

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 16-08-01B
SPECIES: Pinus tecunumanii - Low elevation
COMPANY: Jari Florestal
SITE NAME: Quadra 116 Area 07-86
LATITUDE: 0° 50' S
LONGITUDE: 53° W
ELEVATION: 50 - 100 m
ANNUAL PRECIPITATION: 2077 mm

DATE PLANTED: January 1986
DATE MEASURED: March 1989

ANALYSIS OF VARIANCE

DEPENDENT VARIABLE: Three Year Height (meters)

<u>SOURCE</u>	<u>DF</u>	<u>SUM OF SQUARES</u>	<u>F</u> <u>VALUE</u>
REP	9	14.07676296	1.03 ns
PROV	4	109.26317234	18.01 **
REP*PROV	36	54.59661157	1.25 ns
FAM(PROV)	43	91.94602706	1.76 **
REP*FAM(PROV)	371	450.70150610	1.47 **
ERROR	1427	1182.64755556	
<hr/>			
CORRECTED TOTAL	1890	1965.50832364	

ns: Not significant

** Significant at $p < .01$

TEST MEAN C.V. (%)
3.82 m 23.83

***** 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		4.38	55	* Comm. control
B		3.99	483	Villa Santa
B				
B		3.96	527	San Francisco
B				
B		3.82	427	San Esteban
C		3.35	399	Jocon

* Control lot: Pch = Pinus caribaea, 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>
Pch	*	55	91.67	4.38	20.09	6.68
479	3	45	75.00	4.31	19.58	4.91
597	4	45	75.00	4.30	24.67	4.77
472	3	43	71.67	4.30	19.25	4.86
551	2	51	85.00	4.24	19.08	4.59
586	4	40	66.67	4.22	21.65	4.60
502	3	49	81.67	4.21	18.90	4.56
593	4	36	60.00	4.13	27.53	4.53
592	4	33	55.00	4.12	21.09	4.58
550	2	42	70.00	4.12	19.19	4.46
564	4	38	63.33	4.11	25.94	4.66
596	4	46	76.67	4.06	23.27	4.32
509	3	51	85.00	4.04	27.37	4.44
470	3	42	70.00	4.03	22.79	4.43
633	1	40	66.67	4.03	17.66	4.86
571	4	27	45.00	4.02	21.74	3.76
587	4	49	81.67	3.99	25.07	4.27
474	3	40	66.67	3.99	22.53	4.80
521	2	35	58.33	3.97	25.65	4.16
480	3	45	75.00	3.96	24.24	4.41
590	4	46	76.67	3.96	29.64	4.37
476	3	36	60.00	3.89	23.80	4.09
524	2	35	58.33	3.84	23.65	3.96
572	4	39	65.00	3.80	23.33	4.26
621	1	11	18.33	3.77	31.00	4.32
542	2	43	71.67	3.77	25.73	4.14
482	3	43	71.67	3.77	22.41	4.02
489	3	42	70.00	3.76	21.12	3.96
520	2	36	60.00	3.74	28.00	3.92
539	2	45	75.00	3.73	26.68	3.94
548	2	45	75.00	3.73	27.34	3.83
578	4	46	76.67	3.69	29.52	4.06
504	3	47	78.33	3.67	23.60	4.08
525	2	32	53.33	3.64	31.85	3.84
484	3	44	73.33	3.58	33.00	3.96
541	2	23	38.33	3.56	24.38	3.30
567	4	38	63.33	3.52	29.28	4.03
532	2	40	66.67	3.43	26.46	3.42
631	1	49	58.33	3.40	29.61	4.27
629	1	36	60.00	3.34	33.49	3.67

16-08-01B

<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>
619	1	50	83.33	3.31	30.84	3.62
636	1	38	63.33	3.30	34.13	3.71
620	1	29	48.33	3.28	32.72	3.48
637	1	31	51.67	3.23	30.55	3.14
623	1	39	65.00	3.20	32.67	3.29
634	1	30	50.00	3.17	29.33	3.96
632	1	27	75.00	3.07	30.86	3.71
626	1	19	31.67	3.00	26.97	3.26

OVERALL		1836	65.11	3.80	26.80	4.16
---------	--	------	-------	------	-------	------

The overall mean does not include control lots.

Provenance code: 1 = Jocon, Honduras
2 = San Esteban, Honduras
3 = San Francisco, Honduras
4 = Villa Santa, Honduras