Weed Control - 2022



NTC



Laudis 3.5SC @ 3 oz/A
Roundup P-Max3 5.88SL @ 22 oz/A
Aatrex 4L @ 32 oz/A
Grounded @ 16 oz/A
Applied 23 DAP

CN-02-22
May 4
14 DAT

Field Corn Weed Control - 2022



NTC



Impact 2.8SC @ 0.75 oz/A
Roundup P-Max3 5.88SL @ 22 oz/A
Aatrex 4L @ 32 oz/A
HM9679A @ 16 oz/A
Applied 23 DAP

CN-02-22
May 4
14 DAT

Field Corn Weed Control - 2022



NTC



Halex GT 4.39SC @ 58 oz/A
Aatrex 4L @ 32 oz/A
HM9679A @ 16 oz/A
Applied 23 DAP

CN-02-22
May 4
14 DAT

Field Corn Weed Control - 2022



NTC



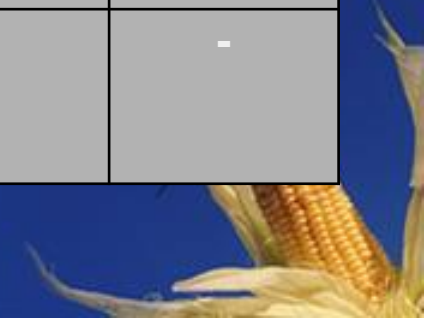
Acuron GT 4.295ZC @ 60 oz/A
AAtrex 4L @ 32 oz/A
Induce @ 0.25% v/v
POST (23 DAP)

CN-06-22
June 8
72 DAP



Comparison of Acuron, Acuron Flexi, Acuron GT, and Halex GT

Trade Name	Active Ingredients (lbs/gal) (WSSA/HRAC MOA)				
	glyphosate (9)	mesotrione (27)	bicyclopyrone (27)	S-metolachlor (15)	atrazine (5)
Acuron	-	0.240	0.060	2.14	1.0
Acuron Flexi	-	0.320	0.080	2.86	-
Acuron GT	2.00	0.200	0.095	2.00	-
Halex GT	2.09	0.209	-	2.09	-



Field Corn Weed Control – 2022

NO Roundup



Field Corn Weed Control - 2022



NTC



Impact 2.8SC @ 1.25 oz/A
Aatrex 4L @ 32 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
Agridex @ 1% v/v
Applied 23 DAT

CN-06-22
May 5
15 DAT

Field Corn Weed Control - 2022



NTC

CN-01-22
May 5
38 DAP



Revulin[®] Q

HERBICIDE

Revulin Q 51.2DG @ 3.5 oz/A
Aatrex 4L @ 64 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
Agridex @ 1% v/v
Applied 24 DAP

Field Corn Weed Control - 2022



NTC

CN-01-22
May 5
38 DAP



Callisto 4SC @ 3.0 oz/A
Aatrex 4L @ 64 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
Agridex @ 1% v/v
Applied 24 DAP

Field Corn Weed Control - 2022



NTC



Laudis 3.5SC @ 3.0 oz/A
Aatrex 4L @ 64 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
AgriDex @ 1% v/v
Applied 24 DAP

CN-01-22
May 5
38 DAP

Field Corn Weed Control - 2022



NTC

CN-01-22
May 5
38 DAP



Shieldex 3.33SC @ 1.0 oz/A
Aatrex 4L @ 64 oz/A
Prowl H₂O 3.8SC @ 32 oz/A
AgriDex @ 1% v/v
Applied 24 DAP



New(er) Products Being Tested

Not in UGA Pest Control Handbook (yet?)

❑ AMVAC

- ❑ *Sinate* (glufosinate + topramezone)
- ❑ *Impact Core* (topramezone + acetochlor)

❑ Corteva

- ❑ *Kyro* (encapsulated acetochlor + topramezone + clopyralid)
- ❑ *Resicore* (mesotrione + acetochlor + clopyralid)
- ❑ *Resicore XL* (mesotrione + encapsulated acetochlor + clopyralid)

❑ Syngenta

- ❑ *Acuron GT* (bicyclopyrone + s-metolachlor + mesotrione + glyphosate)
- ❑ *Acuron XR* (bicyclopyrone + s-metolachlor + mesotrione + atrazine)

❑ Helm

- ❑ *Katagon* (tolpyralate + nicosulfuron)
- ❑ *Helmet Maxx* (metolachlor + atrazine + mesotrione)

❑ Helena

- ❑ *Empyros* (tolpyralate + s-metolachlor)
- ❑ *Empyos Triad* (tolpyralate + s-metolachlor + atrazine)
- ❑ *Empyros Triad Flex* (tolpyralate + s-metolachlor + atrazine)

❑ Valent

- ❑ *Maverick* (mesotrione + pyroxasulfone + clopyralid)

❑ Summit Agro

- ❑ *Restraint* (tolpyralate + acetochlor + dichlormid)



MG in Field Corn



Field Corn Lay-By

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



Tropical Spiderwort/Benghal Dayflower



- ❑ Bury seed!
- ❑ Residuals-Group 15's
 - ❑ *Dual Magnum, Outlook, Warrant, Zidua, Anthem Max*
- ❑ POST – 2,4-D
- ❑ Directed
 - ❑ *Aim, Paraquat, Evik*
- ❑ Post-Harvest
 - ❑ *2,4-D, Aim, Paraquat*

Tropical Spiderwort - HPPD's - 2022



Laudis 3.5SC @ 3 oz/A
Agridex @ 1% v/v



Impact 2.87SC @ 1.25 oz/A
Agridex @ 1% v/v



Callisto 4SC @ 3 oz/A
Agridex @ 1% v/v

Tropical Spiderwort Control in Field Corn Control with Lay-Bys (8 DAT)



Untreated



Aim 2EC @ 1.5 ozs/A
Agrioil @ 1% v/v



Gramoxone 3SC @ 1 pt/A
80/20 @ 0.25% v/v



Evik 80WP @ 2 lb/A
80/20 @ 0.5% v/v

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



Post-Harvest Weed Control

Gramoxone 2L @ 3 pts/A + Tricor 4L @ 8 oz/A + NIS @ 0.25% v/v



09/24/21
Day of application

Post-Harvest Weed Control

Gramoxone 2L @ 3 pts/A + Tricor 4L @ 8 oz/A + NIS @ 0.25% v/v



10/22/21
28 DAT

Field Corn Weed Control - Summary

- ❑ *Start Clean*
- ❑ Use a PRE
- ❑ Timely POST (V3-V5)
 - ❑ *need something else with Roundup + ATZ*
- ❑ Lay-By for MG
- ❑ Post-Harvest
 - ❑ *pigweed*
 - ❑ *dayflower*



Questions/Comments?



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