Yuma Celery Trial

Fall 2024

RDX-N

Robert Masson
Assistant Ag Extension Agent

THE UNIVERSITY OF ARIZONA
Cooperative Extension
Yuma County

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Transplanted: 10/21/24
Wet Date: 10/22
Phos-Acid (Drip): 10/29 (13.3 Gal/AC)
50# N Full or 25# N Reduced – UAN-32 (Drip) 11/12
50# N Full or 25# N Reduced– UAN-32 (Drip) 11/25
50# N Full or 25# N Reduced – UAN -32 (Drip) 12/18
50# N Full or 25# N Reduced – UAN – 32 (Drip) 1/31

Harvest: 3/13

Trt ine	Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	Appl Description	Appl Timing	Appl Amount	Amou Unit
1	1	FERT	UAN-32 (100%N) GSP			L		14.2	GAL/A			ABCD				
2	2	FERT	UAN-32 (100%N+Prod)			L		14.2	GAL/A			ABCD				
3	2	ADDI	RDX-N (100%N+Prod)			L		28	OZ/A			ABCD				
4	3	FERT	UAN-32 (50%N) GSP			L		7.1	GAL/A			ABCD				
5	4	FERT	UAN-32 (50%N+Prod)			L		7.1	GAL/A			ABCD				
6	4	ADDI	RDX-N (50%N+Prod)			L		14	OZ/A			ABCD				
7																
8																
9																

Cleanup crop of sudangrass grown during the summer with no ferts. Mown and biomass removed.

42” Raised Beds
Twin plant lines 6” spacing
Transplanted Celery
Variety: Enterprise Organic KC241379

Full fertilizer 200 #/AC
Reduced fertilizer 100#/AC

Product:
Full 28 floz/ac
Reduced 14 floz/ac

REPORT NUMBER
24-276-0217
COMPLETED DATE
Oct 8, 2024
ACCOUNT
57161
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TODAY'S DATE
Oct 08, 2024

Robert Masson

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Suite 102
Yuma AZ 85364-6928

IDENTIFICATION
THE UNIVERSITY OF ARIZONA COOP
YAC
ICEBERG LETTUCE

SOIL ANALYSIS REPORT

INFO SHEET: 1726219

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I.	PHOSPHORUS			POTASSIUM (NEUTRAL AMMONIUM ACETATE EXCHANGEABLE)	MAGNESIUM (NEUTRAL AMMONIUM ACETATE EXCHANGEABLE)	CALCIUM (NEUTRAL AMMONIUM ACETATE EXCHANGEABLE)	SODIUM (NEUTRAL AMMONIUM ACETATE EXCHANGEABLE)	pH		CATION EXCHANGE CAPACITY C.E.C.	PERCENT BASE SATURATION (COMPUTED)				
436			P_1 (WEAK BRAY) 1:7	P_2 (STRONG BRAY) 1:7	OLSEN BICARBONATE P	K	Mg	Ca	Na	SOIL pH 1:1	BUFFER INDEX		% K	% Mg	% Ca	% H	% Na
		percent RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE			meq/100g					
83123	Southwest	1.4 VL	5 VL	107 VH	13 M	408 VH	892 VH	4118 M	356 VH	8.4		30.6	3.4	24.3	67.2	0.0	5.1
83124	SouthEast	1.6 L	9 L	115 VH	12 M	390 VH	804 VH	3948 H	415 VH	8.2		29.2	3.4	22.9	67.5	0.0	6.2
83125	Northeast	1.5 VL	13 L	106 VH	13 M	420 VH	911 VH	4322 M	418 VH	8.3		32.1	3.4	23.7	67.2	0.0	5.7
83126	Northwest	1.6 L	9 L	114 VH	12 M	418 VH	915 VH	4268 H	368 VH	8.3		31.6	3.4	24.1	67.4	0.0	5.1

LAB NUMBER	NITRATE-N (FIA) SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A	SULFUR S ICAP		ZINC Zn DTPA		MANGANESE Mn DTPA		IRON Fe DTPA		COPPER Cu DTPA		BORON B SORB. DTPA		EXCESS LIME RATE	SOLUBLE SALTS 1:1	
436	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)		ppm RATE		ppm RATE		ppm RATE		ppm RATE		ppm RATE		ppm RATE			mmhos/cm RATE	
83123	5	12	0-8							12	86 VH		2.7 M		6 L		38 VH		2.0 VH		0.9 M		H	1.0 L	
83124	37	89	0-8							89	124 VH		1.8 M		3 VL		20 H		1.9 VH		1.1 M		H	1.4 M	
83125	21	50	0-8							50	105 VH		1.5 M		12 M		41 VH		1.7 H		1.0 M		H	1.3 M	
83126	4	10	0-8							10	96 VH		2.6 M		6 L		21 H		1.7 H		0.9 M		H	1.1 M	

REV.10/17

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ADDITIONAL SOIL ANALYSIS

Labnum *436*	Sample ID	Total Nitrogen LECO ppm
83123	Southwest *Depth: 0-8*	578
83124	SouthEast *Depth: 0-8*	567
83125	Northeast *Depth: 0-8*	771
83126	Northwest *Depth: 0-8*	698

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SODIUM ADSORPTION RATIO REPORT

Method Lab Number	Sample Id	CALCULATED Sodium Adsorption Ratio	SATURATED PASTE EXTRACTION Sodium (Water Soluble) mg/L	Magnesium (Water Soluble) mg/L	Calcium (Water Soluble) mg/L
Units					
43683123	Southwest	3.1	86	12	37
43683124	SouthEast	3.8	156	25	87
43683125	Northeast	2.3	51	7	24
43683126	Northwest	3.2	89	12	40

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SOIL FERTILITY RECOMMENDATIONS (POUNDS PER ACRE)

YOUR SAMPLE NUMBER (LAB NUMBER)	INTENDED CROP	YIELD GOAL	PREVIOUS CROP	SOIL AMENDMENTS					N NITROGEN	P_2O_5 PHOSPHATE	K_2O POTASH	Mg MAGNE-SIUM	S SULFUR	Zn ZINC	Mn MANGA-NESE	Fe IRON	Cu COPPER	B BORON
				LIME LBS/A OF	LIME TON	GYPSUM TONS/A		ELEMENTAL SULFUR LBS/A										
Southwest (43683123)	LETTUCE	BEST	RYE- bu			0.9	OR	160	125	100	--	--	--	--	1.7	--	--	--

REV. 12/03

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LAWN AND GARDEN

ANALYTICAL LABORATORY FINDINGS

SAMPLE IDENTIFICATION		Southwest				
LABORATORY NUMBER		43683123				
ANALYTE	UNITS	RESULTS	LOW	MEDIUM	OPTIMUM	V. HIGH
NITROGEN						
ORGANIC MATTER	%	1.4				
NITRATE-N	ppm	5				
PHOSPHORUS	ppm	18				
POTASSIUM	ppm	408				
MAGNESIUM	ppm	892				
MICRO-NUTRIENTS						
SULFUR	ppm	86				
ZINC	ppm	2.7				
MANGANESE	ppm	6				
IRON	ppm	38				
COPPER	ppm	2.0				
BOORON	ppm	0.9				
CALCIUM	ppm	4118				
SODIUM	ppm	356				
SOLUBLE SALTS	mmhos/cm	1.0				
EXCESS LIME RATE		H				
pH		8.4				
BUFFER INDEX						
C.E.C.	meq/100g	30.6				

MIDWEST SUGGESTIONS FOR LETTUCE

POUNDS PER	100 sq. ft.	1000 sq. ft.	Acre	
SUGGESTED FERTILITY GUIDELINES				
NITROGEN (N)	0.29	2.87	125	
PHOSPHATE (P_2O_5)	0.23	2.30	100	
POTASH (K_2O)	--	--	--	
MAGNESIUM (Mg)	--	--	--	
SULFUR (S)	--	--	--	
ZINC (Zn)	--	--	--	
MANGANESE (Mn)	0.00	0.04	1.7	
IRON (Fe)	--	--	--	
COPPER (Cu)	--	--	--	*Surface Nitrate Depth: 0-8*
BORON (B)	--	--	--	
SUGGESTED AMENDMENT GUIDELINES				
LIME				
ELEMENTAL SULFUR	0.4 OR	4 OR	160 OR	
GYPSUM	4.1	41.3	1800	

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SOIL HEALTH ASSESSMENT

ANALYTICAL LABORATORY FINDINGS

SAMPLE IDENTIFICATION		Southwest	
LABORATORY NUMBER		43683123	
ANALYTE	UNITS	RESULTS	LOW MEDIUM OPTIMUM VERY HIGH
H3A EXTRACTION			
ORTHOPHOSPHATE-P	ppm	39.7	
PHOSPHORUS	ppm	43	
POTASSIUM	ppm	125	
MAGNESIUM	ppm	441	
CALCIUM	ppm	4172	
SODIUM	ppm	331	
IRON	ppm	22	
ALUMINUM	ppm	58	
WATER SOLUBLE			
NITRATE-N	ppm	7	
AMMONIACAL-N	ppm	1.2	
ORTHOPHOSPHATE-P	ppm	3.19	
CARBON	ppm	207.0	
TOTAL NITROGEN	ppm	14.6	
1 DAY CO_2C BURST		14.00	
ORGANIC CARBON	ppm	207.0	
ORGANIC NITROGEN	ppm	6.4	
ORGANIC C/N RATIO		32.3	

ADDITIONAL NITROGEN CREDIT IDENTIFIED VIA HANEY TEST: **N/A. Sample depth not 0-6"**

NITROGEN RECOMMENDATIONS MAY INCLUDE ADDITIONAL NITROGEN CREDITS BASED ON PREVIOUS CROPS AND NITROGEN MINERALIZATION RATES.

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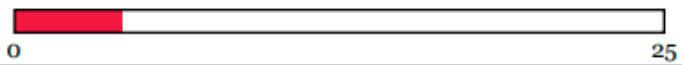
SOIL HEALTH CALCULATION



The **H3A Soil Extractant** was developed by Haney*. This extract is designed to mimic organic acids produced by living plant root systems. These organic acids increase nutrient availability in the root zone.

The **Water Soluble Extract** provides a snapshot of nutrients that are immediately available to the plants.

The **CO_2 Burst** test is very good indicator of soil health. This test measures the amount of CO_2 naturally released from the soil due to the activity of the soil microbes through microbial respiration. This test is very dependent on the amount of carbon that is available to the soil microbes and the form that the carbon is in. As the available carbon increases in your soil the Microbial respiration will increase.

Organic Carbon is the available total water extractable organic carbon from your soil. This pool of carbon is roughly 80 times smaller than the Soil Organic Matter. The organic carbon pool reflects the energy/food source that is driving the soil microbes.

The **Organic Nitrogen** pool is replenished by fresh plant residues, manure, composts, and dying soil microbes.

The **Organic C/N ratio** is a critical component of the nutrient cycle. A soil C/N ratio above 20 generally indicates that Nitrogen will be tied up and not available to plants. The ideal range for the Organic C/N ratio will be from 8:1 to 15:1.

The **Soil Health Calculation** uses the CO_2 Burst, Organic Carbon, Organic Nitrogen, and the C/N ratio to generate the soil health number. This calculation looks at the balance of soil carbon and nitrogen and their relationship to microbial activity. This number represents the overall health of your system. Soil values will range from 0 to 25. A soil with a value below 7 would be considered low. You want to see this number increase as you make changes and adjustments. Keeping track of this number will allow you to gauge the effects of your management practices over time.

*Modifications to the New Soil Extractant H3A-1: A Multinutrient Extractant
R.L. Haney (a); E.B. Haney (b); L.R. Hossner (c); J.G. Arnold (a)

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SOIL HEALTH ASSESSMENT

ANALYTICAL LABORATORY FINDINGS

SAMPLE IDENTIFICATION		SouthEast	
LABORATORY NUMBER		43683124	
ANALYTE	UNITS	RESULTS	LOW MEDIUM OPTIMUM VERY HIGH
H3A EXTRACTION			
ORTHOPHOSPHATE-P	ppm	38.6	
PHOSPHORUS	ppm	42	
POTASSIUM	ppm	135	
MAGNESIUM	ppm	450	
CALCIUM	ppm	4352	
SODIUM	ppm	419	
IRON	ppm	21	
ALUMINUM	ppm	60	
WATER SOLUBLE			
NITRATE-N	ppm	46	
AMMONIACAL-N	ppm	1.1	
ORTHOPHOSPHATE-P	ppm	2.28	
CARBON	ppm	178.9	
TOTAL NITROGEN	ppm	58.7	
1 DAY CO_2C BURST		11.00	
ORGANIC CARBON	ppm	178.9	
ORGANIC NITROGEN	ppm	11.6	
ORGANIC C/N RATIO		15.4	

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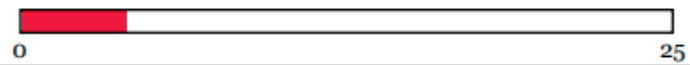

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SOIL HEALTH ASSESSMENT

ANALYTICAL LABORATORY FINDINGS

SAMPLE IDENTIFICATION		Northeast	
LABORATORY NUMBER		43683125	
ANALYTE	UNITS	RESULTS	LOW MEDIUM OPTIMUM VERY HIGH
H3A EXTRACTION			
ORTHOPHOSPHATE-P	ppm	35.9	
PHOSPHORUS	ppm	39	
POTASSIUM	ppm	135	
MAGNESIUM	ppm	469	
CALCIUM	ppm	4331	
SODIUM	ppm	407	
IRON	ppm	23	
ALUMINUM	ppm	67	
WATER SOLUBLE			
NITRATE-N	ppm	28	
AMMONIACAL-N	ppm	1.0	
ORTHOPHOSPHATE-P	ppm	2.32	
CARBON	ppm	182.9	
TOTAL NITROGEN	ppm	38.1	
1 DAY CO_2C BURST		8.00	
ORGANIC CARBON	ppm	182.9	
ORGANIC NITROGEN	ppm	9.1	
ORGANIC C/N RATIO		20.1	

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SOIL HEALTH CALCULATION

3.5

0 — 25

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SOIL HEALTH ASSESSMENT

ANALYTICAL LABORATORY FINDINGS

SAMPLE IDENTIFICATION		Northwest	
LABORATORY NUMBER		43683126	
ANALYTE	UNITS	RESULTS	LOW MEDIUM OPTIMUM VERY HIGH
H3A EXTRACTION			
ORTHOPHOSPHATE-P	ppm	38.2	
PHOSPHORUS	ppm	41	
POTASSIUM	ppm	134	
MAGNESIUM	ppm	462	
CALCIUM	ppm	4213	
SODIUM	ppm	362	
IRON	ppm	22	
ALUMINUM	ppm	66	
WATER SOLUBLE			
NITRATE-N	ppm	5	
AMMONIACAL-N	ppm	1.1	
ORTHOPHOSPHATE-P	ppm	3.07	
CARBON	ppm	218.6	
TOTAL NITROGEN	ppm	12.9	
1 DAY CO_2C BURST		12.00	
ORGANIC CARBON	ppm	218.6	
ORGANIC NITROGEN	ppm	6.8	
ORGANIC C/N RATIO		32.2	

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Irrigation

Irrigation Date	Type	Irrigation Hours	Water Used in Full Water Trts (AC IN)
10/21	Sprinkler	12	1.2
10/22	Sprinkler	12	1.2
10/23	Sprinkler	8	0.8
10/29	Drip	3	0.6
10/31	Sprinkler	4	0.4
11/11	Drip	5	0.9
11/19	Drip	5	0.9
11/25	Manifold installation		
11/25	Drip	2	0.4
12/1	Drip	4	0.7
15/5	Drip	6	1.1
12/9	Drip	5	0.9
12/13	Drip	4	0.7
12/17	Drip	5	0.9
12/25	Drip	4	0.7
Page Total		**79**	**11.4**

Sprinkler rate 0.1 IN/HR
Drip rate 0.186 Acre IN/HR

Irrigation

Irrigation Date	Type	Irrigation Hours	Water Used in Full Water Trts (AC IN)
1/3/25	Drip	4	0.7
1/13	Drip	4	0.7
1/20	Drip	4	0.7
1/24	Drip	6	1.1
1/30	Drip	4	0.7
2/7	Drip	4	0.7
2/13	Drip	4	0.7
2/18	Drip	4	0.7
2/26	Drip	4	0.7
3/4/25	Drip	4	0.7
3/6	Drip	4	0.7
3/13	Drip	4	0.7
Page Sum		**50**	**8.8**
Grand Total		**129**	**20.2**

Sprinkler rate 0.1 IN/HR
Drip rate 0.186 Acre IN/HR

Trial Details

Celery grown at full N fertilizer and reduced N fertilizer rate.
Trt 1: UTC Full N
Trt 2: RDX-N Full N
Trt 3: UTC Reduced N
Trt 4: RDX-N Reduced N

Dec-21-2024 (T11 RDX-N Celery Fall 24)

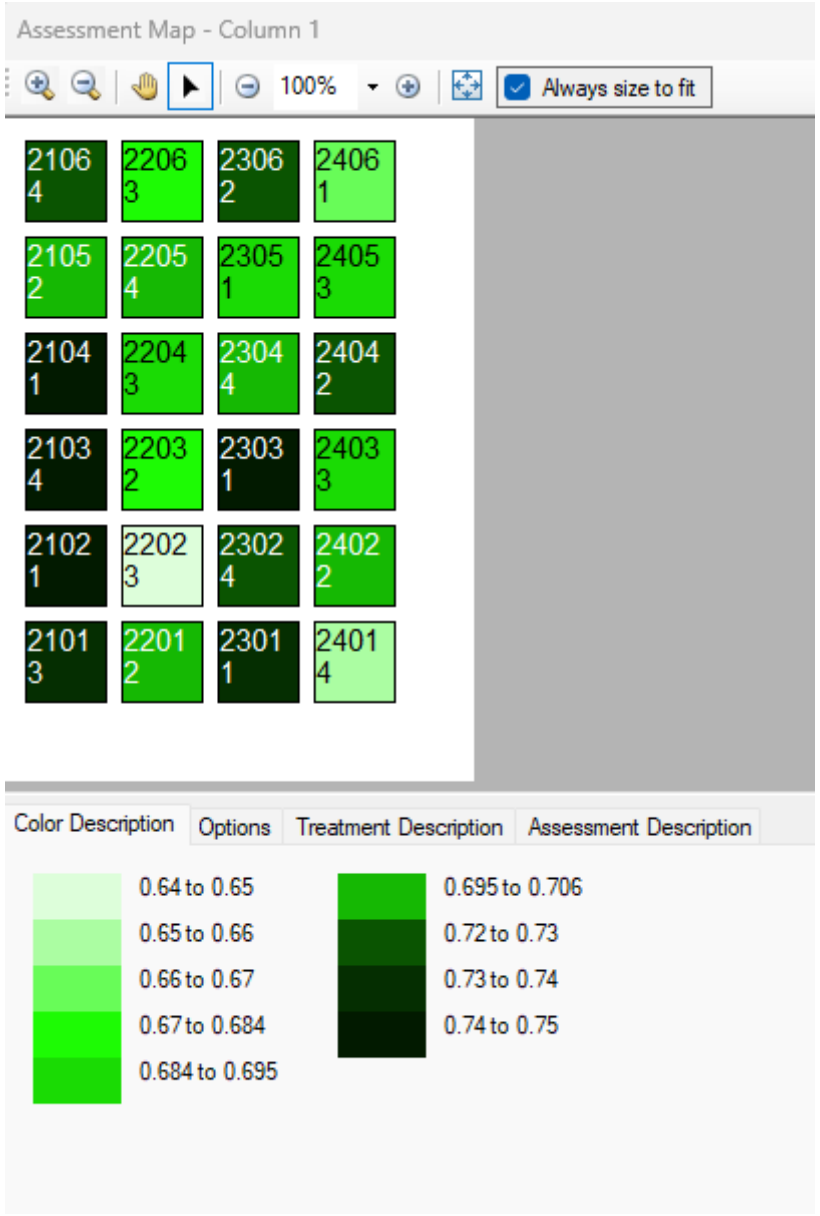
University of Arizona

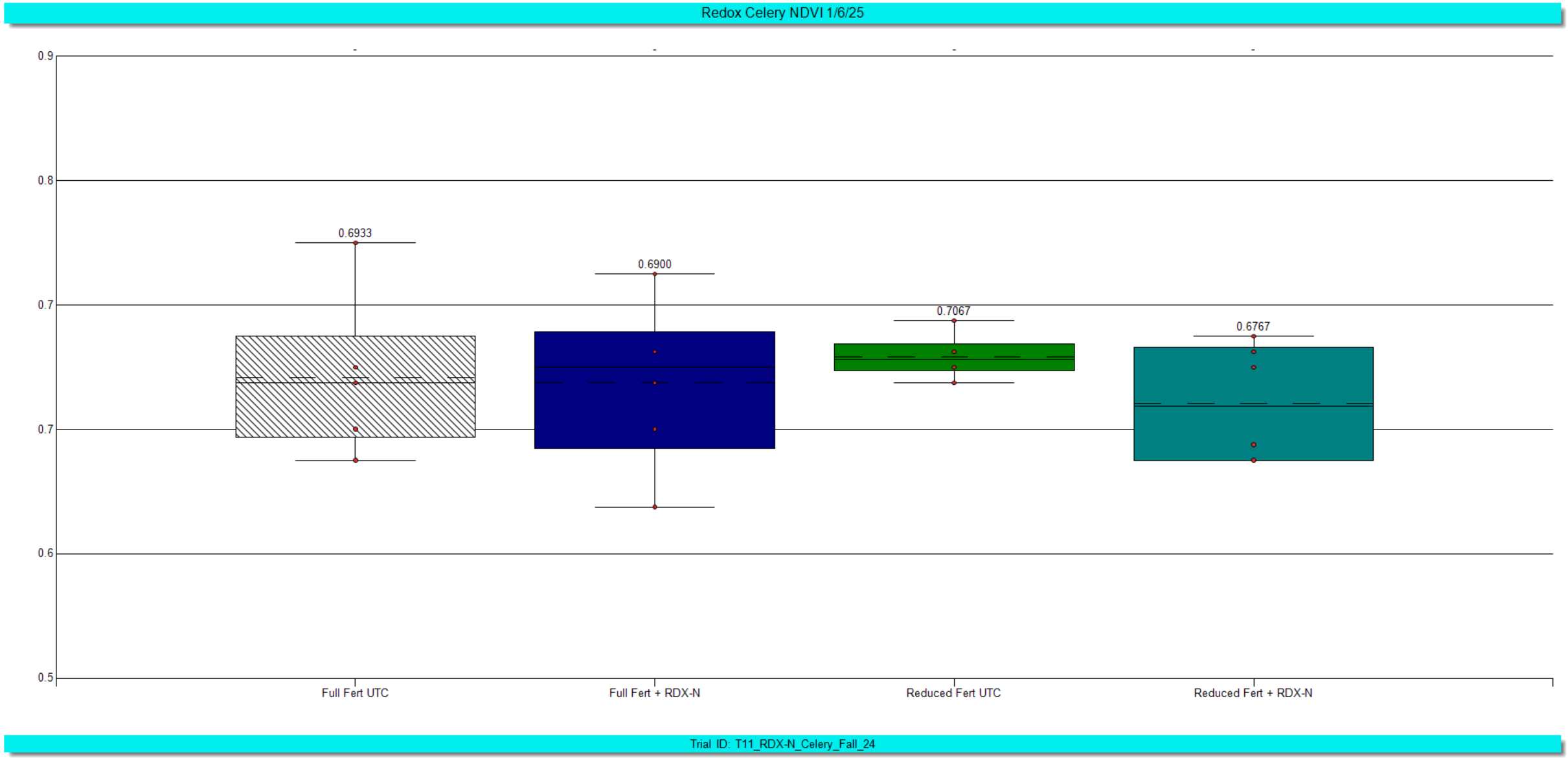
Trial ID: T11_RDX-N_Celery_Fall_24
Protocol ID: T11_RDX-N_Celery_Fall_24 Location: Yuma Arizona Trial Year: 2024
Project ID: T11_RDX-N_Celery_Fall_24
Study Director: Robert Masson Sponsor Contact:
Investigator:

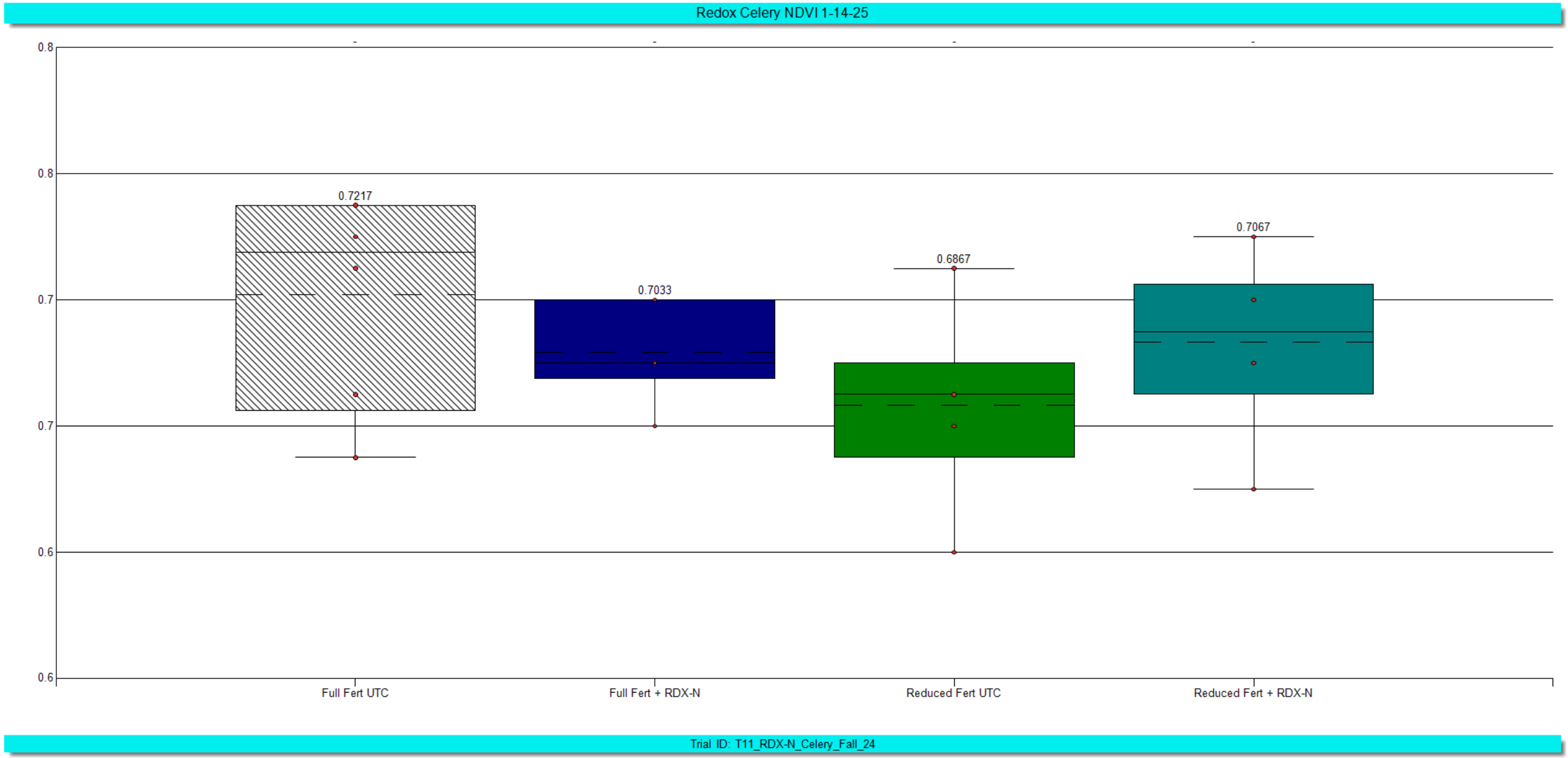
Trial Map Treatment Description

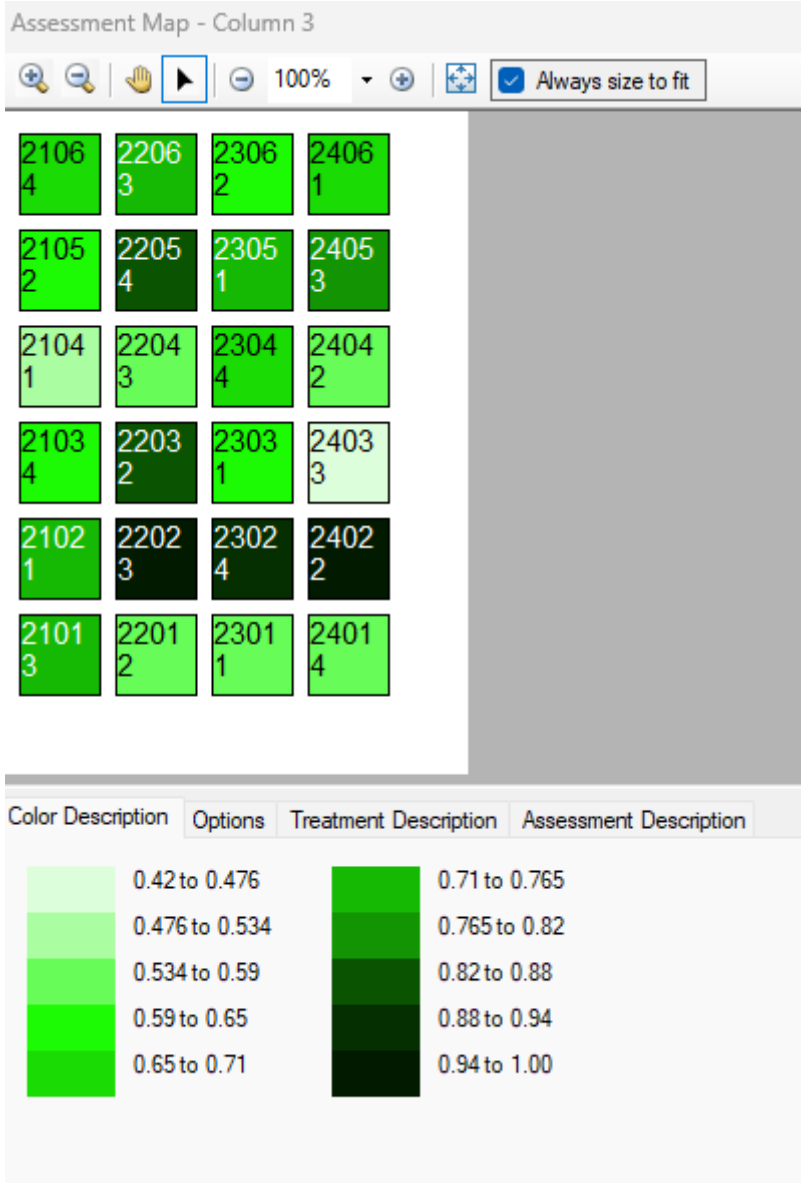
Trt	Code	Description
1	CHK	Full Fert UTC
2		Full Fert + RDX-N
3		Reduced Fert UTC
4		Reduced Fert + RDX-N

Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Description	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	Ap Descr
1	FERT	UAN-32 (100%N) GSP			L		14.2	GAL/A			ABCD	
2	FERT	UAN-32 (100%N+Prod)			L		14.2	GAL/A			ABCD	
2	ADDI	RDX-N (100%N+Prod)			L		28	OZ/A			ABCD	
3	FERT	UAN-32 (50%N) GSP			L		7.1	GAL/A			ABCD	
4	FERT	UAN-32 (50%N+Prod)			L		7.1	GAL/A			ABCD	
4	ADDI	RDX-N (50%N+Prod)			L		14	OZ/A			ABCD	

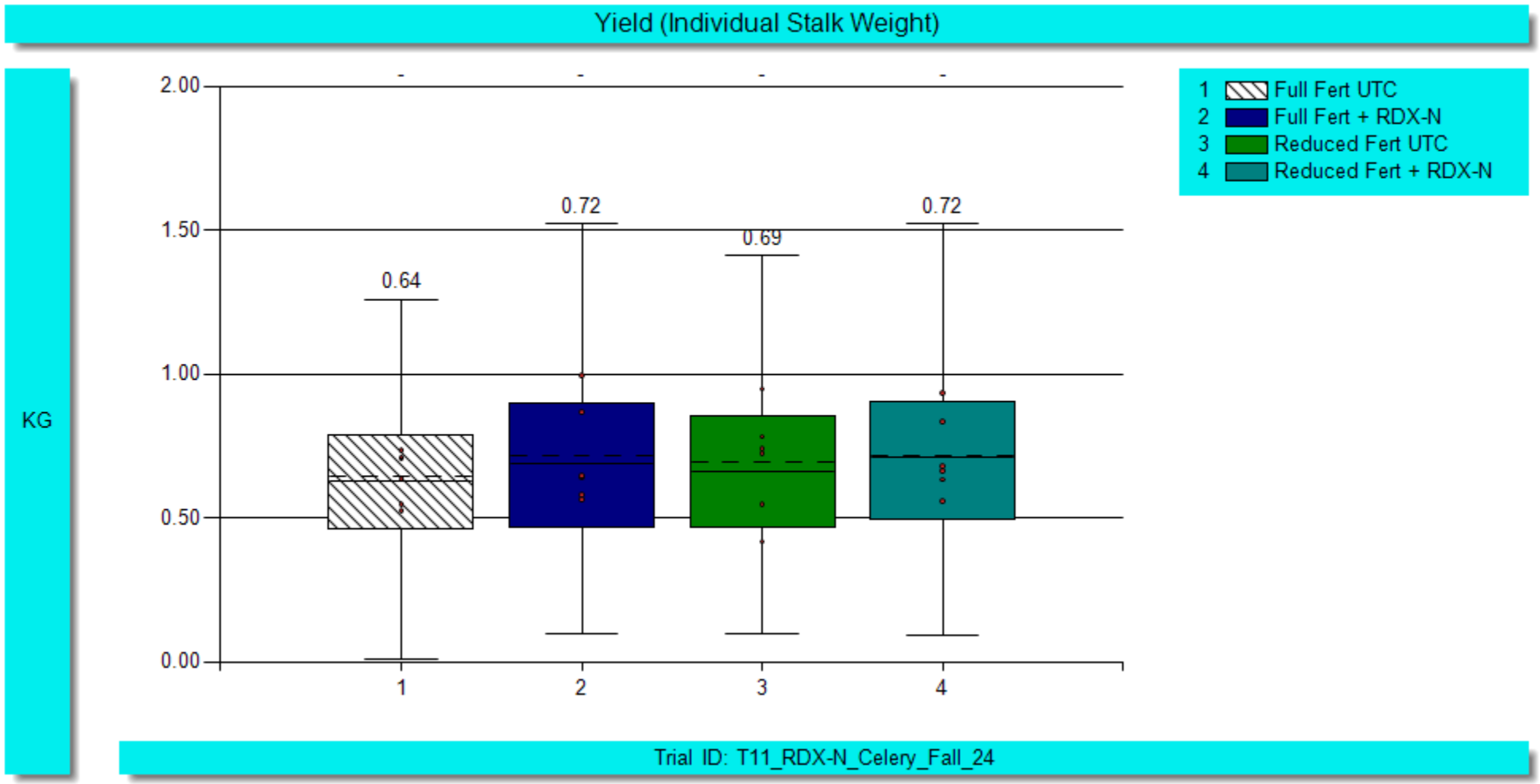

Assessment Map - Column 1
100%
Always size to fit
21064
22063
23062
24061
21052
22054
23051
24053
21041
22043
23044
24042
21034
22032
23031
24033
21021
22023
23024
24022
21013
22012
23011
24014
Color Description
Options
Treatment Description
Assessment Description
0.64 to 0.65
0.65 to 0.66
0.66 to 0.67
0.67 to 0.684
0.684 to 0.695
0.695 to 0.706
0.72 to 0.73
0.73 to 0.74
0.74 to 0.75


Redox Celery NDVI 1/6/25
0.9
0.8
0.7
0.7
0.6
0.5
0.6933
0.6900
0.7067
0.6767
Full Fert UTC
Full Fert + RDX-N
Reduced Fert UTC
Reduced Fert + RDX-N
Trial ID: T11_RDX-N_Celery_Fall_24

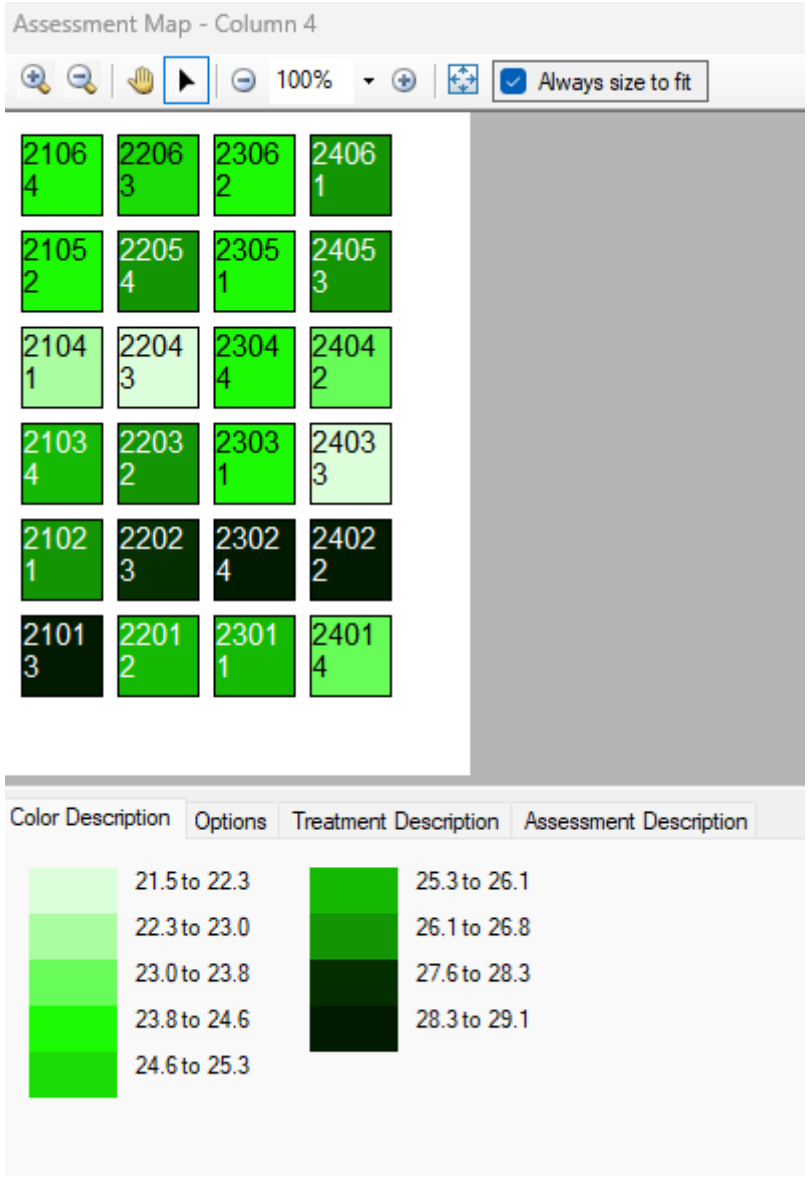

Redox Celery NDVI 1-14-25
0.8
0.8
0.7
0.7
0.6
0.6
0.7217
0.7033
0.6867
0.7067
Full Fert UTC
Full Fert + RDX-N
Reduced Fert UTC
Reduced Fert + RDX-N
Trial ID: T11_RDX-N_Celery_Fall_24


Assessment Map - Column 3
100%
Always size to fit
21064
22063
23062
24061
21052
22054
23051
24053
21041
22043
23044
24042
21034
22032
23031
24033
21021
22023
23024
24022
21013
22012
23011
24014
Color Description
Options
Treatment Description
Assessment Description
0.42 to 0.476
0.476 to 0.534
0.534 to 0.59
0.59 to 0.65
0.65 to 0.71
0.71 to 0.765
0.765 to 0.82
0.82 to 0.88
0.88 to 0.94
0.94 to 1.00

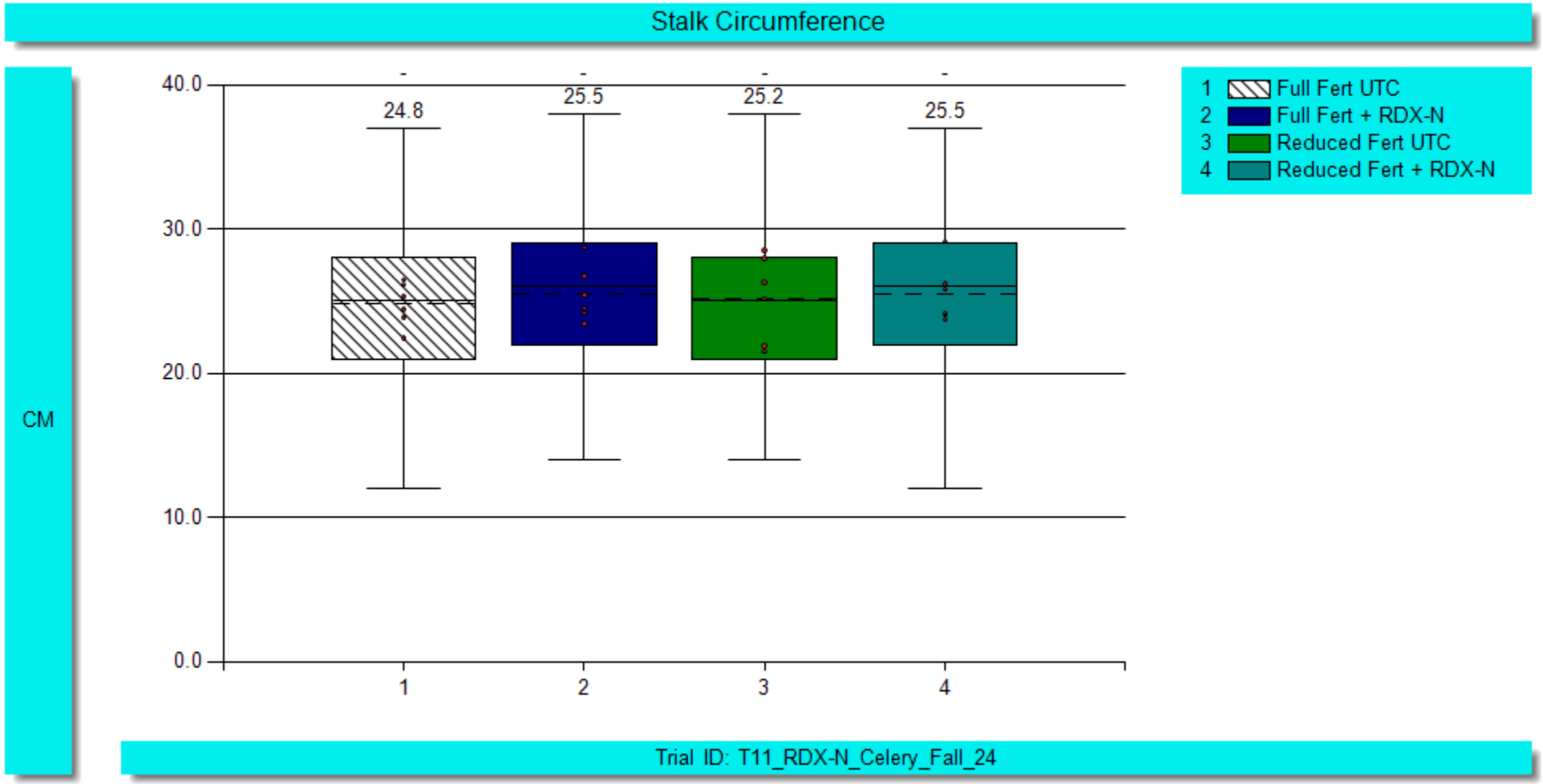
Col 3


Yield (Individual Stalk Weight)
KG
2.00
1.50
1.00
0.50
0.00
0.64
0.72
0.69
0.72
1
2
3
4
1 Full Fert UTC
2 Full Fert + RDX-N
3 Reduced Fert UTC
4 Reduced Fert + RDX-N
Trial ID: T11_RDX-N_Celery_Fall_24

Col 3

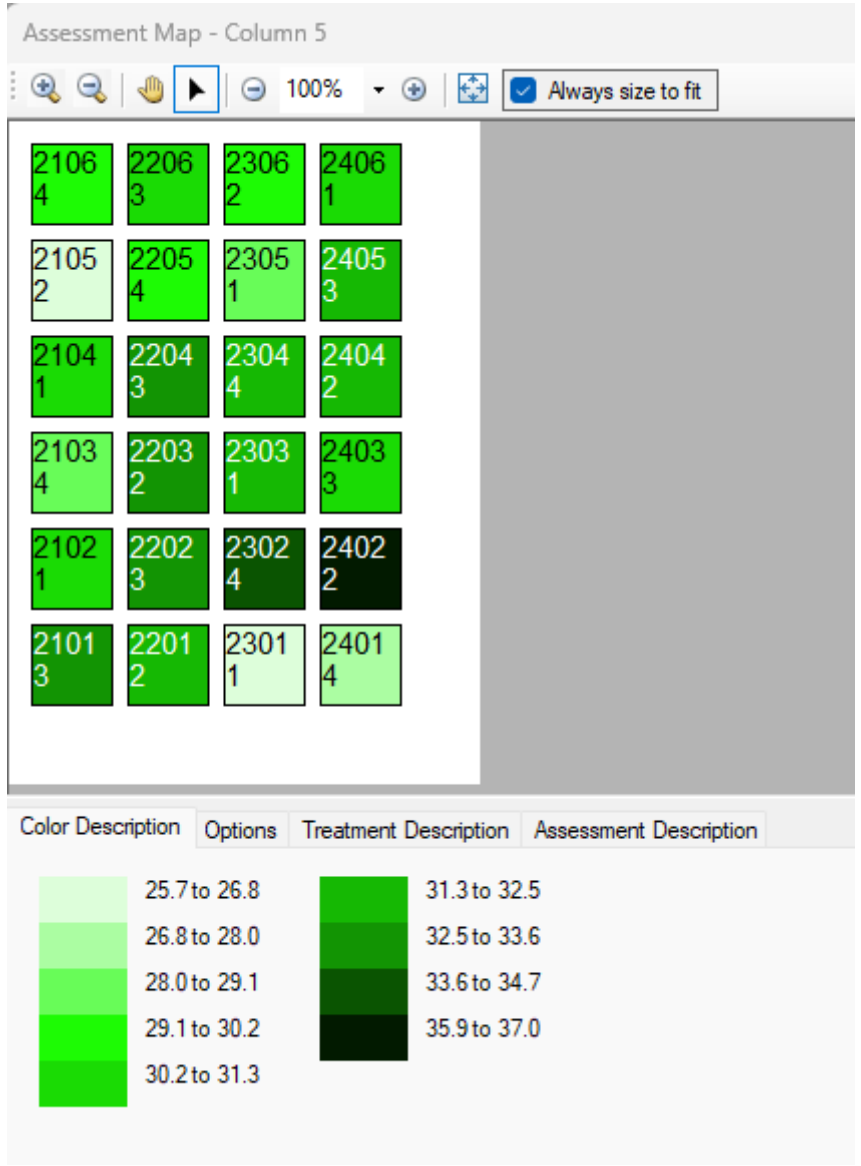

Assessment Map - Column 4
100%
Always size to fit
21064
22063
23062
24061
21052
22054
23051
24053
21041
22043
23044
24042
21034
22032
23031
24033
21021
22023
23024
24022
21013
22012
23011
24014
Color Description
Options
Treatment Description
Assessment Description
21.5 to 22.3
22.3 to 23.0
23.0 to 23.8
23.8 to 24.6
24.6 to 25.3
25.3 to 26.1
26.1 to 26.8
27.6 to 28.3
28.3 to 29.1

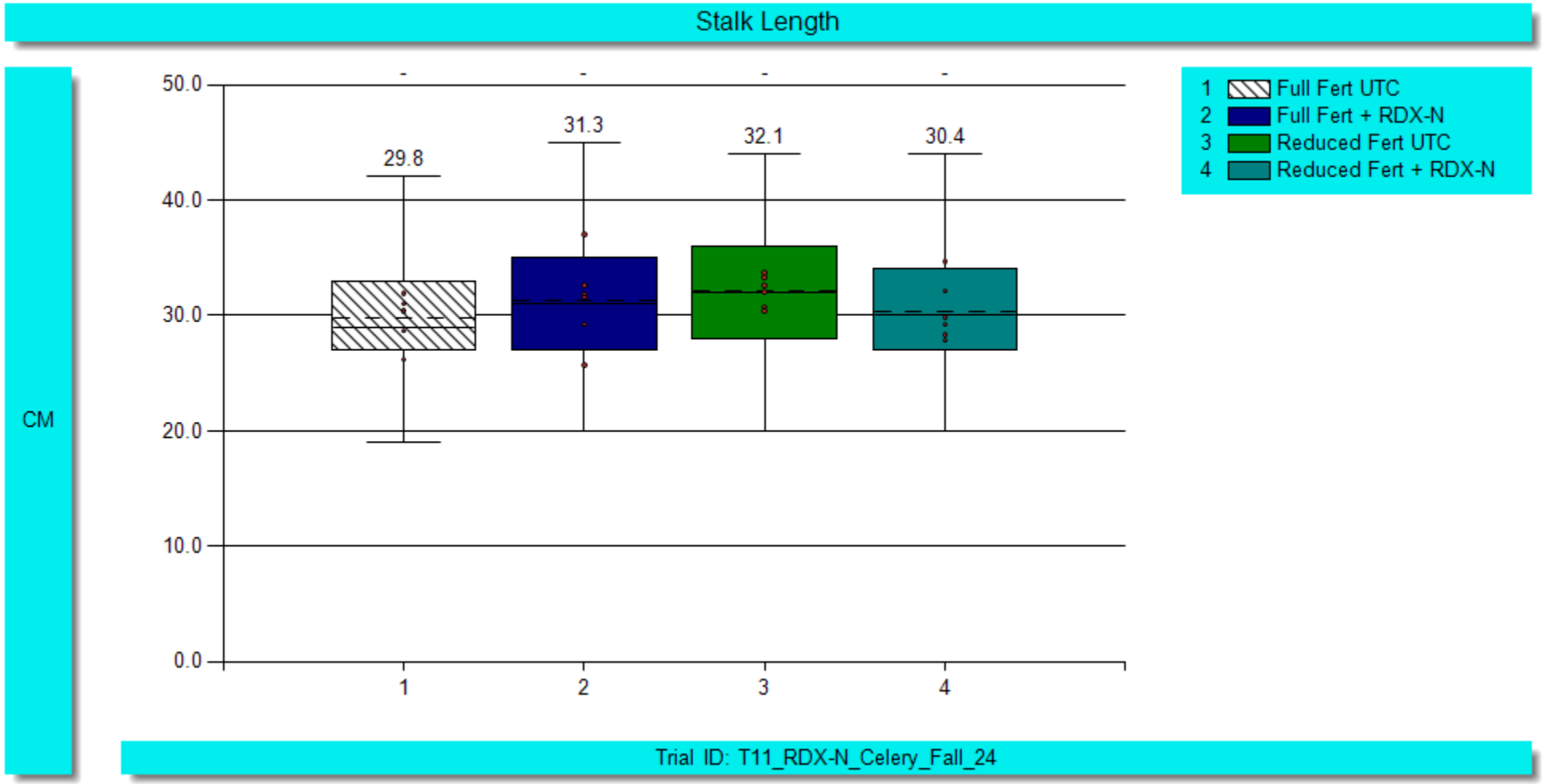
Col 4


Stalk Circumference
CM
40.0
30.0
20.0
10.0
0.0
24.8
25.5
25.2
25.5
1
2
3
4
1 Full Fert UTC
2 Full Fert + RDX-N
3 Reduced Fert UTC
4 Reduced Fert + RDX-N
Trial ID: T11_RDX-N_Celery_Fall_24

Col 4

Col 5


Assessment Map - Column 5
100%
Always size to fit
21064
22063
23062
24061
21052
22054
23051
24053
21041
22043
23044
24042
21034
22032
23031
24033
21021
22023
23024
24022
21013
22012
23011
24014
Color Description
Options
Treatment Description
Assessment Description
25.7 to 26.8
26.8 to 28.0
28.0 to 29.1
29.1 to 30.2
30.2 to 31.3
31.3 to 32.5
32.5 to 33.6
33.6 to 34.7
35.9 to 37.0


Stalk Length
CM
50.0
40.0
30.0
20.0
10.0
0.0
29.8
31.3
32.1
30.4
1
2
3
4
1 Full Fert UTC
2 Full Fert + RDX-N
3 Reduced Fert UTC
4 Reduced Fert + RDX-N
Trial ID: T11_RDX-N_Celery_Fall_24

Col 5

University of Arizona

Trial ID: T11_RDX-N_Celery_Fall_24
Protocol ID: T11 RDX-N Celery Fall 24 Location: Yuma Arizona Trial Year: 2024
Project ID: T11 RDX-N Celery Fall 24
Study Director: Robert Masson Sponsor Contact:
Investigator:

Rating Date							Mar-13-2025		
SE Group No.							1	2	3
Rating Min/Max/Interval							0.01, 2, -	1, 100, -	1, 60, -
Number of Subsamples							45	45	45
Description							Yield	Stalk Circumfer>	Stalk Length
Number of Decimals							2	1	1
Data Entry Date							Mar-24-2025	Mar-24-2025	Mar-24-2025
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot		3	4	5
1	UAN-32 (100%N) GSP	14.2	gal/a	ABCD	2301		0.55	25.3	26.2
					2102		0.74	26.5	30.4
					2303		0.64	23.9	32.0
					2104		0.52	22.4	31.1
					2305		0.71	24.4	28.7
					2406		0.70	26.2	30.2
						Mean =	0.64	24.8	29.8
2	UAN-32 (100%N+Prod)	14.2	gal/a	ABCD	2201		0.58	25.4	31.6
	RDX-N (100%N+Prod)	28	oz/a	ABCD	2402		1.00	28.7	37.0
					2203		0.87	26.8	32.6
					2404		0.56	23.5	31.7
					2105		0.64	24.5	25.7
					2306		0.64	24.2	29.2
						Mean =	0.72	25.5	31.3
3	UAN-32 (50%N) GSP	7.1	gal/a	ABCD	2101		0.73	28.5	33.3
					2202		0.95	28.0	33.6
					2403		0.42	21.7	30.8
					2204		0.55	21.5	32.6
					2405		0.78	26.3	32.1
					2206		0.74	25.1	30.4
						Mean =	0.69	25.2	32.1
4	UAN-32 (50%N+Prod)	7.1	gal/a	ABCD	2401		0.56	23.7	27.9
	RDX-N (50%N+Prod)	14	oz/a	ABCD	2302		0.94	29.1	34.7
					2103		0.63	25.8	28.3
					2304		0.68	24.0	32.1
					2205		0.83	26.2	29.9
					2106		0.66	24.0	29.2
						Mean =	0.72	25.5	30.4

University of Arizona

Trial ID: T11_RDX-N_Celery_Fall_24
Protocol ID: T11 RDX-N Celery Fall 24 Location: Yuma Arizona Trial Year: 2024
Project ID: T11 RDX-N Celery Fall 24
Study Director: Robert Masson Sponsor Contact:
Investigator:

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	3	4	5
	Rating Date				Mar-13-2025		
	SE Group No.				1	2	3
	Rating Min/Max/Interval				0.01, 2, -	1, 100, -	1, 60, -
	Number of Subsamples				45	45	45
	Description				Yield	Stalk Circumfer>	Stalk Length
	Number of Decimals				2	1	1
	Data Entry Date				Mar-24-2025	Mar-24-2025	Mar-24-2025
1	UAN-32 (100%N) GSP	14.2	gal/a	ABCD	0.64 -	24.8 -	29.8 -
2	UAN-32 (100%N+Prod)	14.2	gal/a	ABCD	0.72 -	25.5 -	31.3 -
	RDX-N (100%N+Prod)	28	oz/a	ABCD			
3	UAN-32 (50%N) GSP	7.1	gal/a	ABCD	0.69 -	25.2 -	32.1 -
4	UAN-32 (50%N+Prod)	7.1	gal/a	ABCD	0.72 -	25.5 -	30.4 -
	RDX-N (50%N+Prod)	14	oz/a	ABCD			
	LSD P=.10				0.111	1.63	2.18
	Standard Deviation				0.110	1.61	2.16
	CV				15.84	6.38	6.99
	Levene's F				0.306	1.042	0.702
	Skewness				0.4748	0.1438	0.0744
	Kurtosis				-0.1658	-0.4561	0.5085
	Replicate F				4.749	4.467	2.742
	Replicate Prob(F)				0.0084	0.0108	0.0594
	Treatment F				0.594	0.256	1.393
	Treatment Prob(F)				0.6285	0.8561	0.2836

Tissue Testing

- No specific tissue testing taken in this test
- The following data is from other trials

Leaf Analytical Report

Robert Masson

Attn: Robert Masson
Client or PO: Yuma County Coop Extension

JMLord, Inc.
4184 N. Knoll Drive
Fresno, CA 93722
(559) 268-9755
jmlord@jmlordinc.com

Group: **39257** Date Received: 3/6/2025 Report Date: 3/7/2025

Sample	Field Name	Percentages (%) N	P	K	Ca	Mg	Na	Cl	S	Parts Per Million (ppm) B	Cu	Fe	Mn	Zn	NO3	PO4	% K(ext)
Crop: **Celery**																	
39257 - 1	S1-T9-1	4.08	0.55	3.68	2.06	0.54	1.120	2.81	1.38	47	10	106	71	70	1,167	3,564	3.76
39257 - 2	S2-T9-2	4.37	0.58	3.75	1.81	0.49	0.983	2.59	1.19	51	10	97	61	63	569	3,198	3.65
39257 - 3	S3-T9-3	4.05	0.53	3.49	2.36	0.59	1.450	2.91	1.72	37	9	93	87	73	2,312	3,650	4.13
39257 - 4	S4-T9-4	3.94	0.55	3.39	2.21	0.56	1.200	2.95	1.45	38	10	100	85	75	2,554	3,393	4.16
39257 - 5	S5-T10-1	4.26	0.67	4.15	1.14	0.41	0.751	2.04	0.90	69	13	119	42	69	1,009	3,745	3.49
39257 - 6	S6-T10-2	4.43	0.65	4.03	1.35	0.43	0.757	2.19	0.98	65	12	133	49	68	867	2,840	3.56
39257 - 7	S7-T10-3	4.21	0.63	3.67	1.61	0.48	0.884	2.35	1.18	51	11	114	60	71	1,319	3,254	3.74
39257 - 8	S8-T10-4	3.99	0.60	3.56	1.46	0.43	0.959	2.50	1.07	53	11	100	56	71	2,217	3,724	3.61
39257 - 9	S9-T11-1	4.38	0.62	3.90	1.28	0.45	0.715	1.82	0.94	58	12	106	53	71	877	3,585	3.24
39257 - 10	S10-T11-2	4.24	0.65	3.67	1.11	0.42	0.714	1.74	0.91	59	14	118	47	73	1,181	3,860	3.32
39257 - 11	S11-T11-3	4.30	0.65	3.86	1.58	0.44	0.833	2.32	1.16	58	11	111	61	71	1,685	3,728	3.97
39257 - 12	S12-T11-4	4.10	0.54	3.52	2.63	0.62	1.270	2.76	1.70	45	11	130	91	78	1,647	3,807	3.93
39257 - 13	S13-T12-1	4.27	0.78	4.13	1.36	0.48	0.775	1.99	1.10	68	15	140	62	86	1,767	4,094	3.47
39257 - 14	S14-T12-2	4.41	0.74	4.25	1.60	0.48	0.885	2.32	1.16	61	14	124	67	86	2,411	4,286	3.68
39257 - 15	S15-T12-3	4.21	0.72	4.28	1.30	0.42	0.810	2.16	0.99	60	13	114	52	80	2,290	3,953	3.56
39257 - 16	S16-T12-4	4.24	0.71	4.15	1.09	0.41	0.804	2.15	0.77	63	13	139	47	74	1,866	3,754	3.41

*BDL = Below Detectable Limits

Group: **39257** Date Received: 3/6/2025 Report Date: 3/7/2025

Sample	Field Name	Percentages (%)								Parts Per Million (ppm)							%
		N	P	K	Ca	Mg	Na	Cl	S	B	Cu	Fe	Mn	Zn	NO3	PO4	K(ext)
Recommended levels for Celery																	
	Low	0.7	0.25	7.0	2.20	0.30				25	5	22	10				
	High	1.5	0.50	9.5	3.50	0.60				60	15	100	100				

Trial 11 – Redox (Celery)

Plot Photos 12/16


T11 - Redox
Celery
Plot 1
Plot: 2101
Trt: 3


T11 - Redox
Celery
Plot 2
Plot: 2201
Trt: 2


T11 - Redox
Celery
Plot 3
Plot: 2301
Trt: 1


T11 - Redox
Celery
Plot 4
Plot: 2401
Trt: 4


T11 - Redox
Celery
Plot 5
Plot: 2102
Trt: 1


T11 - Redox
Celery
Plot 6
Plot: 2202
Trt: 3


T11 - Redox
Celery
Plot 7
Plot: 2302
Trt: 4


T11 - Redox
Celery
Plot 8
Plot: 2402
Trt: 2


T11 - Redox
Celery
Plot 9
Plot: 2103
Trt: 4


T11 - Redox
Celery
Plot 10
Plot: 2203
Trt: 2


T11 - Redox
Celery
Plot 11
Plot: 2303
Trt: 1


T11 - Redox
Celery
Plot 12
Plot: 2403
Trt: 3


T11 - Redox
Celery
Plot 13
Plot: 2104
Trt: 1


T11 - Redox
Celery
Plot 14
Plot: 2204
Trt: 3


T11 - Redox
Celery
Plot 15
Plot: 2304
Trt: 4


T11 - Redox
Celery
Plot 16
Plot: 2404
Trt: 2


T11 - Redox
Celery
Plot 17
Plot: 2105
Trt: 2


T11 - Redox
Celery
Plot 18
Plot: 2205
Trt: 4


T11 - Redox
Celery
Plot 19
Plot: 2305
Trt: 1


T11 - Redox
Celery
Plot 20
Plot: 2405
Trt: 3


T11 - Redox
Celery
Plot 21
Plot: 2106
Trt: 4


T11 - Redox
Celery
Plot 22
Plot: 2206
Trt: 3


T11 - Redox
Celery
Plot 23
Plot: 2306
Trt: 2


T11 - Redox
Celery
Plot 24
Plot: 2406
Trt: 1

Trial 11 – Redox (Celery)

Plot Photos 1/13/25


T11 - Redox
Celery
Plot 2101


T11- Redox
Celery
Plot 2102


T11 - Redox
Celery
Plot 2103


T11 - Redox
Celery
Plot 2104


T11- Redox
Celery
Plot 2105


T11 - Redox
Celery
Plot 2106


T11- Redox
Celery
Plot 2201


T11- Redox
Celery
Plot 2202


T11- Redox
Celery
Plot 2203


T11- Redox
Celery
Plot 2204


T11 - Redox
Celery
Plot 2205


T11- Redox
Celery
Plot 2206


T11 - Redox
Celery
Plot 2301


T11 - Redox
Celery
Plot 2302


T11- Redox
Celery
Plot 2303


T11- Redox
Celery
Plot 2304


T11- Redox
Celery
Plot 2305


T11 - Redox
Celery
Plot 2306


T11- Redox
Celery
Plot 2401


T11 - Redox
Celery
Plot 2402


T11- Redox
Celery
Plot 2403


T11 - Redox
Celery
Plot 2404


T11- Redox
Celery
Plot 2405


T11 - Redox
Celery
Plot 2406