

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 10-08-12A
SPECIES: Pinus caribaea
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	13.99096510	1.55 ns
PROV	4	40.90179057	10.23 **
REP*PROV	35	34.99377001	1.20 ns
FAM(PROV)	33	81.16481623	2.94 **
REP*FAM(PROV)	291	243.38914310	1.42 **
ERROR	1744	1025.78883586	
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CORRECTED TOTAL	2116	1440.96644308	

ns: Not significant

** Significant at $p < .01$

TEST MEAN
4.33 m

C.V. (%)
17.72

10-08-12A

***** 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	4.69	172	Limon
	B	4.41	772	Culmi
	B			
	B	4.34	48	* Comm. control
	B			
	B	4.23	453	La Brea
	B			
	B	4.21	672	Zacapa

* 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>
670	7	53	88.33	4.88	18.00	7.81
592	5	59	98.33	4.73	16.52	7.39
565	5	56	93.33	4.70	15.08	7.76
587	5	55	91.67	4.66	14.11	7.70
644	8	46	95.83	4.62	15.49	7.76
660	7	59	98.33	4.62	19.71	7.78
665	7	60	100.00	4.60	18.71	7.19
621	8	52	86.67	4.55	19.73	7.40
569	5	57	95.00	4.54	17.79	7.53
576	5	54	90.00	4.51	13.88	7.21
714	6	46	95.83	4.48	15.47	6.95
720	6	66	91.67	4.47	23.78	6.76
580	5	55	91.67	4.43	14.08	7.21
739	6	53	88.33	4.40	21.34	7.09
658	8	57	95.00	4.38	12.84	7.58
553	5	58	96.67	4.38	14.77	7.13
572	5	52	86.67	4.36	17.74	6.80
Pch	*	48	80.00	4.34	20.96	7.49
602	5	51	85.00	4.34	16.43	7.31
589	5	54	90.00	4.32	20.63	7.05
558	5	57	95.00	4.30	16.62	7.59
640	8	64	88.89	4.29	18.53	7.21
712	6	58	96.67	4.26	14.61	7.09
595	5	54	90.00	4.24	22.04	7.06
651	8	57	95.00	4.21	18.32	6.93
710	6	59	98.33	4.19	13.58	7.20
721	6	59	98.33	4.18	19.68	7.05
654	8	58	96.67	4.14	16.95	6.91
711	6	46	95.83	4.14	21.58	6.82
649	8	57	95.00	4.14	15.84	6.80
643	8	57	95.00	4.13	22.95	6.39
657	8	59	98.33	4.10	23.34	6.84
610	8	57	95.00	4.09	21.23	6.86
560	5	58	96.67	4.07	19.06	6.68
585	5	52	86.67	4.04	12.47	6.73
638	8	53	88.33	3.98	16.44	6.97
648	8	55	91.67	3.96	21.80	6.42
725	6	66	91.67	3.83	26.83	5.88

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	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>	<u>Mean D.B.H. (cm)</u>
OVERALL	2069	93.20	4.33	19.03	7.10

The overall mean does not include control lots.

Provenance code: 5 = Culmi, Honduras
6 = La Brea, Honduras
7 = Limon, Honduras
8 = Zacapa, Honduras

* Control lot: Pch = Pinus caribaea, CAFMA, Brazil