

Table 1. Some Characteristics of cultivated soil.

Soil depth (cm)	Texture grade	Saturation Percentage (SP %)		pH 1:2.5 suspend	ECe dS/m (1:5 ext.)	CaCO ₃ %	Organic matter %	
0-30	Sandy	19.5		7.59	0.51	1.13	0.35	
30-60	Sandy	18.6		7.47	0.46	1.09	0.28	
soluble cations (meq/l) (1:5 ext.)				soluble anions (meq/l) (1:5 ext.)				
	Ca ⁺⁺	Mg ⁺⁺	Na ⁺	K ⁺	CO ₃ ⁻⁻	HCO ₃ ⁻	SO ₄ ⁻⁻	CL ⁻
0-30	1.20	0.15	2.00	1.85	ND	0.96	3.84	0.40
30-60	1.16	0.12	1.75	1.67	ND	0.88	3.52	0.30

ND: Not Detected

Table 2. Effect of KCl:KNO₃ combination ratio on accumulated changes in banana pseudo stem diameters and Leaves number during growth season and their regression indices

a) Accumulated changes in pseudo stem diameters in (cm).

KCl:KNO ₃	Months - Days						Mean PSD	
	Apr-0	May-30	Jun-60	Jul-90	Aug-120	Sept-150	mean	*RC%
0:100	0.0	3.0	6.2	10.2	14.2	14.2	7.9 _G	100
10:90	0.0	3.7	16.2	21.4	26.7	26.7	15.8 _C	198
20:80	0.0	4.0	11.0	12.1	13.2	13.2	8.9 _F	112
30:70	0.0	4.3	12.5	14.3	0.0	16.1	7.9 _G	99
40:60	0.0	3.3	6.3	9.2	12.0	12.0	7.1 _H	90
50:50	0.0	5.0	20.2	22.7	25.2	26.2	16.5 _A	208
60:40	0.0	3.7	10.3	12.1	14.0	14.0	9.0 _F	113
70:30	0.0	6.7	18.0	21.4	24.8	24.8	16.0 _B	201
80:20	0.0	5.3	14.0	14.7	15.3	15.3	10.8 _E	136
90:10	0.0	8.3	20.2	21.4	22.7	23.3	16.0 _B	201
100:0	0.0	4.7	10.8	15.8	20.7	20.7	12.1 _D	152

* RC%=relative change as calculated as a percentage of that of 0:100 KCl: KNO₃ treatment.

- Values having the same letters within a column are not significantly different at 5% confidence level.

Cont. Table 2.

b) Accumulated changes in leaves number

KCl:KNO ₃	Months - Days						Mean LN	
	Apr-0	May-30	Jun-60	Jul-90	Aug-120	Sept-150	mean	*RC%
0:100	0.0	2.3	6.3	11.0	15.7	15.7	8.5 E	100
10:90	0.0	3.3	8.3	12.3	16.3	16.3	9.4 B	111
20:80	0.0	3.0	8.0	11.3	14.7	14.7	8.6 D	101
30:70	0.0	3.0	8.0	12.0	16.0	16.0	9.2 C	108
40:60	0.0	3.3	8.3	11.0	13.7	13.7	8.3 F	98
50:50	0.0	3.0	8.0	12.0	16.0	16.0	9.2 C	108
60:40	0.0	3.0	8.0	11.2	14.3	14.3	8.5 E	100
70:30	0.0	3.0	8.0	12.7	17.3	17.3	9.7 A	114
80:20	0.0	3.3	8.3	12.3	16.3	16.3	9.4 B	111
90:10	0.0	3.3	8.3	12.3	16.3	16.3	9.4 B	111
100:0	0.0	3.3	8.3	10.8	13.3	14.0	8.3 F	98

* RC%=relative content as calculated as a percentage of that of 0:100 KCl: KNO₃ treatment.

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Cont. Table 2.

c) Simple regression indices for pseudo stem diameters (PSD) and leaves numbers (LN) of banana plants

KCl:KNO ₃	Pseudo stem diameter in cm (SD)			Leaves number (LN)		
	Intercept	Slope	R ²	Intercept	Slope	R ²
0:100	6.6	7.04	0.96	3.8	3.51	0.97
10:90	11.4	13.61	0.92	3.0	3.56	0.96
20:80	2.6	3.19	0.95	2.6	3.19	0.95
30:70	7.9	11.00	0.62	3.1	3.51	0.96
40:60	4.0	5.78	0.96	1.9	2.91	0.94
50:50	6.6	12.78	0.86	3.1	3.51	0.96
60:40	2.4	3.11	0.95	2.4	3.11	0.95
70:30	5.2	11.94	0.89	3.7	3.84	0.96
80:20	0.0	7.07	0.77	3.0	3.56	0.96
90:10	0.4	10.59	0.80	3.0	3.56	0.96
100:0	8.0	10.19	0.96	1.9	2.93	0.95

PSD = f (growth period in months) LN = f (growth period in months)

Table 3. The effect of KCl:KNO₃ combination ratio on some fruit yield parameters of banana plants

KCl:KNO ₃	Bunch weight		Hand No		Finger No		Finger diameter		Finger length	
	Kg/bunch	*RC%	/ bunch	*RC%	/ bunch	*RC%	/cm	*RC%	/cm	*RC%
0:100	18.3 B	100	9.00 CD	100	18.3 B	100	3.32 DEF	100	19.6 B	100
10:90	18.5 B	101	9.33 BCD	104	18.3 B	100	3.24 EF	97	19.7 B	101
20:80	18.8 B	103	8.33 D	93	19.7 AB	107	3.39 CDEF	102	19.8 B	101
30:70	18.5 B	101	9.67 BC	107	19.2 AB	105	3.29 DEF	99	19.9 B	102
40:60	19.0 B	104	10.00 ABC	111	17.3 B	95	3.43 BCDEF	103	20.7 AB	106
50:50	18.5 B	101	9.00 CD	100	18.3 B	100	3.10 F	93	20.5 AB	105
60:40	20.0 AB	109	10.00 ABC	111	17.7 B	96	3.82 AB	115	20.5 AB	105
70:30	21.3 AB	116	10.00 ABC	111	17.5 B	95	3.74 ABC	112	22.5 AB	115
80:20	24.3 A	133	11.00 A	122	21.2 A	115	3.85 A	116	23.5 A	120
90:10	18.3 B	100	10.33 AB	115	19.3 AB	105	3.57 ABCDE	107	21.2 AB	108
100:0	18.7 B	102	9.67 BC	107	19.5 AB	106	3.64 ABCD	110	21.2 AB	109

* RC%= relative change as calculated as a percentage of that of 0:100 KCl: KNO₃ treatment.

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Table 4. The effect of KCl:KNO₃ combination ratio on some nutrient contents in banana leaves lamina and its relative to 0/100=100

KCl:KNO ₃	N		P		K		Cl	
	%	*RC%	%	*RC%	%	*RC%	%	*RC%
0:100	3.44 ^{BC}	100	0.23 ^{EF}	100	3.29 ^G	100	0.86 ^G	100
10:90	4.11 ^A	119	0.23 ^E	103	4.01 ^{ABC}	122	1.01 ^F	117
20:80	3.07 ^{DE}	89	0.30 ^C	132	4.19 ^A	128	1.04 ^{EF}	121
30:70	3.70 ^B	107	0.30 ^C	133	4.16 ^{AB}	127	1.10 ^{DE}	128
40:60	4.16 ^A	121	0.22 ^F	95	3.78 ^{DE}	115	1.13 ^D	131
50:50	3.24 ^{CD}	94	0.20 ^G	88	3.98 ^{BC}	121	1.20 ^C	139
60:40	2.86 ^E	83	0.29 ^C	129	3.60 ^{EF}	110	1.19 ^C	139
70:30	3.62 ^B	105	0.36 ^A	158	3.44 ^{FG}	105	1.25 ^{BC}	144
80:20	3.08 ^{DE}	89	0.35 ^B	152	3.96 ^{CD}	121	1.30 ^B	150
90:10	3.57 ^{BC}	104	0.30 ^C	133	3.98 ^{BC}	121	1.44 ^A	167
100:0	2.51 ^F	73	0.25 ^D	110	3.72 ^E	113	1.44 ^A	167
average	3.40		0.28		3.83		1.18	

*RC%=relative content was calculated as a percentage of that of 0:100 KCl: KNO₃ treatment.

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Table 5. The effect of KCl:KNO₃ combination ratio on chloride accumulation in different soil layers in meq/l

KCl:KNO ₃	0-30 cm depth			30-60 cm depth		
	Cl ⁻ meq/l	**RC %	accumulation %*	Cl ⁻ meq/l	**RC %	accumulation %*
0:100	0.42 _F	100	5.00	0.33 _F	100	10.00
10:90	0.48 _{EF}	114	20.00	0.36 _{EF}	109	20.00
20:80	0.60 _{DE}	143	50.00	0.39 _{EF}	118	30.00
30:70	0.63 _{DE}	150	57.50	0.42 _{DEF}	127	40.00
40:60	0.66 _D	157	65.00	0.48 _{CDEF}	145	60.00
50:50	0.72 _{CD}	171	80.00	0.51 _{BCDE}	155	70.00
60:40	0.73 _{CD}	175	82.50	0.51 _{BCDE}	155	70.00
70:30	0.74 _{BCD}	177	85.00	0.57 _{ABCD}	173	90.00
80:20	0.87 _{ABC}	207	117.50	0.64 _{ABC}	193	113.33
90:10	0.90 _{AB}	214	125.00	0.65 _{AB}	198	116.67
100:0	0.93 _A	221	132.50	0.68 _A	205	126.67

* accumulation % = ((Cl after harvest- Cl before cultivation)/Cl before cultivation)*100.

** RC%=relative content as calculated as a percentage of that of 0:100 KCl: KNO₃ treatment.

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