Source of Variation	DF	Mean Squares									
		Height (m)	Single Cane Weight (kg)	Diameter (cm)	Stock Population (Number/ha)	Cane yield (ton/ha)	Sucrose Percent Cane (%)	Sugar Yield (ton/ha)	Pol (%)	Brix	Purity (%)
Genotype	2	0.369**	0.022 ns	0.161**	745241**	16395.31**	4.818**	8914**	8.812**	10.2264***	8.30ns
Seed Source	1	0.250ns	0.467***	0.017ns	270344.8ns	126250**	0.001ns	15074***	0.004ns	0.0004ns	0.04ns
Genotype* Seed Source	2	0.352**	0.064 ns	0.104**	781172**	1075071**	0.996ns	5486**	0.938ns	0.2794ns	15.82**
Soil type	1	0.06 ns	0.026ns	0.025ns	108301**	2828.83**	1.818ns	8440**	0.608ns	0.6834ns	82.45***
Genotype* Soil type	2	0.010ns	0.002ns	0.015ns	655172ns	1310.34ns	2.132ns	361ns	3.755ns	3.6100**	2.26**
Seed Source* Soil type	1	0.020ns	0.006ns	0.011ns	23793ns	142.76ns	5.437**	2850ns	7.896**	4.5227**	16.78ns
Genotype* Seed Source * Soil type	2	0.016ns	0.094ns	0.099**	174000ns	16356**	4.884**	2044ns	7.384**	5.8866**	11.35ns
CV (%)		11.8	13.1	6.22	14.4	18.8	9.92	18.8	8.31	5.89	2.5

""** indicates P > 0.001 but < 0.05; "***" indicates P < 0.001 while "ns" indicates p > 0.05 at 5% probability level.

Table 1: ANOVA for comparison of micropropagated and conventional seed sources of three sugarcane genotypes.

Seed Source	Tukey's Standardized Range(HSD) Grouping								
	Stalk Height(m)	Single Cane Weight (kg)	Diameter(cm)	Stock Population (Number/ha)	Cane Yield (ton/ha)	Sucrose Percent Cane (%)	Sugar Yield (ton/ha)	Pol (%)	Brix
Conventional	2.47[a]	1.46[a]	2.57[a]	150193.1[a]	1219.281[a]	10.96[a]	238.69[a]	15.80[a]	17.70[a]
Tissue culture	2.30[a]	1.23[b]	2.52[a]	146972.4[a]	1180.776[b]	10.95[a]	197.77[b]	15.78[a]	17.69[a]

Remark: Means with the same letter are not significantly different.

Table 2: Response of sugarcane genotypes to the two seed sources.

Genotypes	Stalk Height (m)	Single Cane Weight (kg)	Diameter (cm)	Stock Population (Number/ha)	Cane Yield (ton/ha)	Sucrose Percent Cane (%)	Sugar Yield (ton/ha)	Pol (%)	Brix	Purity (%)
NCO-334	2.54[a]	1.30[a]	2.42[c]	152413.79[b]	198.137.93[b]	10.22[c]	204.52[b]	14.81[c]	16.68[c]	88.36[b]
B52-298	2.20[c]	1.34[a]	2.64[a]	132413.79[c]	177.434.49[c]	11.68[a]	200.55[c]	16.42[a]	18.48[a]	88.62[b]
N14	2.43[b]	1.39[a]	2.57[b]	160920.68[a]	223.679.75[a]	11.27[b]	249.61[a]	16.13[b]	17.91[b]	89.91[a]

Remark: Means with the same letter are not significantly different.

Table 3: Comparison of sugarcane genotypes NCO-334, B52-298 and N14.

Genotype	Seed Source	Soil Type	Mean ± SE				
			Stalk Diameter(cm)	Cane Yield (ton/ha)	Sucrose Percent Cane (%)	Pol (%)	Brix
B52-298	Tissue culture	Luvisol	2.72±0.09^{b}	105.876 ± 2.83^{k}	13.23±0.63^{a}	18.62±0.76^{a}	20.23±0.60^{a}
		Vertisol	2.52±0.09^{d}	176.552± 2.83^{i}	9.75±0.63^{j}	14.52±0.76^{g}	17.01±0.60^{h}
	Conventional	Luvisol	2.71±0.09^{b}	221.279 ± 2.83^{d}	10.87±0.63^{f}	15.72±0.76^{d}	17.73±0.60^{f}
		Vertisol	2.60±0.09^{c}	220.114 ± 2.83d^{e}	11.62±0.63^{c}	16.81±0.76^{ab}	18.97±0.60^{b}
N14	Tissue culture	Luvisol	2.53±0.09^{d}	233.028 ±2.83^{c}	10.86±0.63^{f}	15.50±0.76^{e}	17.07±0.60^{h}
		Vertisol	2.36±0.09^{f}	217.355 ±2.83^{e}	11.01±0.63^{e}	16.09±0.76^{c}	18.42±0.60^{c}
	Conventional	Luvisol	2.61±0.09^{c}	184.893 ±2.83^{h}	11.95±0.63^{b}	16.69±0.76^{b}	17.92±0.60^{e}
		Vertisol	2.79±0.09^{a}	255.286 ±2.83^{a}	11.26±0.63^{d}	16.24±0.76^{c}	18.24±0.60^{d}
NCO-334	Tissue culture	Luvisol	2.47±0.09^{e}	170.231 ± 2.83^{j}	10.59±0.63^{g}	14.99±0.76^{f}	16.42±0.60^{j}
		Vertisol	2.45±0.09^{e}	196.666 ±2.83^{f}	10.25±0.63^{i}	14.92±0.76^{f}	16.99±0.60^{i}
	Conventional	Luvisol	2.50±0.09^{d}	189.117 ±2.83^{g}	9.57±0.63^{k}	13.97±0.76^{h}	15.96±0.60^{k}
		Vertisol	2.25±0.09^{g}	242.069 ±2.83^{b}	10.49±0.63^{h}	15.35±0.76^{e}	17.35±0.60^{g}

Remark: Means with the same letter are not significantly different

Table 4: Separation of significant means for the interaction effects of genotype, seed source and soil type.

Genotype	Seed Source	Mean ± SE			
		Stalk Height (cm)	Stalk Population (Number/ha)	Sugar Yield (ton/ha)	Purity (%)
B52-298	Tissue culture	1.93±0.12^{e}	119138 ±2.53^{f}	155.83±0.44^{e}	88.68±0.90^{c}
	Conventional	2.47±0.12^{c}	145690 ±2.53^{c}	245.26±0.44^{b}	88.56±0.90^{c}
N14	Tissue culture	2.50±0.12^{ab}	176201 ±2.53^{a}	245.28±0.44^{b}	88.78±0.90^{c}
	Conventional	2.36±0.12^{d}	145621 ±2.53^{d}	253.95±0.44^{a}	91.04±0.90^{a}
NCO-334	Tissue culture	2.49±0.12^{b}	145586 ±2.53^{e}	192.19±0.44^{d}	89.53±0.90^{b}
	Conventional	2.59±0.12^{a}	159241±0.53^{b}	216.86±0.44^{c}	87.19±0.90^{d}

Remark: Means with the same letter are not significantly different.

Table 5: Separation of means for the interaction effects of genotype by seed source.