

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 06-04-18A
 SPECIES: Pinus oocarpa
 COMPANY: CONARE
 SITE NAME: Nirgua
 LATITUDE: 8° N
 LONGITUDE: 65° W

DATE PLANTED: July 1983
 DATE MEASURED: October 1986

ANALYSIS OF VARIANCE

DEPENDENT VARIABLE: THREE YEAR HEIGHT (meters)

<u>SOURCE</u>	<u>DF</u>	<u>SUM OF SQUARES</u>	<u>F VALUE</u>
REP	8	577.42195041	
PROV	8	48.86421125	1.18 ns
REP*PROV	58	299.04401985	
FAM(PROV)	45	158.42519098	1.85 **
REP*FAM(PROV)	243	463.52364315	
ERROR	1602	1890.97259091	
<hr/>			
CORRECTED TOTAL	1964	3564.01949110	

** Significant at $p < .01$ ns: not significant

TEST MEAN	C.V. (%)
2.9005	37.4574

06-04-18A

The analysis of variance shows no significant differences among the provenances.

	<u>PROVENANCE</u>	<u>MEAN</u>	<u>N</u>
	La Lagunilla	3.0693	283
	El Castaño	3.0337	297
	San Marcos	2.9993	299
	Tablazon	2.9865	170
(FUD)	Nirgua	2.9293	41
(202)	Mt. Pine Ridge	2.9118	51
	San Luis	2.8543	359
	Las Crucitas	2.8435	170
	Guaimaca	2.5380	295

WALLER-DUNCAN MULTIPLE COMAPRISONS FOR THREE YEAR FAMILY HEIGHTMEANS WITH THE SAME LETTER ARE NOT SIGNIFICANTLY DIFFERENT.

<u>WALLER</u>	<u>GROUPING</u>	<u>MEAN</u>	<u>N</u>	<u>FAMILY</u>	<u>PROVENANCE</u>
	A	4.8562	16	188	9
	A				
B	A	4.0875	8	242	8
B	A				
B	A C	3.5941	17	193	9
B	C				
B	D C	3.4667	9	152	2
B	D C				
B	D C	3.4214	28	238	8
B	D C				
B	D C	3.3812	48	232	8
B	D C				
B	D C	3.3211	19	6	3
B	D C				
B	D C	3.2937	32	125	3
B	D C				
B	D C	3.2579	38	147	2
B	D C				
B	D C	3.2381	21	128	3
B	D C				
B	D C	3.2292	48	95	4
B	D C				
B	D C	3.1962	52	155	2
B	D C				
B	D C	3.1762	21	122	3
B	D C				
B	D C	3.1377	53	134	3
B	D C				
B	D C	3.1366	41	97	4
B	D C				
B	D C	3.1286	42	140	2
B	D C				
B	D C	3.0900	30	279	6
B	D C				
B	D C	3.0500	26	171	9
B	D C				
B	D C	3.0026	39	135	3
B	D C				
B	D C	2.9886	35	275	6
B	D C				
B	D C	2.9706	51	137	2

06-04-18A

<u>WALLER</u>	<u>GROUPING</u>	<u>MEAN</u>	<u>N</u>	<u>FAMILY</u>	<u>PROVENANCE</u>
B	D C				
B	D C	2.9634	41	115	4
B	D C				
B	D C	2.9400	50	162	3
B	D C				
B	D C	2.9293	41	FUD	*
B	D C				
B	D C	2.9118	51	202	*
B	D C				
B	D C	2.8981	53	149	2
B	D C				
B	D C	2.8975	40	251	8
B	D C				
B	D C	2.8739	23	295	6
B	D C				
B	D C	2.8687	48	257	8
B	D C				
B	D C	2.8522	46	337	7
B	D C				
B	D C	2.8419	31	398	9
B	D C				
B	D C	2.8137	51	247	8
B	D C				
B	D C	2.8125	48	130	3
B	D C				
B	D C	2.8080	50	234	8
B	D C				
B	D C	2.7974	39	320	7
B	D C				
B	D C	2.7870	23	169	9
	D C				
	D C	2.7667	45	93	4
	D C				
	D C	2.7558	52	145	2
	D C				
	D C	2.7444	45	114	4
	D C				
	D C	2.7367	30	266	6
	D C				
	D C	2.7111	27	316	7
	D C				
	D C	2.7044	45	118	4
	D C				
	D C	2.6894	47	113	4
	D C				
	D C	2.6519	52	272	6
	D C				

<u>WALLER</u>	<u>GROUPING</u>	<u>MEAN</u>	<u>N</u>	<u>FAMILY</u>	<u>PROVENANCE</u>
	D C	2.6346	26	254	8
	D C				
	D C	2.6277	47	112	4
	D C				
	D C	2.6261	23	178	9
	D C				
	D C	2.4580	50	332	7
	D C				
	D C	2.4375	16	321	7
	D C				
	D C	2.4083	36	328	7
	D C				
	D C	2.3973	37	318	7
	D C				
	D C	2.3000	18	175	9
	D				
	D	2.2250	16	199	7
	D				
	D	2.2250	44	341	9

Provenance code: 2 = El Castaño, Guatemala
 3 = La Lagunilla, Guatemala
 4 = San Luis, Guatemala
 6 = Las Crucitas, Honduras
 7 = Guaimaca, Honduras
 8 = San Marcos, Honduras
 9 = Tablazon, Honduras

* Commercial Control: 202 = P. tecunumanii, Mt. Pine Ridge, Belize
 FUDECO = P. oocarpa, Nirgua, Venezuela