



Agricenter International

2024 Electroaeration in Rice

Trial ID: 2024 EA Rice
Protocol ID: 2024 EA Rice Location: Agricenter International Trial Year: 2024
Project ID: Project ID 2: Project ID 3:
Study Director: Sponsor Contact:
Investigator:

Rating Date	11/28/2023	11/28/2023	11/28/2023	11/28/2023	11/28/2023
Part Rated	PLAEME, C	GRAIN, C	GRAIN, C	GRAIN, C	GRAIN, C
Rating Type	HEIGHT	MOICON	WEIGHT	WEITES	YIELD
Rating Unit	IN	%	lb/plot	%	BU
Rating Min/Max/Interval		0, 100, -		0, 100, -	
Sample Size		1 PLOT	1 PLOT	1 PLOT	1 A
Number of Subsamples	1	1	1	1	1
Plant-Eval Interval	-156 DP-1	-156 DP-1	-156 DP-1	-156 DP-1	-156 DP-1
Days After Emergence	-164 DE-1	-164 DE-1	-164 DE-1	-164 DE-1	-164 DE-1
ARM Action Codes					TY1
Number of Decimals					1
Data Entry Date	12/5/2023	12/5/2023	12/5/2023	12/5/2023	
Trt Treatment	Rate Appl				
No. Name	Rate Unit Code Plot				
		1	2	3	4
1 EA Well water 15 gal/a A	101	25.0	6.4700	24.7650	45.0000
	202	24.0	5.8600	23.9650	46.0050
	301	25.0	5.8150	21.6900	48.6350
	Mean =	24.7	6.0483	23.4733	46.5467
2 Well water 15 gal/a A	102	24.0	6.0350	22.2900	48.2900
	201	23.0	5.4550	20.2600	48.2500
	302	22.0	6.0100	19.8200	45.1600
	Mean =	23.0	5.8333	20.7900	47.2333

Total BU 479.7

=53.8 BU more 12.63% Increase

Total BU :425.9

Part Rated

PLAEME = plant - emerged

GRAIN = grain

C = Crop is Part Rated

Rating Type

HEIGHT = height

MOICON = moisture content

WEIGHT = weight

WEITES = weight - test

YIELD = yield

Rating Unit

IN, , , = inch

%, 0, 100, = percent

lb/plot, , , = pounds per plot

BU, , , = bushel

PLOT = total plot

A = acre

Plant-Eval Interval

-156 DP-1 = 1 ORYSI 5/2/2024

ARM Action Codes

TY1 = $6.45333333 * [C3] * (100 - [C2]) / 89$



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Reps: 3 Plots: 5 by 20 feet
Appl. Amount: 15 GAL/AC Mix Size: 2 L (total for 3 plots; minimum=0.391 L)

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3
1	EA Well water	15 gal/a	A		Flood water		101	202	301
2	Well water	15 gal/a	A		Flood water		102	201	302

Sort Order: Treatment

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Status: E established

Last Changed By: Bruce Kirksey

Trial Location

Address (Location): 7777 Walnut Grove Road
City: Memphis **Country:** USA United States
State/Prov.: Tennessee TN **County:** Shelby **Region:** South
Postal Code: 38120 **Climate Zone:** EPPOSE EPPO South East

Latitude of LL Corner °: 35.125818 N
Longitude of LL Corner °: -89.831399 W USATN 36.678255 - 34.982924
-81.6469 - -90.310298
Altitude of LL Corner: 257.00 FT
Time Zone: America/Chicago

Regulations

Conducted Under GLP: No
Conducted Under GEP: No

Objectives:

to evaluate the effect of electroaeration and its affect on well water in rice

Crop Description

Crop 1: C ORYSI Oryza sativa Dry-seeded paddy rice **BBCH Scale:** BRIC
Stage Scale: BBCH
Variety: PVL03
Attributes: Provisia
Planting Date: 5/2/2024 **Planting Rate:** 75 LB/A
Depth: 0.5 IN
Rows per Plot: 9 **Planting Method:** DRILLE drilled
Row Spacing: 7.5 IN **Planting Equipment:** PD plot drilling machine
Seed Bed: FRIABL friable
Soil Temperature: 72 F **Soil Moisture:** EXCELL excellent
Emergence Date: 5/10/2024
Harvest Date: 12/5/2024 **Harvest Equipment:** Almaco Plot Combine
Harvested Width: 5 FT
Harvested Length: 30 FT
% Standard Moisture: 11.0

Site and Design

Treated Plot Width: 5 FT **Site Type:** FIELD field
Treated Plot Length: 20 FT
Treated Plot Area: 100.0 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Treatments:** 2 **Plots:** 6 **Study Design:** RACOB� Randomized Complete Block (RCB)
Distance between Blocks: 1 FT
Distance between 'Plot' Experimental Units: 0.5 FT

Soil Description

Description Name: 2023 Rice Field
% Sand: 29.6 **% OM:** 1.8 **Texture:** SIL silt loam
% Silt: 51.6 **Soil Name:** Falaya silt loam
% Clay: 18.6 **Fert. Level:** G good
pH: 6.3 **CEC:** 7.6
Soil Drainage: G good

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale	ORYSI, BRIC
Stage Scale Used	BBCH

Application Equipment

	A
Minimum Mix/Treatment	0.391 L



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ARM Action Codes					TY1
Number of Decimals					1
Data Entry Date	12/5/2023	12/5/2023	12/5/2023	12/5/2023	
Trt Treatment	1	2	3	4	5
No. Name					
Rate Appl					
Rate Unit					
Code					
1 EA Well water	15 gal/a A	24.7 -	6.0483 -	23.4733 a	46.5467 -
2 Well water	15 gal/a A	23.0 -	5.8333 -	20.7900 b	47.2333 -
LSD P=.05	2.87	0.88283	2.32285	9.04670	15.01
Standard Deviation	0.82	0.25130	0.66120	2.57513	4.27
CV	3.43	4.23	2.99	5.49	2.83
Grand Mean	23.83	5.94083	22.13167	46.89000	150.92
Levene's F^	0.00	0.00	0.00	0.00	0.00
Levene's Prob(F)	1.00	1.00	1.00	1.00	1.00
Rank X2	.	.	.	.	.
P(Rank X2)	.	.	.	.	.
Shapiro-Wilk^	0.9129	0.9269	0.9338	0.9471	0.9471
P(Shapiro-Wilk)^	0.4558	0.556	0.6099	0.7167	0.7167
Skewness^	0.0	0.0	0.0	0.0	0.0
P(Skewness)^	1.0	1.0	1.0	1.0	1.0
Kurtosis^	-1.875	-1.875	-1.875	-1.875	-1.875
P(Kurtosis)^	0.4245	0.4245	0.4245	0.4245	0.4245
Replicate F	1.000	2.822	8.793	0.018	9.193
Replicate Prob(F)	0.5000	0.2616	0.1021	0.9827	0.0981
Treatment F	6.250	1.098	24.705	0.107	26.464
Treatment Prob(F)	0.1296	0.4047	0.0382	0.7750	0.0358

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C = Crop is Part Rated

Rating Type

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WEIGHT = weight
WEITES = weight - test
YIELD = yield

Rating Unit

IN, , , = inch
%, 0, 100, = percent
lb/plot, , , = pounds per plot
BU, , , = bushel

PLOT = total plot

A = acre

Plant-Eval Interval

-156 DP-1 = 1 ORYSI 5/2/2024

ARM Action Codes

TY1 = 6.45333333*[C3]*(100-[C2])/89

Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

^Calculated from residual.