

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 05-08-03B
SPECIES: Pinus caribaea - Dry
COMPANY: Jari Florestal
SITE NAME: Quadra 37; Area 60-75 (85)
LATITUDE: 0° 50' S
LONGITUDE: 53° W
ELEVATION: 50 - 100 m
ANNUAL PRECIPITATION: 1981 mm

DATE PLANTED: February 1985
DATE MEASURED: March 1988

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	9	26.10298132	0.75 ns
PROV	8	129.27354281	4.15 **
REP*PROV	72	280.26856429	2.83 **
FAM(PROV)	32	209.28503854	4.75 **
REP*FAM(PROV)	287	395.18259779	1.98 **
ERROR	1945	1349.47416667	
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CORRECTED TOTAL	2353	2405.13284622	

ns: Not significant

** Significant at $p < .01$

TEST MEAN
4.346 m

C.V. (%)
19.16

***** MEANS BY PROVENANCE *****

WALLER-DUNCAN MULTIPLE COMPARISONS FOR THREE YEAR PROVENANCE HEIGHT

MEANS WITH THE SAME LETTER ARE NOT SIGNIFICANTLY DIFFERENT.

<u>Waller</u>	<u>Grouping</u>	<u>Mean</u>	<u>N</u>	<u>Provenance</u>
	A	4.62	919	Poptun
	A			
	A	4.50	55	* San Esteban (80)
	A			
B	A	4.38	57	* La Mosquitia (78)
B	A			
B	A	4.22	342	Gualjoco
B	A			
B	A	4.19	406	Los Limones
B	A			
B	A	4.18	59	* San Nicolas (79)
B	A			
B	A	4.17	50	* Comm. Control (PV)
B	A			
B	A	4.07	411	Santa Cruz De Yojoa
B				
B		3.89	55	* Los Limones (81)

* Control lots: 78 = P. caribaea, La Mosquitia, Honduras
 79 = P. caribaea, San Nicolas, Honduras
 80 = P. caribaea, San Esteban, Honduras
 81 = P. caribaea, Los Limones, Honduras
 PV = Commercial control, CAFMA, Brazil

***** MEANS BY FAMILY *****

<u>Family</u>	<u>Prov</u>	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>	<u>Mean D.B.H. (cm)</u>
24	4	59	98.33	5.48	19.46	8.02
6	4	56	93.33	5.16	15.92	8.57
3	4	57	95.00	5.15	15.30	7.95
45	4	58	96.67	4.93	17.06	7.26
37	4	58	96.67	4.76	19.33	7.73
39	4	57	95.00	4.69	18.64	7.53
27	4	58	96.67	4.64	24.30	7.32
17	4	58	96.67	4.60	19.38	7.41
288	2	57	95.00	4.58	18.86	6.86
41	4	63	95.45	4.54	23.49	7.47
80	*	55	91.67	4.50	24.03	6.66
4	4	59	98.33	4.46	21.24	6.97
296	2	58	96.67	4.46	19.90	6.68
35	4	56	93.33	4.45	26.20	6.58
229	3	56	93.33	4.45	21.80	6.50
239	3	58	96.67	4.45	21.58	6.91
232	3	58	96.67	4.42	18.56	6.54
43	4	51	94.44	4.41	21.95	7.29
78	*	57	95.00	4.38	22.80	6.74
238	3	57	95.00	4.31	18.41	6.31
307	2	57	95.00	4.31	19.76	6.18
242	3	60	100.00	4.30	20.34	6.76
189	5	58	96.67	4.30	21.85	5.87
22	4	58	96.67	4.29	22.09	6.34
175	5	58	96.67	4.28	20.38	6.42
33	4	59	98.33	4.27	20.91	7.11
177	5	60	100.00	4.25	18.24	6.01
293	2	56	93.33	4.18	24.93	6.24
79	*	59	98.33	4.18	21.61	6.82
PV	*	50	83.33	4.17	20.47	6.58
11	4	55	91.67	4.07	27.80	5.81
285	2	59	98.33	4.01	23.02	6.45
30	4	57	95.00	4.00	26.22	6.02
191	5	59	98.33	3.99	20.11	5.56
179	5	59	98.33	3.91	22.18	6.09
181	5	59	98.33	3.91	24.37	5.79
81	*	55	91.67	3.89	23.02	5.42
193	5	58	96.67	3.87	29.50	5.73
245	3	58	96.67	3.85	25.69	6.18
278	2	55	91.67	3.81	26.25	6.16
234	3	59	98.33	3.54	23.87	5.04

05-08-03B

	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>	<u>Mean D.B.H. (cm)</u>
OVERALL	2078	96.20	4.36	23.28	6.66

The overall mean does not include control lots.

Provenance code: 2 = Gualjoco, Honduras
3 = Los Limones, Honduras
4 = Poptun, Guatemala
5 = Santa Cruz De Yojoa, Honduras