

## 9.4 Appendix

### Appendix- i Measurement of Plant height and above-ground biomass between Control and Rock-Phosphate

Sr. no	Treatment		Plant Height		Above-ground Biomass (g)
			2 weeks after sowing	5 weeks after sowing	
1	Control	Control	22.75	69.13	1.75
		RP*	23.44	68.25	1.84
2	Proradix	Control	24.13	69.50	1.88
		RP	22.88	70.00	1.99
3	RhizoVital 42 (RV42)	Control	22.38	66.13	1.62
		RP	25.19	72.75	2.09
4	RhizoVital 45	Control	22.88	69.63	1.56
		RP	24.25	71.13	1.93
5	MUCI	Control	18.38	62.75	1.38
		RP	21.00	68.38	1.63
6	RV42 + MUCI	Control	20.13	64.38	1.43
		RP	19.94	67.00	1.81
7	SuperFifty	Control	22.63	66.63	1.54
		RP	22.56	66.25	1.78
8	NemaTec	Control	22.38	71.00	1.68
		RP	24.13	73.75	2.19
9	LamVita	Control	22.75	67.25	1.57
		RP	22.63	68.88	2.18
10	Biological Fertilizer OD	Control	23.94	67.13	1.78
		RP	22.75	68.50	1.97
11	Trichoderma OMG	Control	22.31	66.13	1.69
		RP	22.81	70.38	2.04

\*RP~ Rock Phosphate

Remark - Mean value for each parameter is used as basis comparison value.

**Appendix- ii Measurement of element content in the aboveground dry biomass between Control and Rock-Phosphate**

Sr. no	Treatment		Elements content in the aboveground dry biomass (mg/kg)				
			P	K	Ca	Mg	S
1	Control	Control	1767.09	12173.08	8275.83	3174.84	569.55
		RP*	1562.93	11325.99	6074.16	2662.95	568.37
2	Proradix	Control	1578.99	11909.60	6704.34	2624.64	504.48
		RP	1549.41	9048.43	6403.04	2825.34	500.77
3	RhizoVital 42 (RV42)	Control	1701.24	12108.10	7349.37	2953.28	557.31
		RP	1593.45	9317.95	6553.81	2928.55	492.43
4	RhizoVital 45	Control	1688.71	11730.16	8536.38	3395.25	593.36
		RP	1647.74	11374.37	6611.01	2845.27	583.20
5	MUCI	Control	1682.11	10629.77	7496.21	3102.95	490.31
		RP	1493.91	13141.45	5388.80	2495.47	461.46
6	RV42 + MUCI	Control	1446.92	9702.88	7896.33	2903.30	558.75
		RP	1248.07	13055.06	4245.53	1968.34	434.57
7	SuperFifty	Control	1650.76	11603.21	8204.55	3155.38	658.79
		RP	1561.19	11797.84	5886.88	2627.98	587.03
8	NemaTec	Control	1535.93	10649.94	7792.99	3137.75	613.51
		RP	1587.07	9589.94	5926.79	2857.55	518.96
9	LamVita	Control	1687.59	11489.67	7880.68	3051.21	676.53
		RP	1532.64	9895.92	5713.23	2588.97	573.26
10	Biological Fertilizer OD	Control	1606.45	11827.26	7298.17	2862.14	452.95
		RP	1641.96	9835.39	6522.27	2947.29	568.79
11	Trichoderma OMG	Control	1795.07	13304.43	7045.85	2860.79	498.57
		RP	1335.05	11132.86	4448.15	2254.23	415.58

\*RP~ Rock Phosphate

Remark - Mean value for each parameter is used as basis comparison value.

**Appendix- iii Measurement of element content in the aboveground dry biomass between Control and Rock-Phosphate**

Sr. no	Treatment		Elements content in the aboveground dry biomass (mg/kg)					
			Fe	Cu	Zn	Mn	B	Ni
1	Control	Ctrl*	96.69	5.90	31.42	74.15	15.71	3.24
		RP**	112.48	5.07	21.35	62.09	13.74	3.39
2	Proradix	Ctrl	89.29	5.48	25.30	85.29	13.47	2.73
		RP	104.09	4.48	26.12	60.16	15.40	2.14
3	RhizoVital 42 (RV42)	Ctrl	68.52	5.73	26.63	79.88	14.71	2.01
		RP	70.33	4.80	26.29	62.09	15.06	1.79
4	RhizoVital 45	Ctrl	62.65	5.79	31.87	78.93	15.97	0.54
		RP	71.95	4.85	26.92	64.01	15.48	1.64
5	MUCI	Ctrl	137.34	4.75	24.60	81.42	12.90	3.14
		RP	46.70	4.08	19.80	56.60	13.60	1.50
6	RV42 + MUCI	Ctrl	127.75	4.16	21.96	74.50	19.31	0.34
		RP	46.81	3.53	15.12	48.67	9.62	0.11
7	SuperFifty	Ctrl	68.19	5.25	26.81	77.38	14.84	0.49
		RP	53.52	4.90	22.87	62.77	14.98	1.90
8	NemaTec	Ctrl	670.76	5.15	27.10	77.54	14.26	0.59
		RP	51.02	5.15	23.40	68.22	12.64	2.08
9	LamVita	Ctrl	73.46	5.71	29.52	76.34	14.63	2.57
		RP	57.17	4.84	24.70	67.74	16.66	0.47
10	Biological Fertilizer OD	Ctrl	66.22	4.99	24.00	58.93	15.46	2.50
		RP	55.39	5.32	26.97	74.66	14.01	2.18
11	Trichoderma OMG	Ctrl	59.35	5.29	27.36	55.46	13.57	1.85
		RP	51.43	3.90	20.92	47.59	7.37	1.31

\*Ctrl ~ Control

\*\*RP ~ Rock Phosphate

Remark - Mean value for each parameter is used as basis comparison value.

**Appendix- iv Measurement of element uptake by aboveground dry biomass between Control and Rock-Phosphate**

Sr. no	Treatment	Element uptake by aboveground dry biomass					
		P (mg/kg)	K (mg/kg)	Ca (mg/kg)	Mg (mg/kg)	S (µg/kg)	
1	Control	Control	3.11	21.53	14.50	5.54	1008.95
		RP*	2.87	20.92	11.07	4.86	1036.25
2	Proradix	Control	2.93	22.00	12.51	4.89	936.28
		RP	3.08	18.03	12.65	5.61	996.20
3	RhizoVital 42 (RV42)	Control	2.74	19.70	11.81	4.74	898.30
		RP	3.33	19.54	13.66	6.10	1025.54
4	RhizoVital 45	Control	2.63	18.21	13.31	5.29	922.65
		RP	3.15	21.90	12.62	5.43	1116.14
5	MUCI	Control	2.31	14.60	10.29	4.26	672.53
		RP	2.49	20.84	9.00	4.17	768.42
6	RV42 + MUCI	Control	2.05	13.68	11.21	4.13	787.57
		RP	2.24	23.50	7.65	3.54	780.14
7	SuperFifty	Control	2.53	17.73	12.58	4.83	1009.53
		RP	2.78	20.96	10.51	4.68	1044.82
8	NemaTec	Control	2.57	17.77	13.05	5.26	1021.76
		RP	3.47	21.00	12.90	6.22	1130.88
9	LamVita	Control	2.64	17.92	12.32	4.78	1057.57
		RP	3.28	21.51	12.32	5.57	1232.12
10	Biological Fertilizer OD	Control	2.82	20.87	12.79	4.99	788.28
		RP	3.16	19.20	12.72	5.73	1097.01
11	Trichoderma OMG	Control	3.03	22.28	11.88	4.84	835.19
		RP	2.62	22.64	8.78	4.44	814.99

\*RP ~ Rock Phosphate

Remark - Mean value for each parameter is used as basis comparison value.

**Appendix- v Measurement of element uptake by aboveground dry biomass between Control and Rock-Phosphate**

Sr. no	Treatment		Elements uptake by aboveground dry biomass ( $\mu\text{g}/\text{kg}$ )					
			Fe	Cu	Zn	Mn	B	Ni
1	Control	Ctrl*	170.27	10.38	54.86	131.50	27.60	5.70
		RP**	207.25	9.33	38.96	114.04	25.09	6.29
2	Proradix	Ctrl	164.56	10.10	47.03	159.37	25.27	5.13
		RP	204.10	8.92	51.51	119.23	30.54	4.22
3	RhizoVital 42 (RV42)	Ctrl	110.37	9.22	43.10	129.40	23.79	3.26
		RP	147.56	10.03	54.92	129.60	31.25	3.76
4	RhizoVital 45	Ctrl	97.50	9.00	49.77	122.95	24.94	0.83
		RP	143.52	9.28	51.08	123.16	29.81	3.12
5	MUCI	Ctrl	190.12	6.53	33.80	111.80	17.74	4.32
		RP	78.10	6.78	33.05	94.92	22.66	2.55
6	RV42 + MUCI	Ctrl	176.54	5.88	31.16	106.30	28.09	0.47
		RP	83.65	6.35	27.05	87.97	17.39	0.19
7	SuperFifty	Ctrl	104.66	8.05	40.96	118.76	22.75	0.72
		RP	95.03	8.73	41.08	112.06	26.63	3.39
8	NemaTec	Ctrl	101.00	8.54	45.40	129.35	24.04	0.99
		RP	111.42	11.22	50.86	148.40	27.70	4.58
9	LamVita	Ctrl	114.08	8.92	46.34	119.58	22.90	4.01
		RP	122.59	10.35	53.21	147.75	35.65	0.92
10	Biological Fertilizer OD	Ctrl	116.94	8.79	42.05	104.64	27.59	4.39
		RP	106.41	10.25	52.56	146.15	27.01	4.28
11	Trichoderma OMG	Ctrl	99.66	8.92	46.53	92.56	22.91	3.12
		RP	99.86	7.62	40.90	94.79	14.72	2.53

\*Ctrl ~ Control

\*\*RP ~ Rock Phosphate

Remark - Mean value for each parameter is used as basis comparison value.