KHARIF

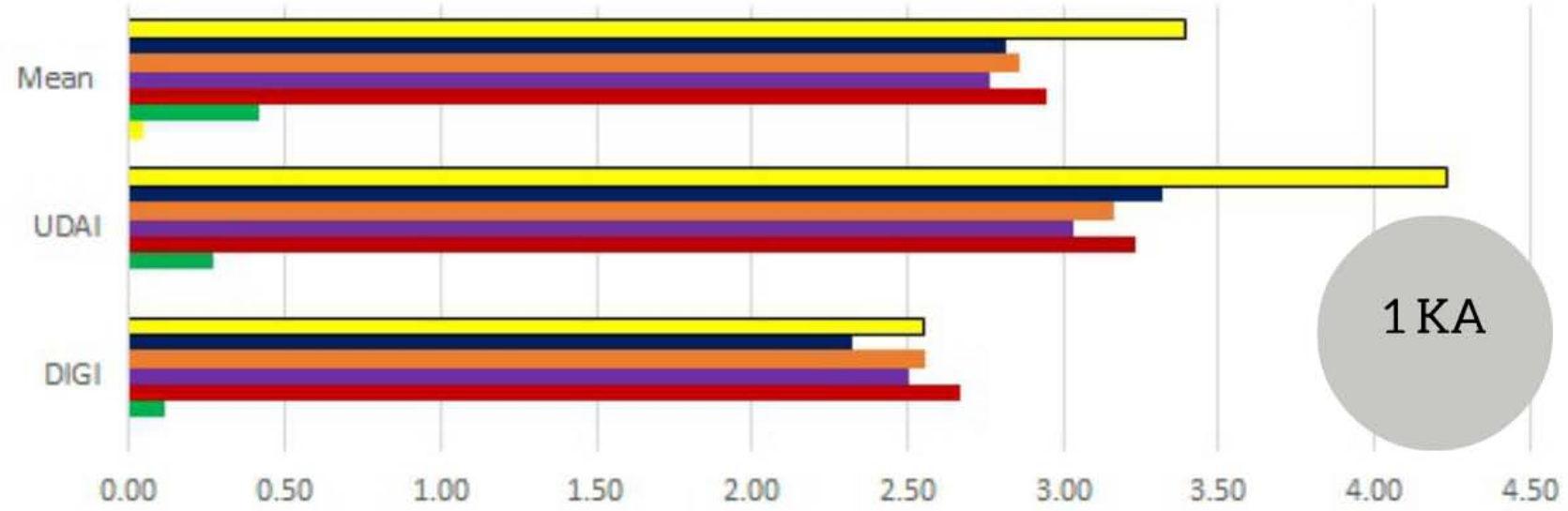
"Summer Sorghum"

KHARIF

"Summer Sorghum"

Mandatory
1KA
1KC
Location Specific
2K,
7K
9K
"Grain Sorghum"

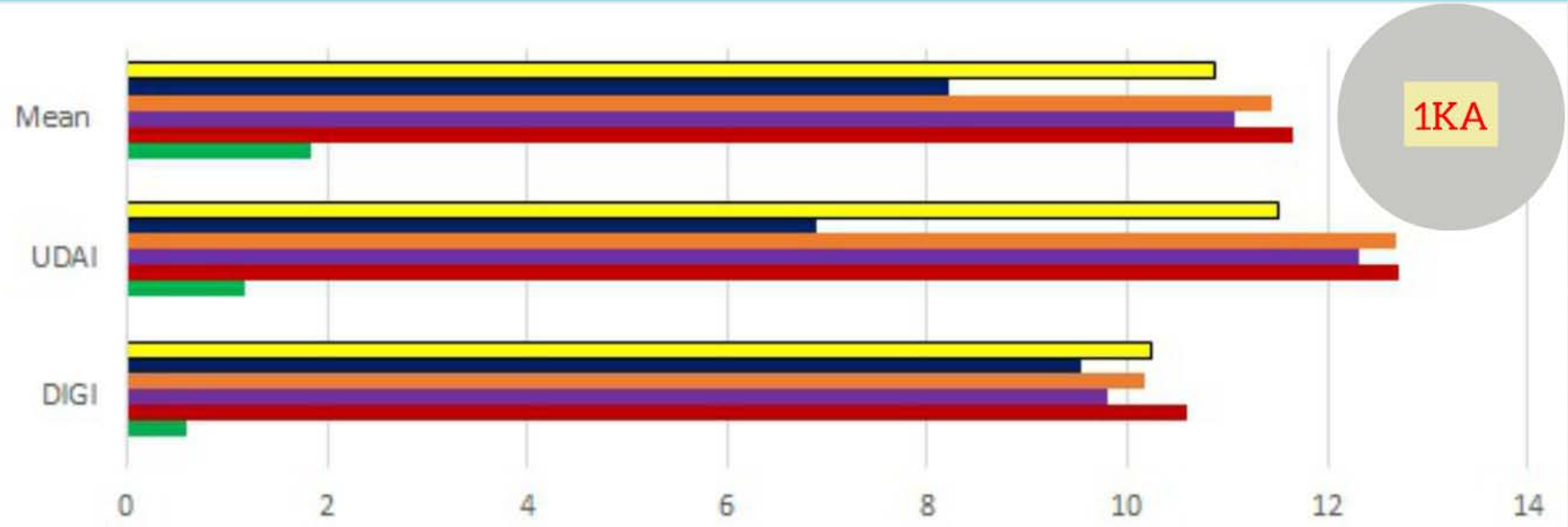
Grain Sorghum



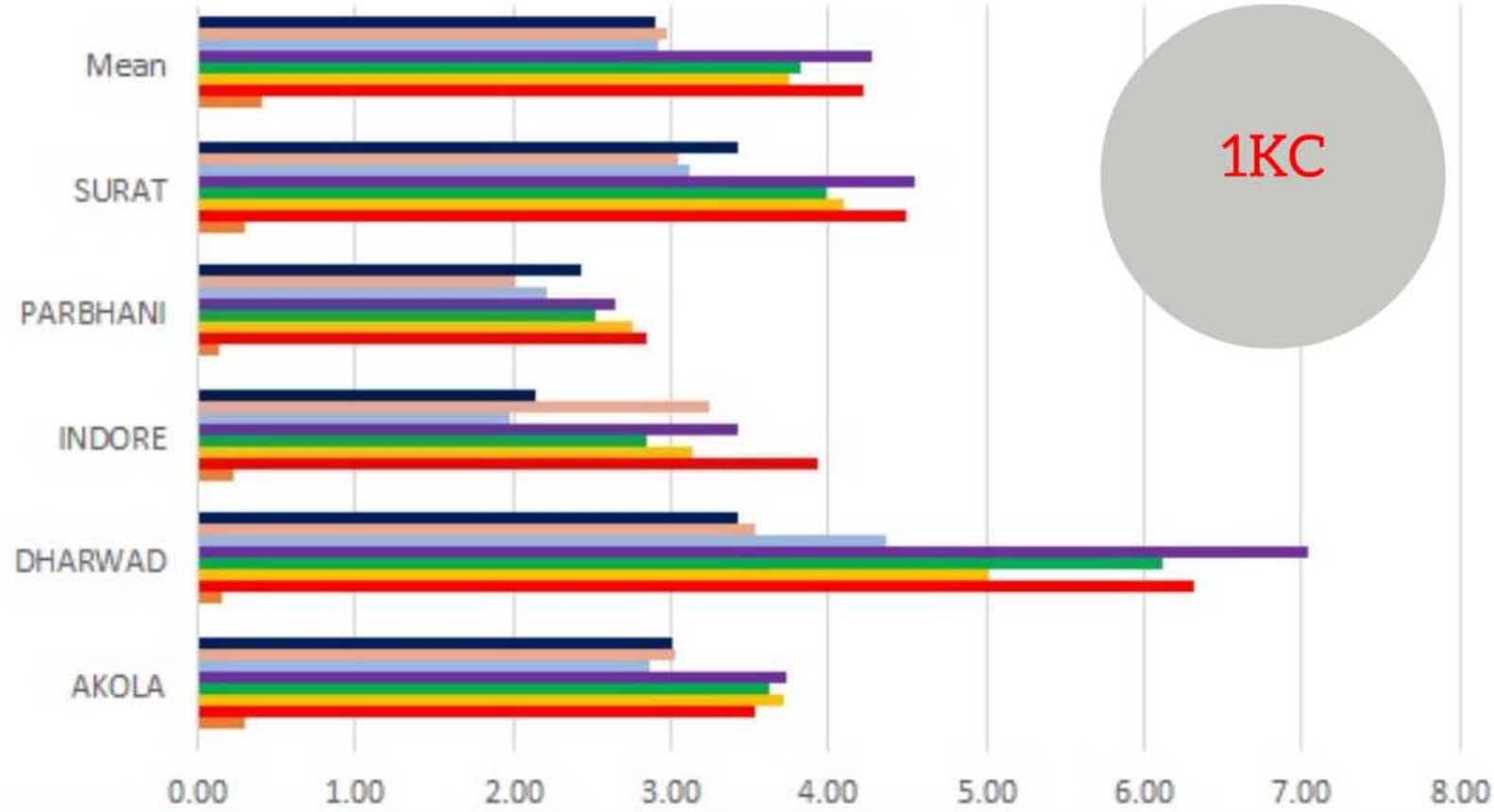
Grain Yield (t/ha)	DIGI	UDAI	Mean
CSH 14	2.55	4.23	3.39
CSV 17	2.32	3.32	2.82
SPV 2308	2.56	3.16	2.86
SPV 2307	2.50	3.03	2.76
SPV 2293	2.67	3.23	2.95
C.D. (5%) Bi-Bj	0.11	0.27	0.42
F (Prob)	0.00	0.00	0.04

	H INDEX	TEST WT	P LENTH	GWT PP
SPV 2293	20.52	27.53	23.56	62.30
SPV 2307	19.52	28.97	21.08	62.36
SPV 2308	20.03	29.79	21.06	63.37
CSV 17	26.61	27.25	22.33	65.97
C.D. (5%) Bi-Bj	4.59	1.95	0.83	5.29
F (Prob)	0.02	0.04	0.00	0.00

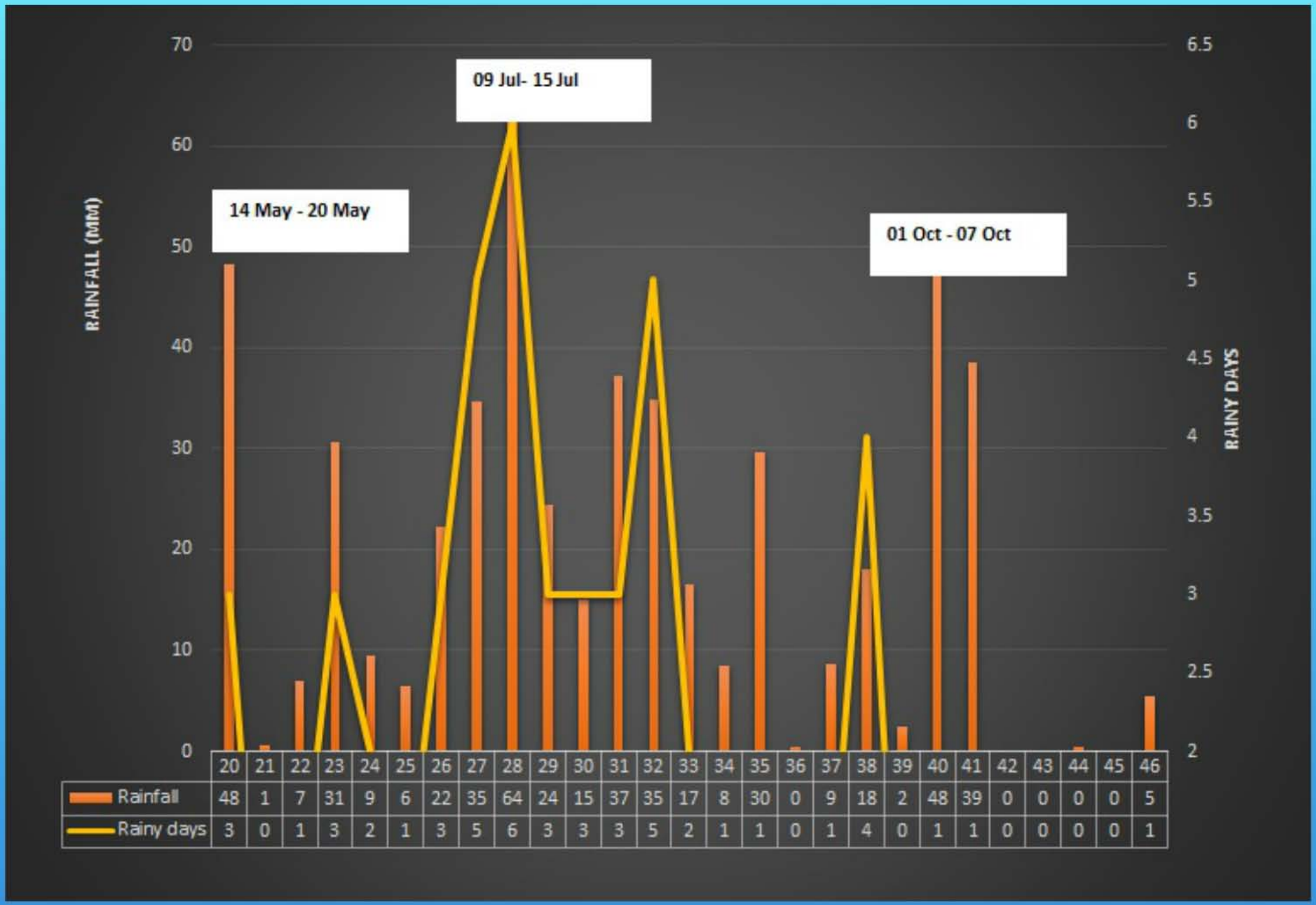
Fodder Yield



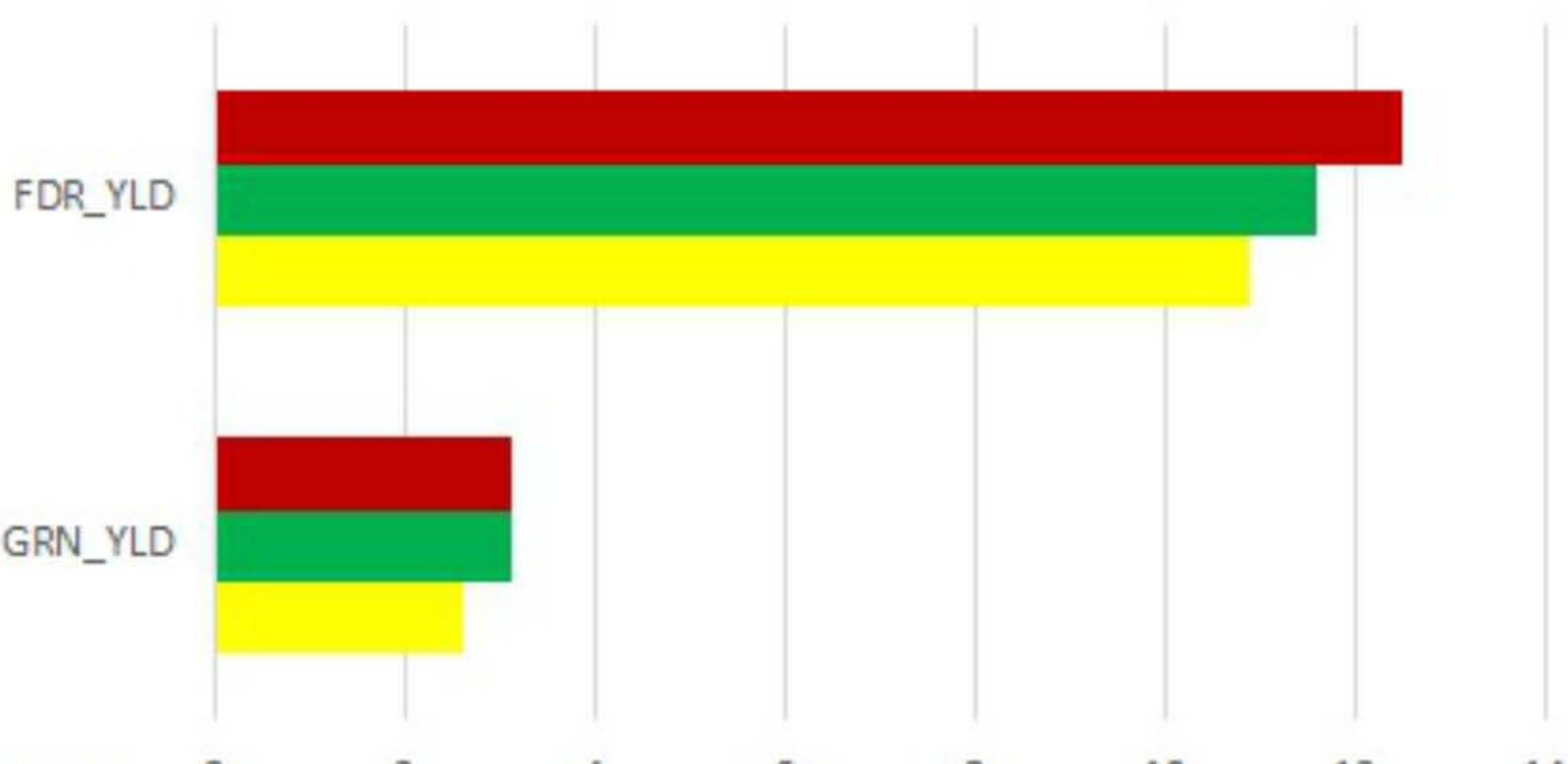
Fodder Yield (t/ha)	DIGI	UDAI	Mean
CSH 14	10.23	11.52	10.88
CSV 17	9.53	6.88	8.21
SPV 2308	10.18	12.69	11.43
SPV 2307	9.81	12.31	11.06
SPV 2293	10.60	12.71	11.65
C.D. (5%) Bi-Bj	0.59	1.18	1.84
F (Prob)	0.01	0.00	0.01



Grain Yield (t/ha)	AKOLA	DHARWAD	INDORE	PARBHANI	SURAT	Mean
CSV-20	3.01	3.43	2.14	2.42	3.43	2.89
SPV-2307	3.02	3.54	3.24	2.01	3.04	2.97
SPV-2296	2.87	4.36	1.97	2.22	3.12	2.91
CSH-25	3.73	7.04	3.42	2.64	4.55	4.28
CSH-16	3.62	6.11	2.84	2.52	3.99	3.82
SPH-1779	3.72	5.01	3.13	2.76	4.09	3.74
SPH-1778	3.54	6.32	3.92	2.85	4.49	4.22
C.D. (5%) Bi-Bj	0.29	0.16	0.22	0.14	0.30	0.40
F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00

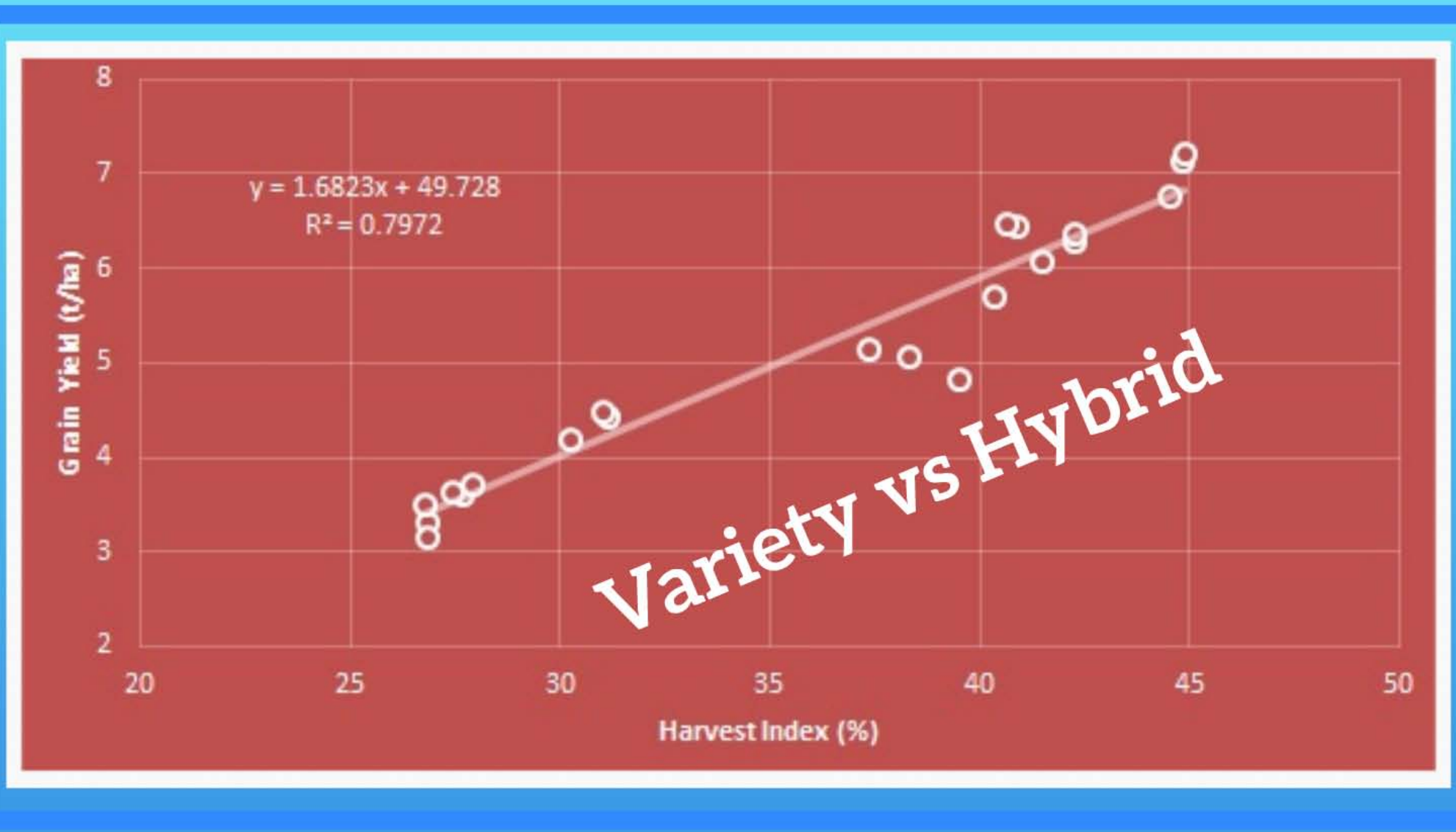


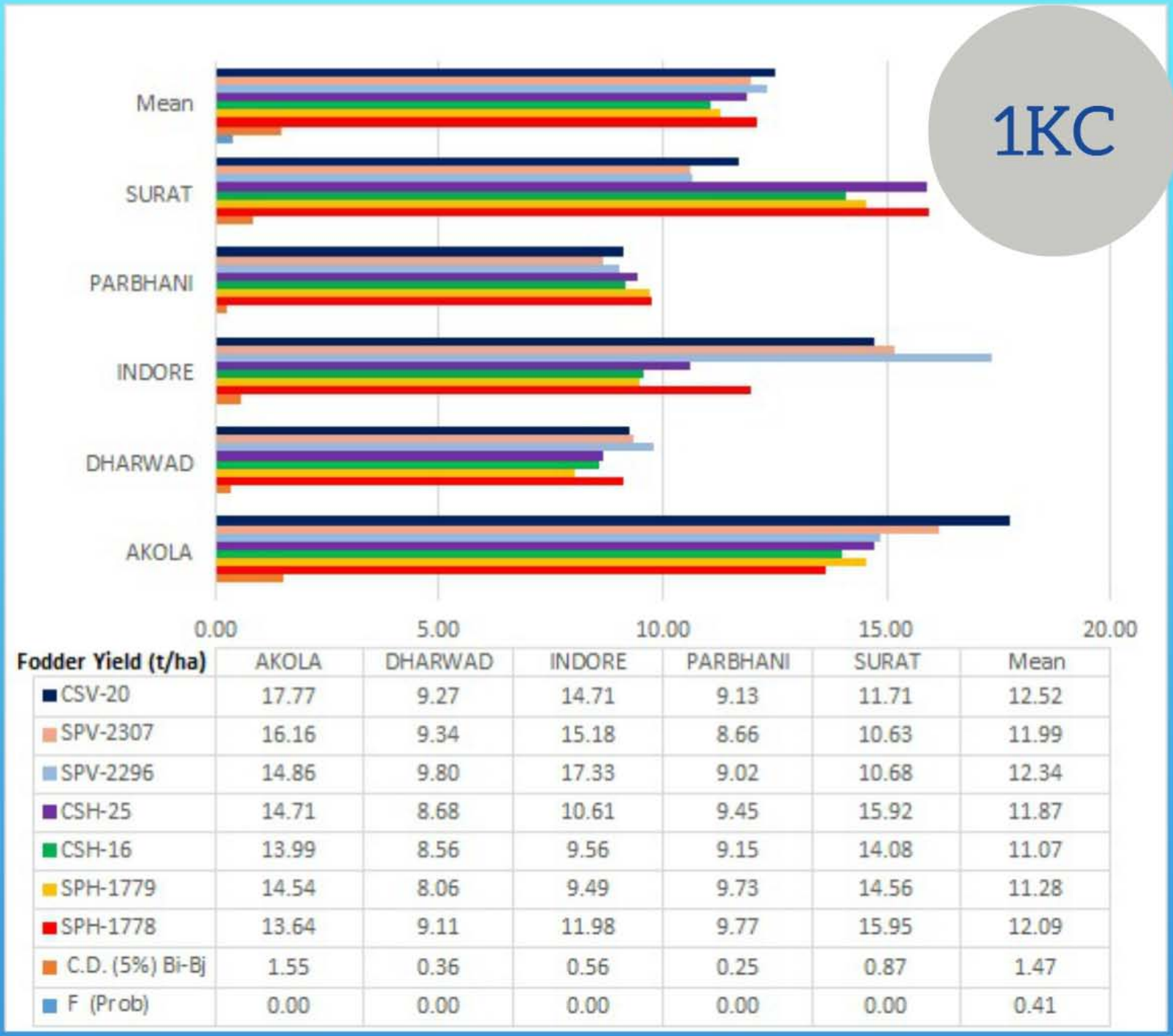
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Rainfall	48	1	7	31	9	6	22	35	64	24	15	37	35	17	8	30	0	9	18	2	48	39	0	0	0	0	5
Rainy days	3	0	1	3	2	1	3	5	6	3	3	3	5	2	1	1	0	1	4	0	1	1	0	0	0	0	1



Yield (t/ha)	GRN_YLD	FDR_YLD
125% RDF+SPV-2293	3.11	12.49
100% RDF+SPV-2293	3.13	11.58
75% RDF+SPV-2293	2.63	10.89

Fertilizer Response

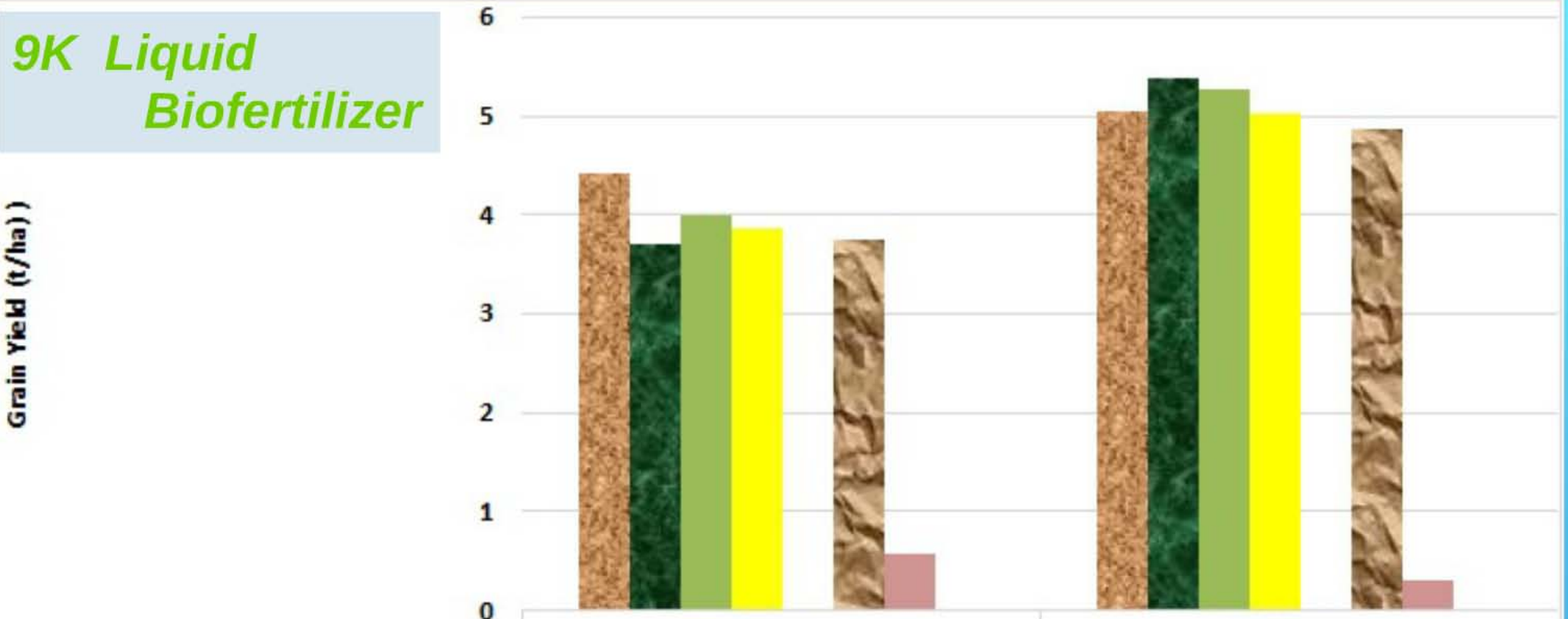

y = 1.6823x + 49.728
R² = 0.7972
Grain Yield (t/ha)
Harvest Index (%)
8
7
6
5
4
3
2
20
25
30
35
40
45
50
Variety vs Hybrid



Fodder Yield (t/ha)	AKOLA	DHARWAD	INDORE	PARBHANI	SURAT	Mean
CSV-20	17.77	9.27	14.71	9.13	11.71	12.52
SPV-2307	16.16	9.34	15.18	8.66	10.63	11.99
SPV-2296	14.86	9.80	17.33	9.02	10.68	12.34
CSH-25	14.71	8.68	10.61	9.45	15.92	11.87
CSH-16	13.99	8.56	9.56	9.15	14.08	11.07
SPH-1779	14.54	8.06	9.49	9.73	14.56	11.28
SPH-1778	13.64	9.11	11.98	9.77	15.95	12.09
C.D. (5%) Bi-Bj	1.55	0.36	0.56	0.25	0.87	1.47
F (Prob)	0.00	0.00	0.00	0.00	0.00	0.41

Fodder Yield

9K Liquid Biofertilizer



	AKOLA	DHARWAD
RDF + AZO (2ml) + PSB (2ml) Liquid	4.41	5.04
RDF + AZO (2ml) + PSB (4ml) Liquid	3.69	5.37
RDF + AZO (4ml) + PSB (2ml) Liquid	3.99	5.27
RDF + AZO (4ml) + PSB (4ml) Liquid	3.86	5.03
RDF + AZO + PSB powder	3.75	4.86
C.D. (5%)	0.56	0.30
F (Probability)	0.00	0.00

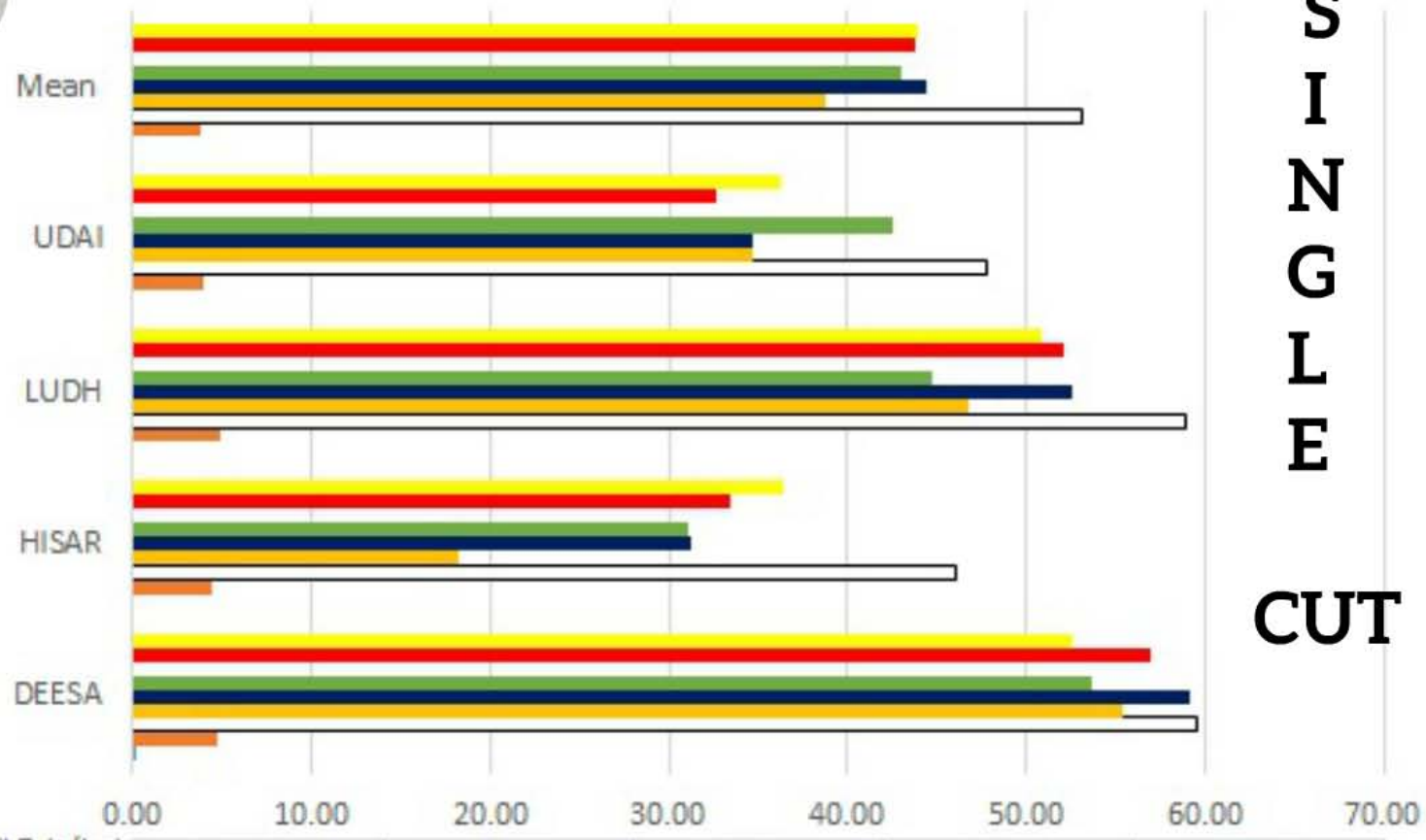
1KE Single Cut

1KF Multi Cut

6K & 8K

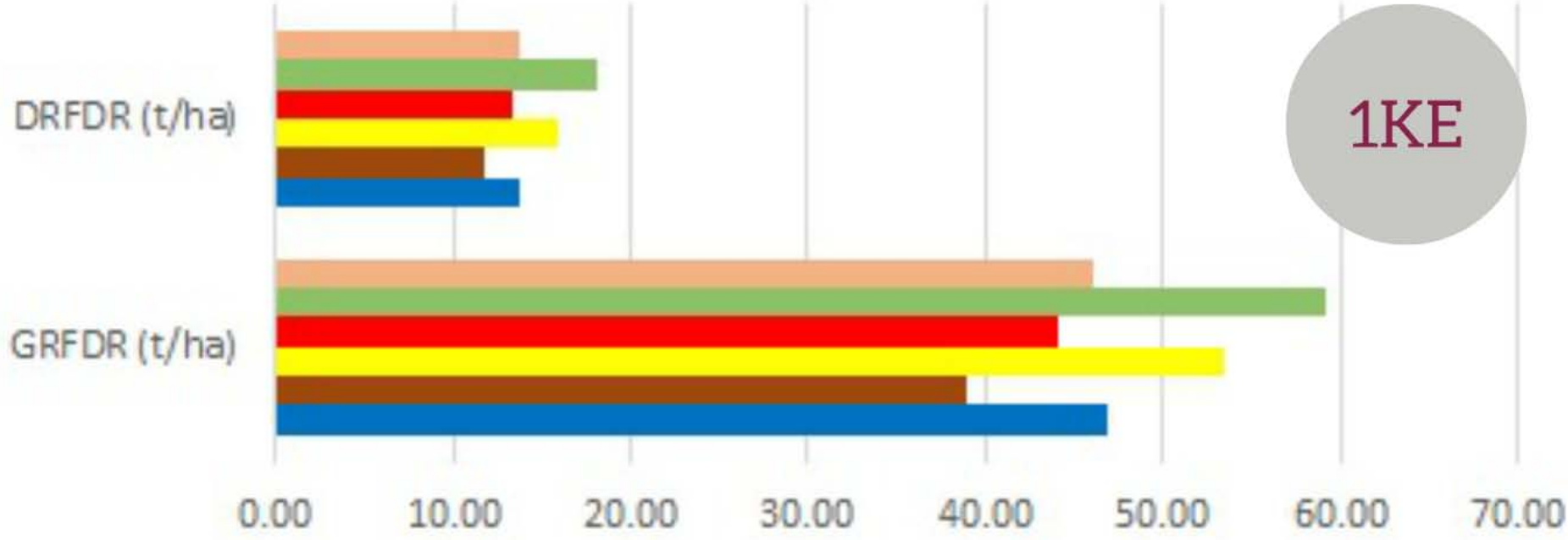
"Forage Sorghum"

1KE

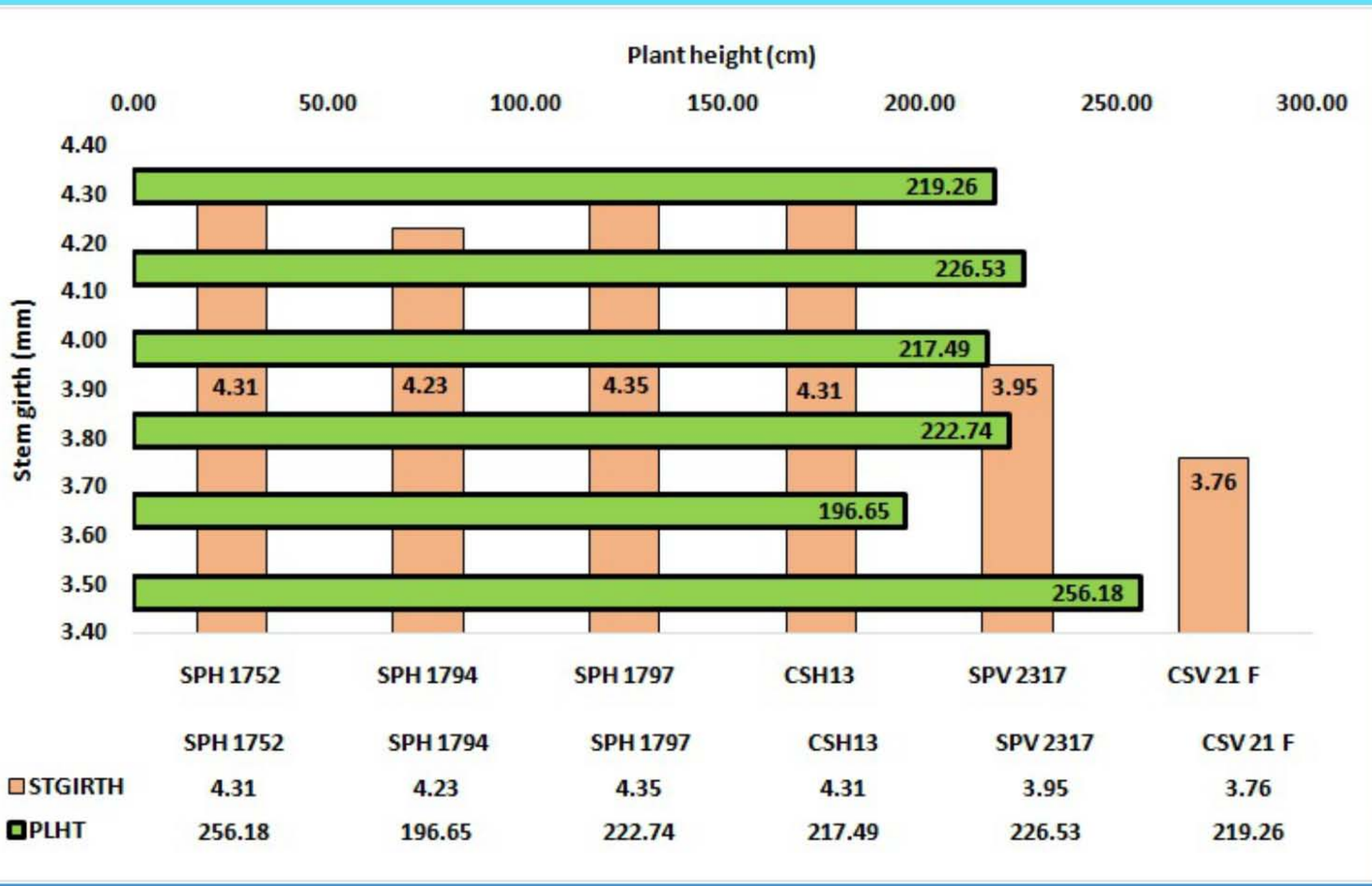


SINGLE CUT

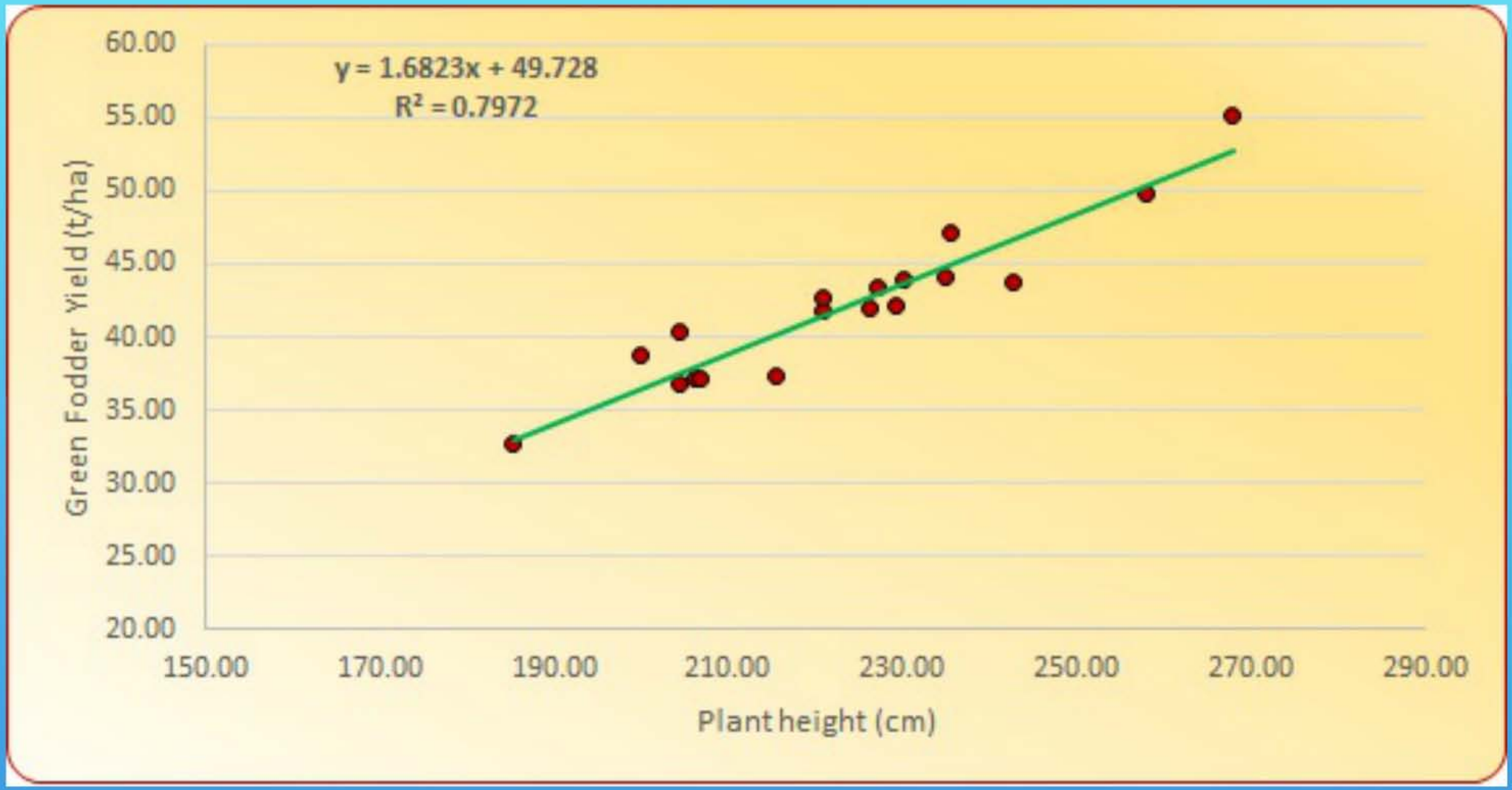
Green F YLD (t/ha)	DEESA	HISAR	LUDH	UDAI	Mean
CSV 21 F	52.50	36.34	50.81	36.29	43.99
SPV 2317	56.97	33.44	52.07	32.58	43.77
CSH13	53.71	31.08	44.78	42.55	43.03
SPH 1797	59.21	31.22	52.63	34.72	44.45
SPH 1794	55.38	18.15	46.76	34.62	38.73
SPH 1752	59.56	46.10	58.92	47.73	53.08
C.D. (5%) Bi-Bj	4.75	4.40	4.87	3.94	3.79
F (Prob)	0.02	0.00	0.00	0.00	0.00

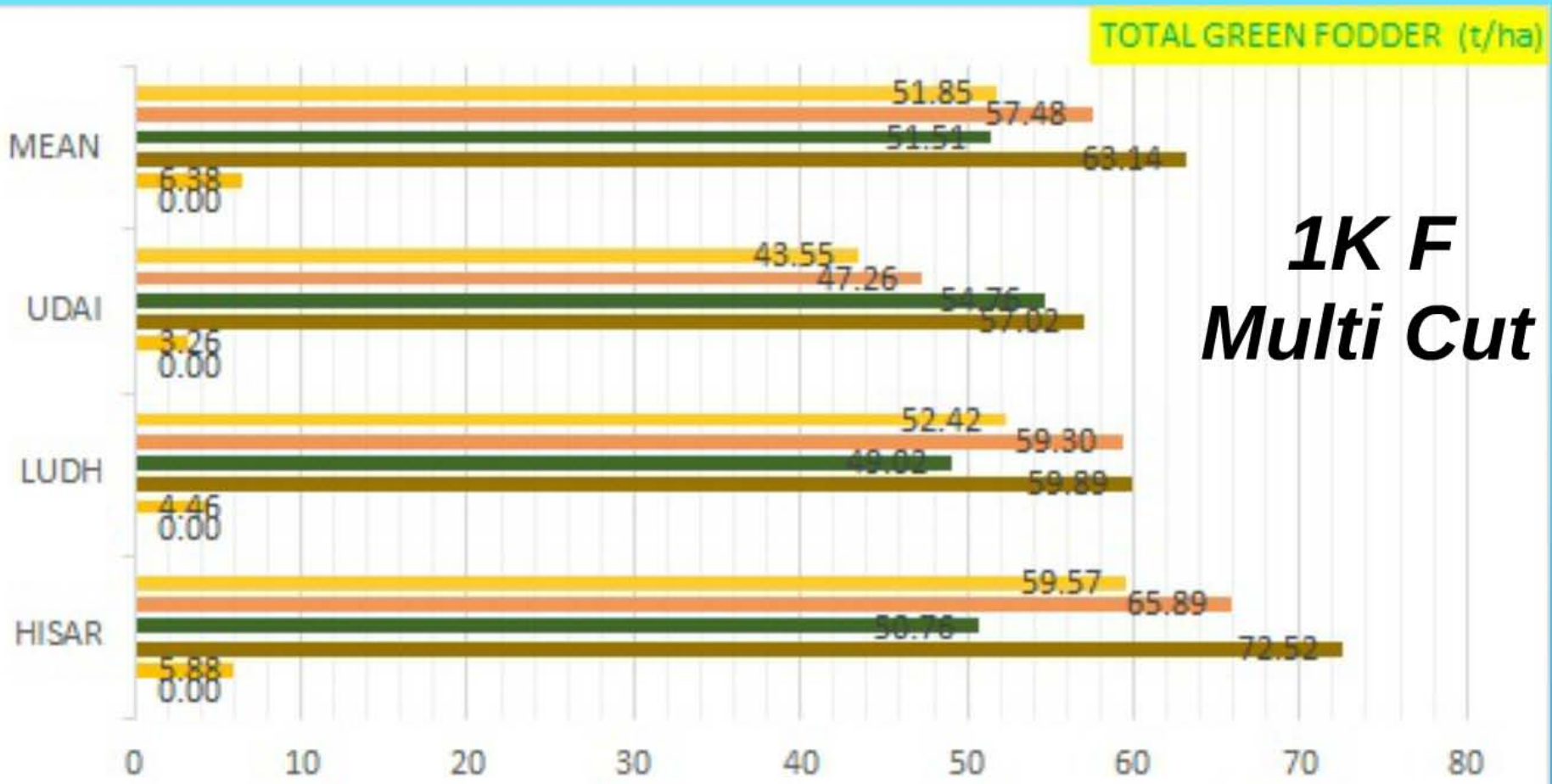


	GRFDR (t/ha)	DRFDR (t/ha)
125%RDF CSH13	46.11	13.78
125% RDF SPH 1752	59.11	18.13
100%RDF CSH13	44.15	13.32
100% RDF SPH 1752	53.31	15.92
75%RDF CSH13	38.83	11.69
75% RDF SPH 1752	46.81	13.70



	SPH 1752	SPH 1794	SPH 1797	CSH13	SPV 2317	CSV 21 F
STGIRTH	4.31	4.23	4.35	4.31	3.95	3.76
PLHT	256.18	196.65	222.74	217.49	226.53	219.26

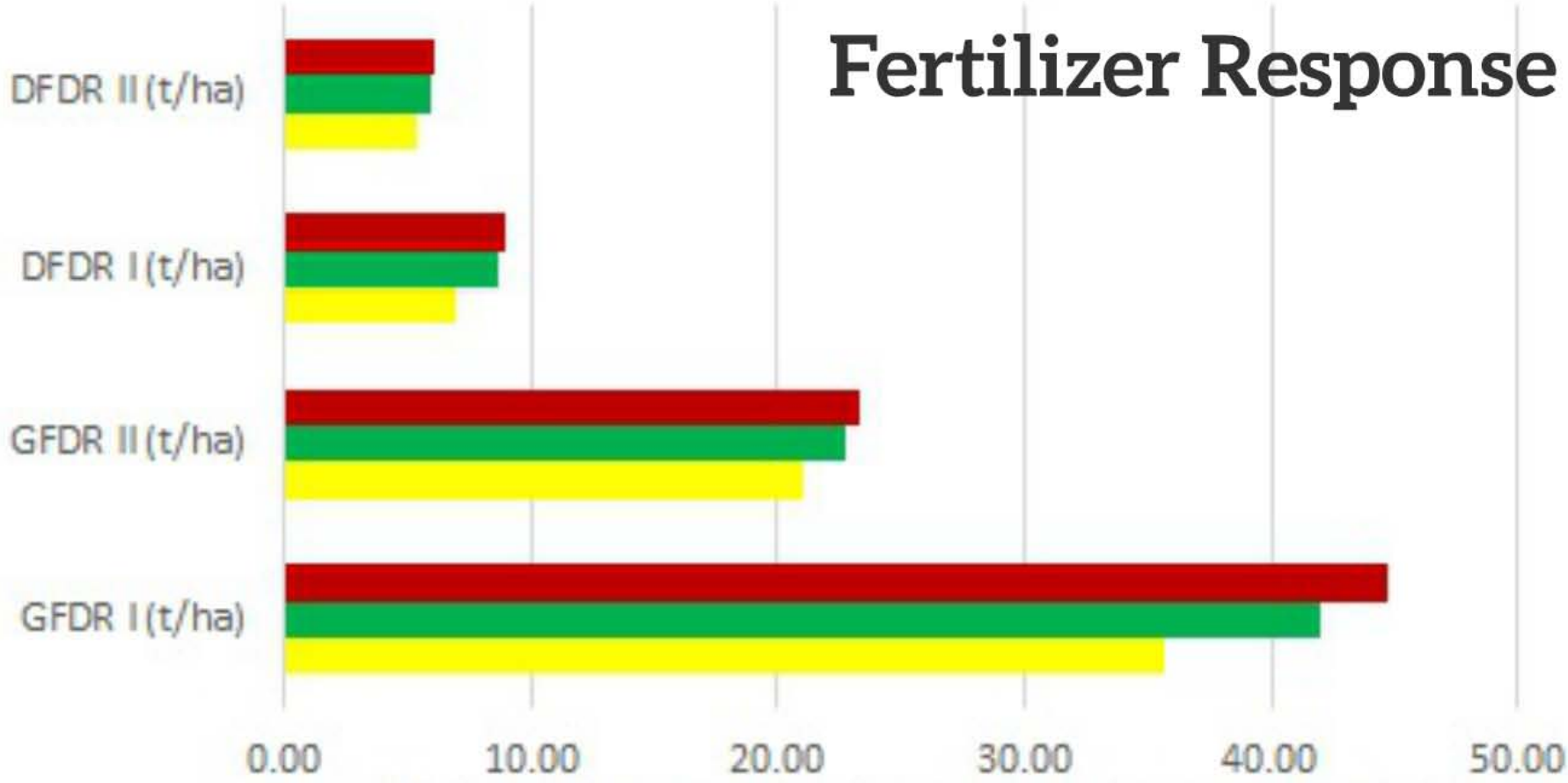

y = 1.6823x + 49.728
R² = 0.7972
Green Fodder Yield (t/ha)
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
150.00
170.00
190.00
210.00
230.00
250.00
270.00
290.00
Plant height (cm)



1K F
Multi Cut

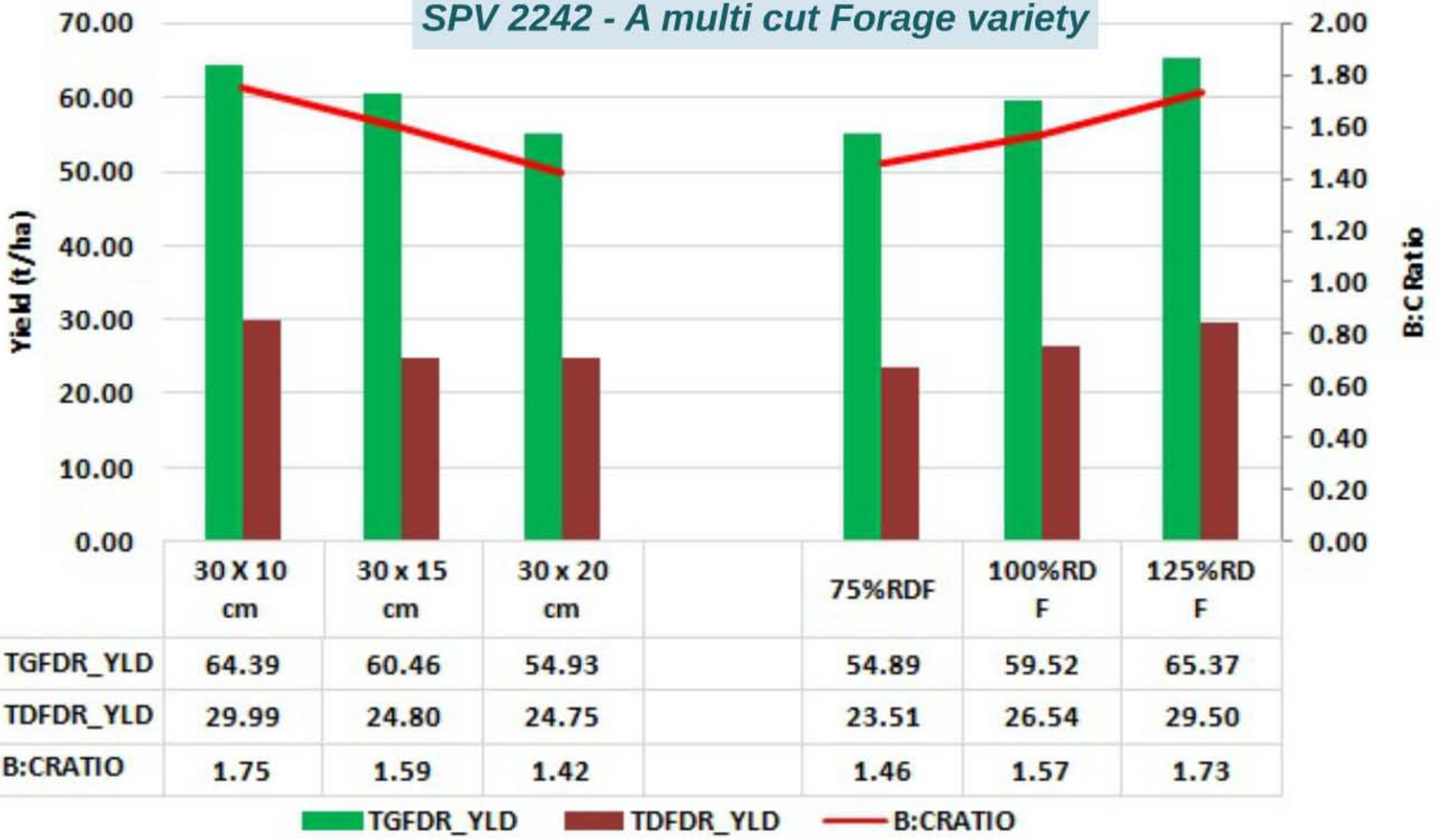
	HISAR	LUDH	UDAI	MEAN
CSH - 24MF	59.57	52.42	43.55	51.85
CSH - 20MF	65.89	59.30	47.26	57.48
SPH 1770	50.76	49.02	54.76	51.51
SPH 1768	72.52	59.89	57.02	63.14
C.D. (5%) Bi-Bj	5.88	4.46	3.26	6.38
F (Prob)	0.00	0.00	0.00	0.00

Fertilizer Response



	GFDR I (t/ha)	GFDR II (t/ha)	DFDR I (t/ha)	DFDR II (t/ha)
125%RDF + SPH 1768	44.74	23.39	9.00	6.05
100%RDF + SPH 1768	42.00	22.70	8.69	5.87
75%RDF + SPH 1768	35.61	20.98	7.00	5.38

SPV 2242 - A multi cut Forage variety



	30 X 10 cm	30 x 15 cm	30 x 20 cm		75%RDF	100%RDF	125%RDF
TGFDR_YLD	64.39	60.46	54.93		54.89	59.52	65.37
TDFDR_YLD	29.99	24.80	24.75		23.51	26.54	29.50
B:CRATIO	1.75	1.59	1.42		1.46	1.57	1.73

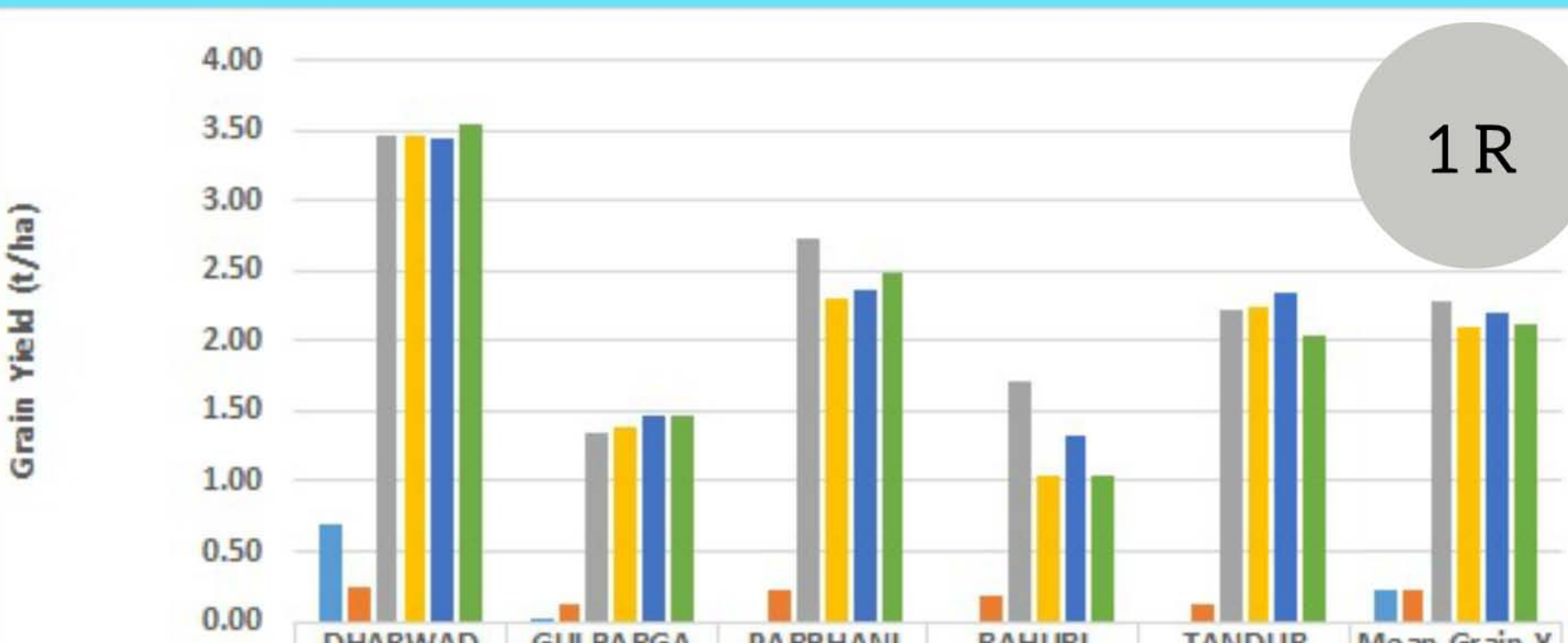
"*Rabi* Sorghum"

Location Specific

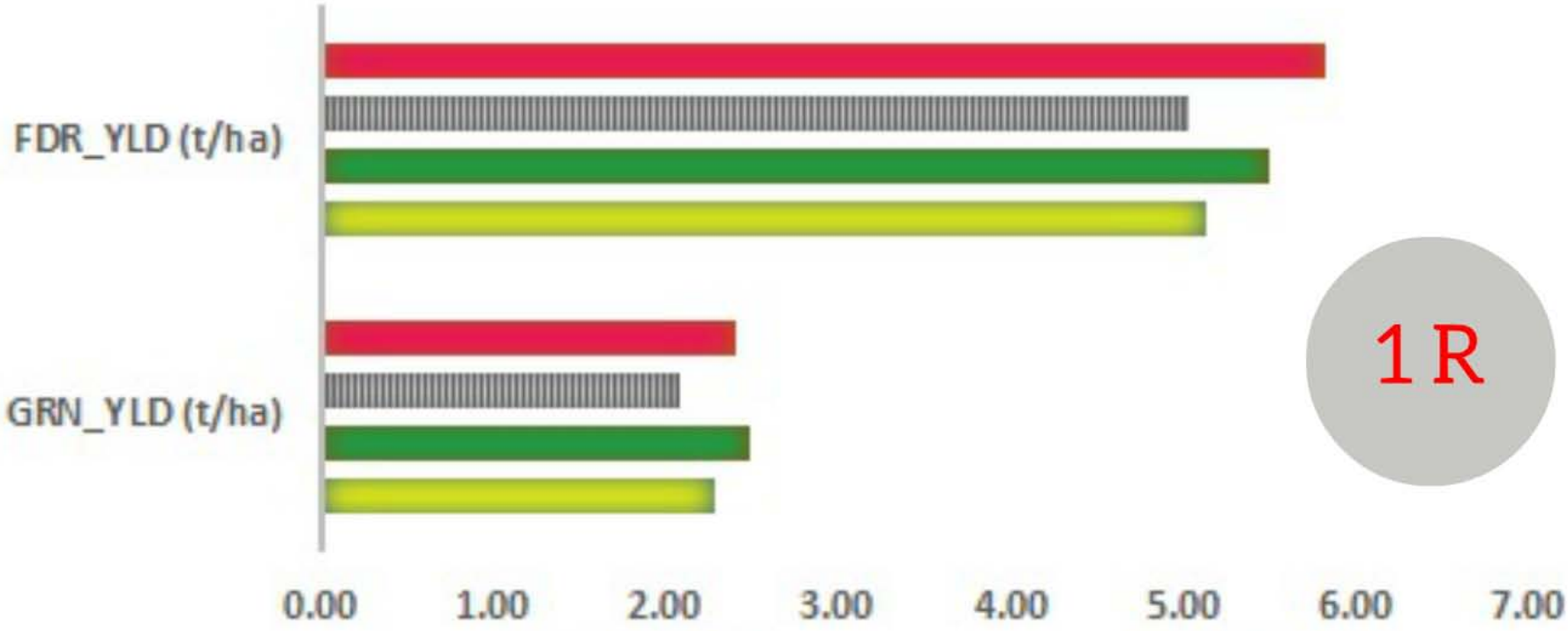
3R Prio MGMT
5R PRIM x SPRA
6R SULFUR
7R Organic ENRICH
8R Liquid BioFERT

Mandatory

1R F x V

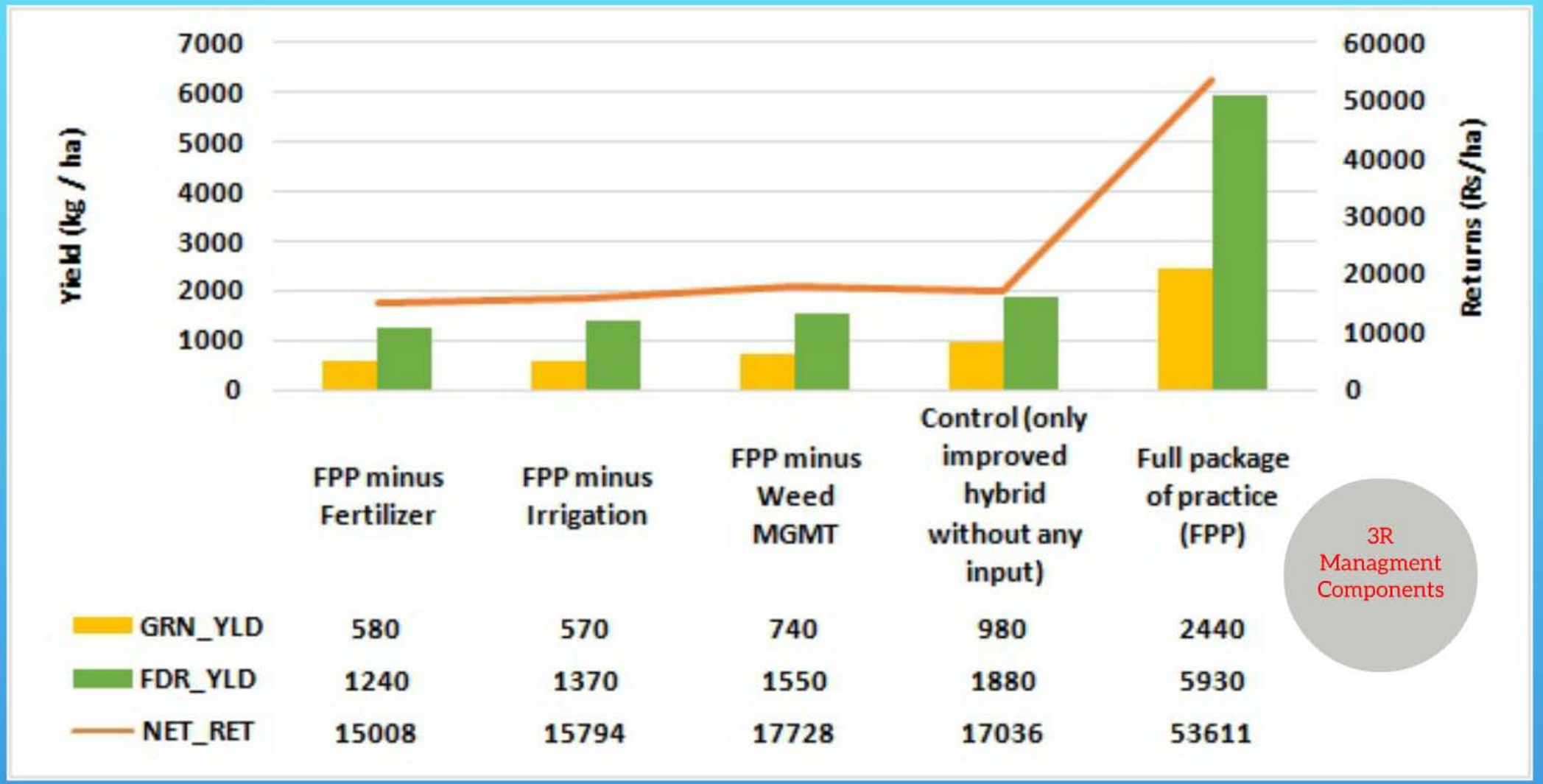


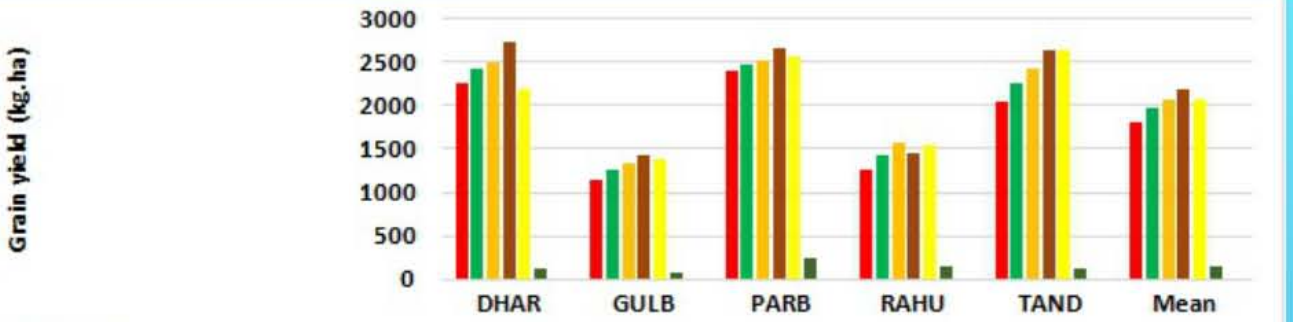
	DHARWAD	GULBARGA	PARBHANI	RAHURI	TANDUR	Mean Grain Y
F (Prob)	0.69	0.03	0.00	0.00	0.00	0.22
C.D. (5%) Bi-Bj	0.24	0.13	0.23	0.18	0.13	0.23
CSV 22R	3.46	1.34	2.73	1.71	2.22	2.29
CSH 15R	3.47	1.39	2.30	1.03	2.25	2.09
SPH 1805	3.45	1.47	2.36	1.32	2.35	2.19
SPH 1801	3.55	1.46	2.48	1.04	2.03	2.11



1 R

	GRN_YLD (t/ha)	FDR_YLD (t/ha)
100% RDF + CSV 22 R	2.41	5.83
100% RDF + CSH 15 R	2.08	5.04
100% RDF + SPH 1805	2.49	5.50
100% RDF + SPH 1801	2.28	5.13


7000
6000
5000
4000
3000
2000
1000
0
Yield (kg / ha)
60000
50000
40000
30000
20000
10000
0
Returns (Rs/ha)
FPP minus Fertilizer
FPP minus Irrigation
FPP minus Weed MGMT
Control (only improved hybrid without any input)
Full package of practice (FPP)
3R Managment Components
GRN_YLD 580 570 740 980 2440
FDR_YLD 1240 1370 1550 1880 5930
NET_RET 15008 15794 17728 17036 53611

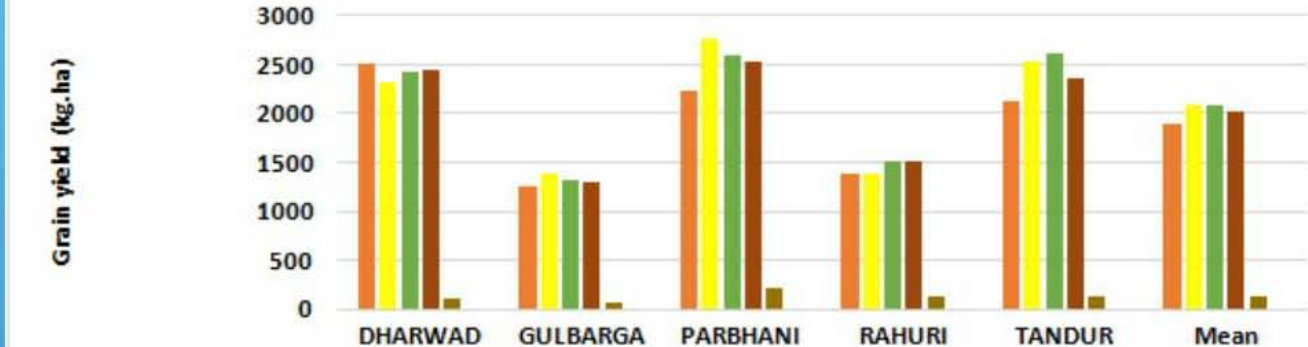


	DHAR	GULB	PARB	RAHU	TAND	Mean
Control	2270	1150	2400	1250	2050	1820
Seed priming with water	2420	1270	2470	1430	2270	1970
Seed priming with ZnSO4 @0.5%	2500	1330	2530	1570	2440	2070
Seed priming with KNO3 @0.5%	2750	1440	2670	1450	2650	2190
Seed priming with KH2PO4 @0.5%	2200	1370	2580	1540	2640	2070
C.D. (5%) Bi-Bj	120	70	240	140	130	140
F (Prob)	0.00	0.00	0.22	0.00	0.00	0.00

5R Priming & Spraying

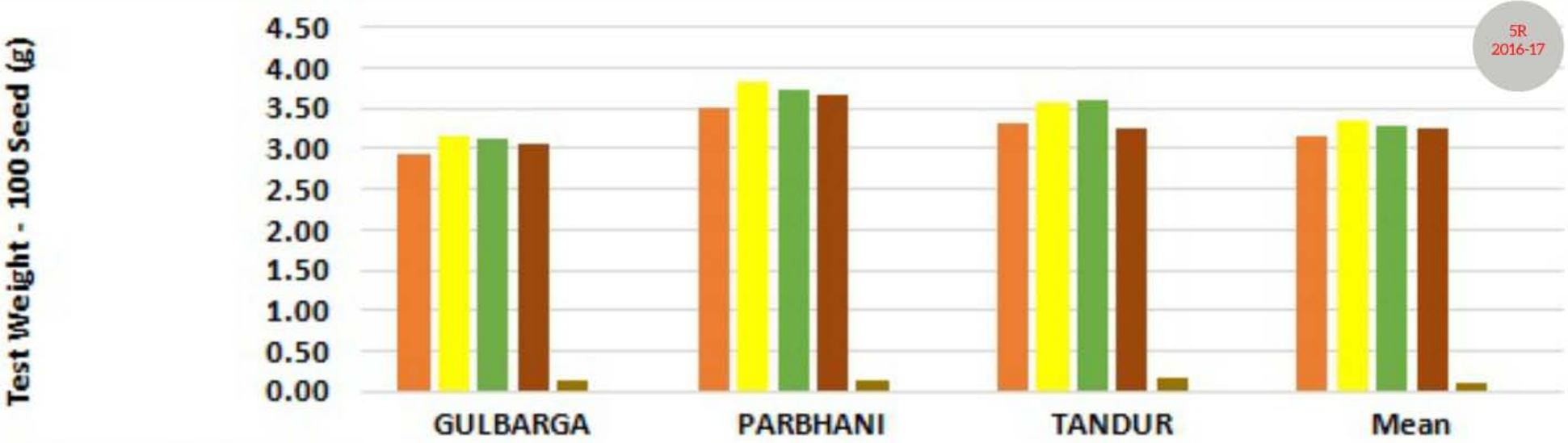
Seed Priming

Foliar Spraying at 55 DAS

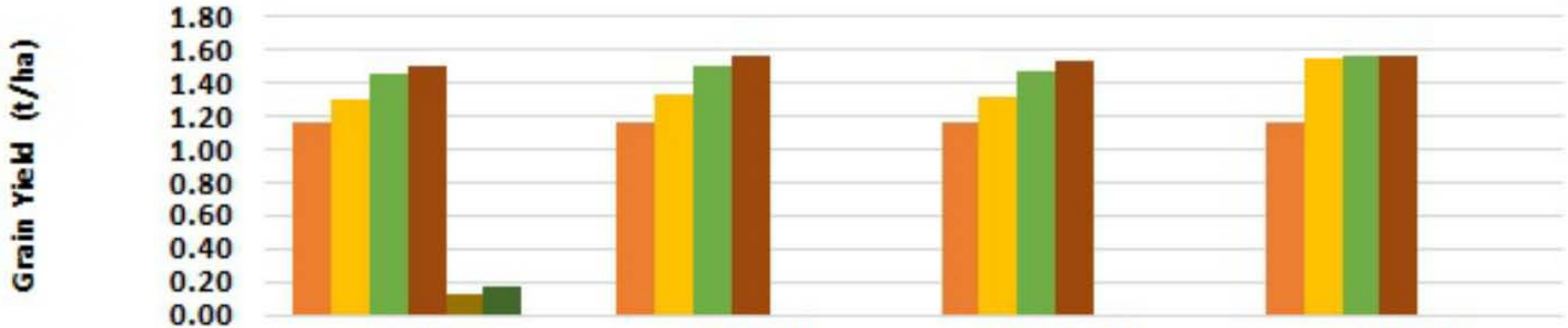


	DHARWAD	GULBARGA	PARBHANI	RAHURI	TANDUR	Mean
Control (water spray)	2520	1260	2230	1390	2130	1900
KNO3 @2%	2310	1380	2770	1380	2540	2080
DAP @2%	2430	1310	2590	1500	2610	2090
Urea @2%	2450	1290	2540	1510	2370	2030
C.D. (5%) Bi-Bj	110	60	210	130	120	130
F (Prob)	0	0	0	0.09	0	0.02

5R
2016-17

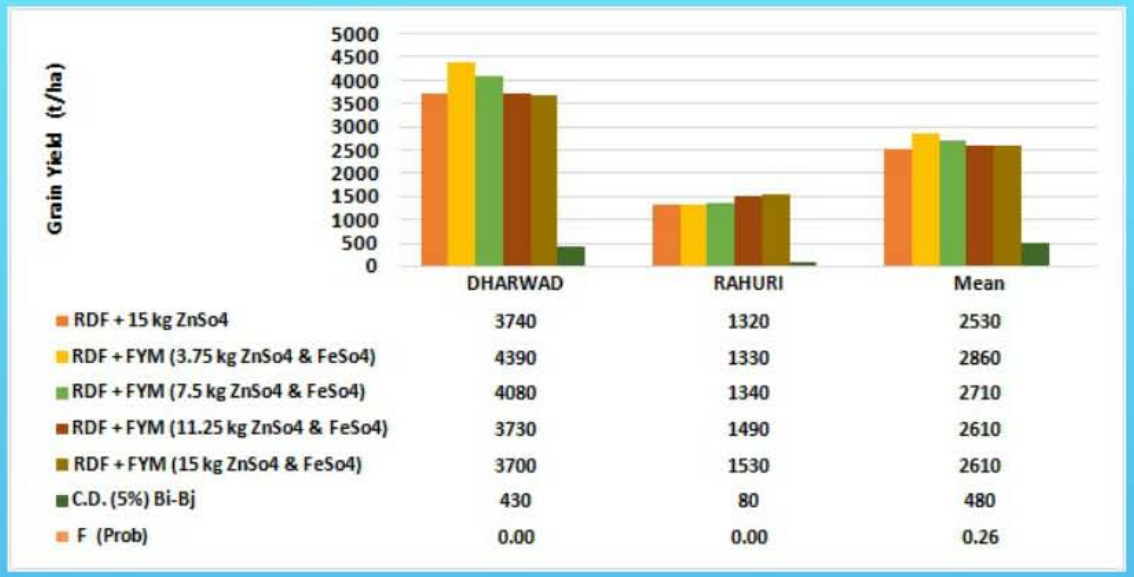


	GULBARGA	PARBHANI	TANDUR	Mean
Control (water spray)	2.94	3.50	3.31	3.15
KNO3 @2%	3.17	3.83	3.59	3.35
DAP @2%	3.13	3.74	3.62	3.29
Urea @2%	3.06	3.66	3.27	3.26
C.D. (5%) Bi-Bj	0.13	0.12	0.15	0.10
F (Prob)	0.00	0.00	0.00	0.00

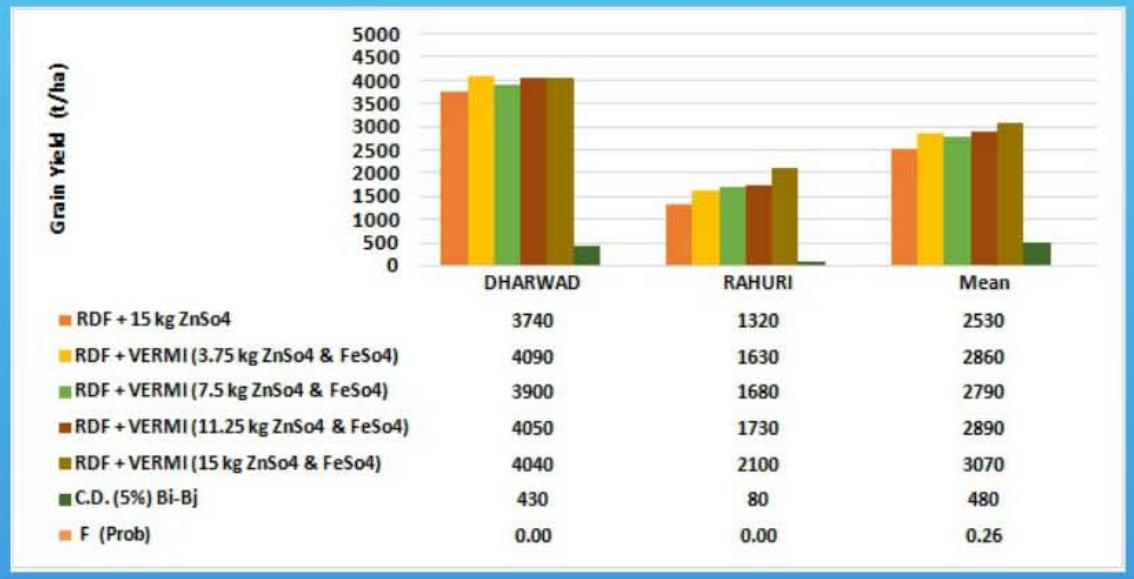


	SSP	GYPSUM	PHOS GYP	BENTO
RDF + 0kg	1.16	1.16	1.16	1.16
10 kg	1.30	1.34	1.32	1.55
20 kg	1.46	1.50	1.47	1.56
30 kg	1.51	1.57	1.54	1.56
C.D. (5%) Bi-Bj	0.12			
C.D. (1%) Bi-Bj	0.17			
F (Prob)	0.00			

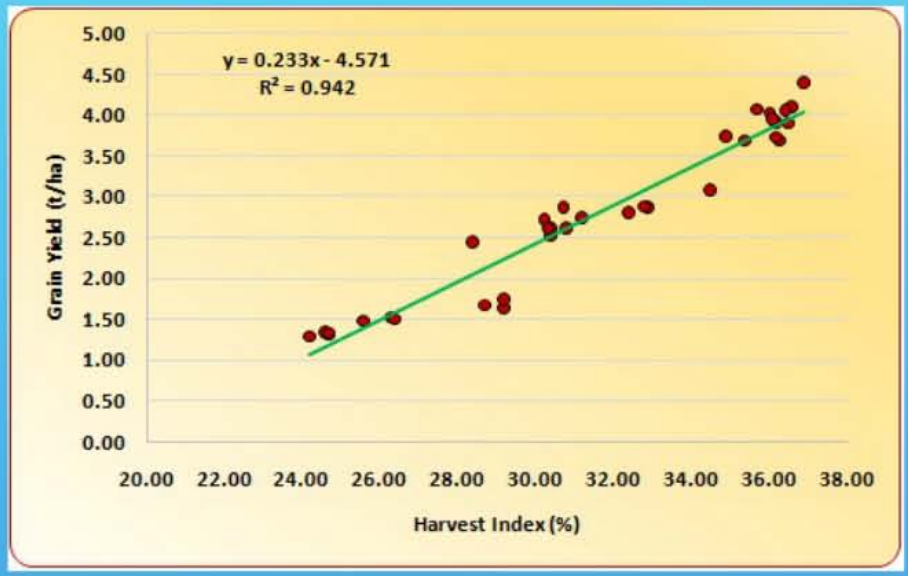
6R
Sulfur
Source & Rate



	DHARWAD	RAHURI	Mean
RDF + 15 kg ZnSo4	3740	1320	2530
RDF + FYM (3.75 kg ZnSo4 & FeSo4)	4390	1330	2860
RDF + FYM (7.5 kg ZnSo4 & FeSo4)	4080	1340	2710
RDF + FYM (11.25 kg ZnSo4 & FeSo4)	3730	1490	2610
RDF + FYM (15 kg ZnSo4 & FeSo4)	3700	1530	2610
C.D. (5%) Bi-Bj	430	80	480
F (Prob)	0.00	0.00	0.26

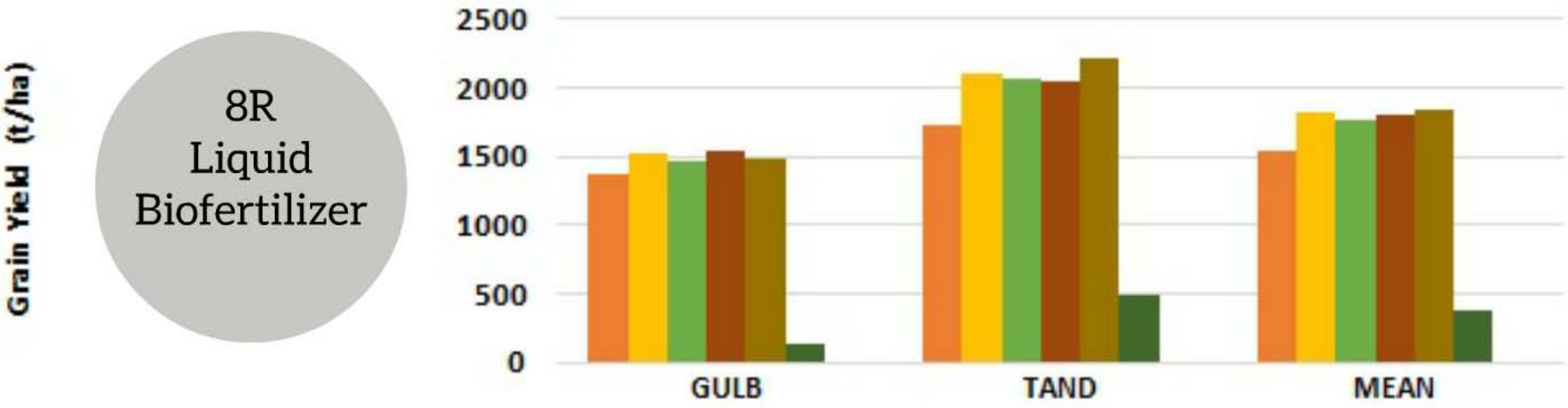


	DHARWAD	RAHURI	Mean
RDF + 15 kg ZnSo4	3740	1320	2530
RDF + VERMI (3.75 kg ZnSo4 & FeSo4)	4090	1630	2860
RDF + VERMI (7.5 kg ZnSo4 & FeSo4)	3900	1680	2790
RDF + VERMI (11.25 kg ZnSo4 & FeSo4)	4050	1730	2890
RDF + VERMI (15 kg ZnSo4 & FeSo4)	4040	2100	3070
C.D. (5%) Bi-Bj	430	80	480
F (Prob)	0.00	0.00	0.26



7R
Enriching
Organic Source
Zn & Fe

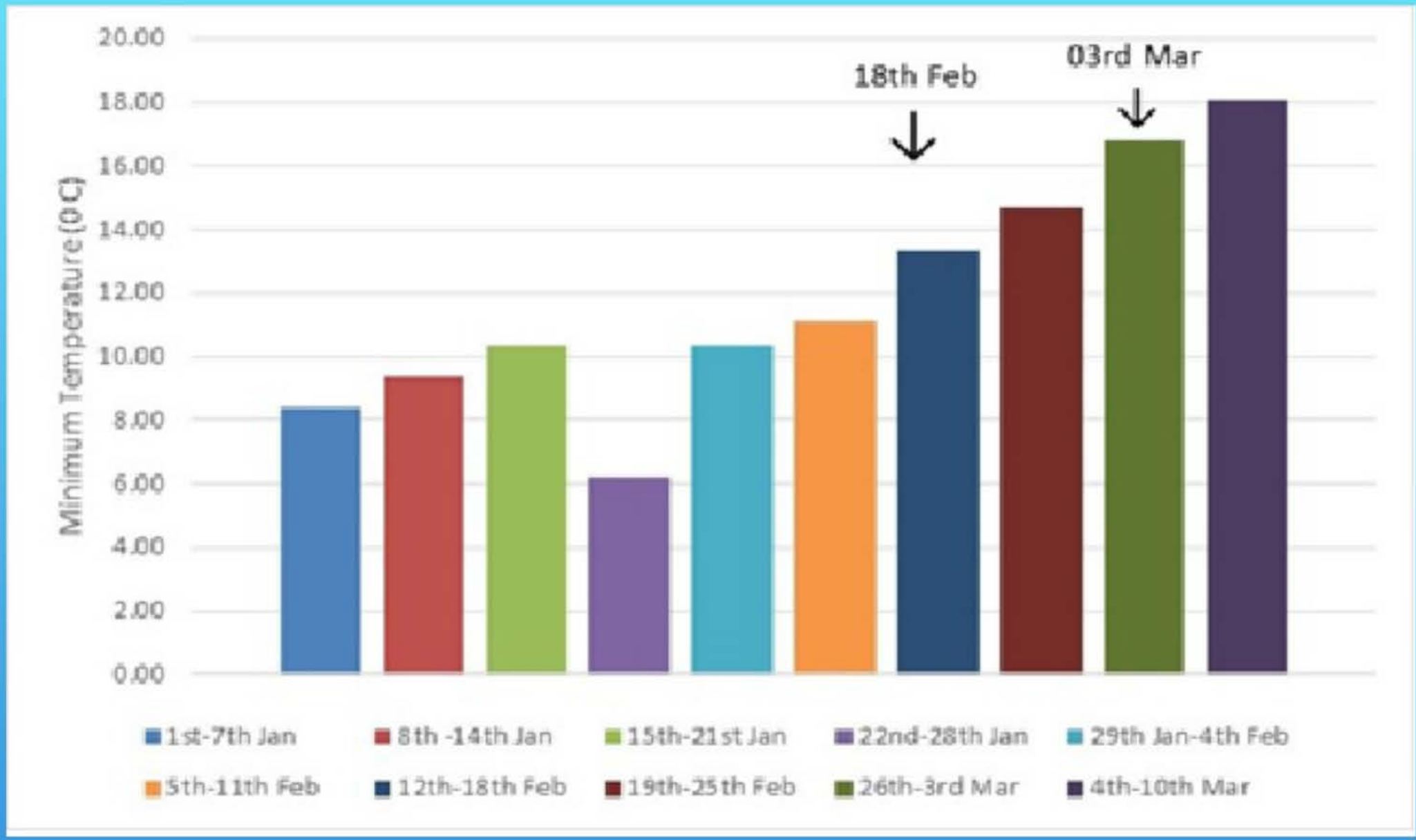
8R
Liquid
Biofertilizer



	GULB	TAND	MEAN
RDF + AZO & PSB @ 50g /kg seed)	1370	1730	1550
RDF+ AZO @ 2ml & PSB @ 2ml/kg seed	1520	2110	1820
RDF+ AZO @ 2ml & PSB @ 4ml/kg seed	1460	2060	1760
RDF+ AZO @ 4ml & PSB @ 2ml/kg seed	1550	2050	1800
RDF+ AZO @ 4ml & PSB @ 4ml/kg seed	1480	2220	1850
C.D. (5%) Bi-Bj	130	490	370
F (Prob)	0.00	0.00	0.12

"Summmer Sorghum"

	Panicle Length (cm)	Test Weight (g)	Fodder yield (t ha^{-1})	Grain yield (t ha^{-1})
16-Feb-16	33.03 A	25.69 A	17.23A	3.49B
03-Mar-16	35.91 A	26.55 A	21.23A	4.21A
Tukey's HSD at 1%	6.74	8.73	7.14	0.71
F (Prob)	0.007	0.008	0.03	0.0100
CSH 13	34.51 BC	30.82 A	22.66^{BC}	4.74 ^{A}
CSH 14	34.04CD	28.34AB	18.56^{DE}	4.32 ^{AB}
CSH 16	41.56 A	25.23AB	15.84 ^{F}	4.14^{ABC}
CSH 25	40.80 A	27.82AB	17.17 ^{EF}	4.13^{ABC}
CSV 15	29.81 D	24.07 B	18.97^{DE}	3.57 ^{BCD}
CSV 20	29.79 D	24.47 B	14.69^{FG}	3.50 ^{BCD}
CSV 23	30.22CD	25.18AB	27.09 ^{A}	3.25 ^{CD}
Tukey's HSD at 1%	3.66	4.77	2.49	1.00
F (Prob)	<.0001	0.0001	<.0001	<.0001
C.V. (%)	5.47	9.41	14.47	11.22


20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Minimum Temperature (0C)
18th Feb
03rd Mar
1st-7th Jan
8th -14th Jan
15th-21st Jan
22nd-28th Jan
29th Jan-4th Feb
5th-11th Feb
12th-18th Feb
19th-25th Feb
26th-3rd Mar
4th-10th Mar

CENTRAL FARM
"Thank U"