

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 10-08-10B
SPECIES: Pinus caribaea - Wet
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: May 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	73.57865493	3.24 **
PROV	7	28.43671801	1.61 ns
REP*PROV	53	133.55276079	2.13 **
FAM(PROV)	37	256.80062811	5.86 **
REP*FAM(PROV)	253	299.86970559	1.24 **
ERROR	1860	1772.62556804	
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CORRECTED TOTAL	2219	2671.68404955	

ns: Not significant

** Significant at $p < .01$

TEST MEAN C.V. (%)
4.61 m 21.17

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

The Waller-Duncan multiple comparison procedure shows no significant differences among the mean provenance heights.

<u>Provenance</u>	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>	<u>Mean D.B.H. (cm)</u>
* Los Limones	28	93.33	4.92	25.51	6.95
Puerto Lempira	753	95.08	4.77	23.78	6.78
* Comm. control	54	90.00	4.73	27.12	7.34
* La Mosquitia	59	98.33	4.63	24.94	6.81
Araslaya	527	95.47	4.56	23.85	6.42
* San Esteban	30	100.00	4.56	17.71	6.65
* San Nicolas	59	98.33	4.48	23.06	6.56
Dursuna	710	93.92	4.47	23.07	6.47

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***** 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>
472	4	75	96.15	5.42	19.91	7.35
467	4	36	100.00	5.34	10.64	8.22
498	4	39	92.86	5.16	14.94	7.76
488	4	58	96.67	5.10	17.21	7.16
434	1	47	97.92	5.05	26.57	6.78
496	4	59	98.33	4.99	18.51	6.92
443	1	37	88.10	4.95	15.00	7.20
413	1	60	100.00	4.95	18.56	6.97
466	4	53	98.15	4.93	17.71	7.09
81	*	28	93.33	4.92	25.51	6.95
522	2	75	96.15	4.89	18.95	7.62
509	2	58	96.67	4.88	14.07	7.52
473	4	42	100.00	4.88	19.51	7.30
453	4	34	94.44	4.84	23.68	6.78
525	2	57	95.00	4.78	21.78	6.92
478	4	41	97.62	4.77	17.74	6.87
PV	*	54	90.00	4.73	27.12	7.34
470	4	72	92.31	4.72	31.34	6.96
532	2	54	90.00	4.69	18.70	6.56
512	2	44	91.67	4.69	24.29	6.69
435	2	68	94.44	4.63	20.29	6.48
78	*	59	98.33	4.63	24.94	6.81
410	1	71	98.61	4.62	19.13	6.29
80	*	30	100.00	4.56	17.71	6.65
505	2	35	97.22	4.53	20.76	6.71
513	2	58	96.67	4.52	22.33	6.59
502	2	70	97.22	4.49	21.66	6.34
409	1	69	95.83	4.49	21.65	6.52
79	*	59	98.33	4.48	23.06	6.56
477	4	56	93.33	4.45	23.79	6.23
459	4	41	85.42	4.43	20.60	6.34
534	2	53	88.33	4.32	26.05	6.00
456	4	53	88.33	4.32	30.02	5.94
427	2	74	88.10	4.30	26.90	6.09
415	1	42	100.00	4.23	29.78	5.79
542	2	75	96.15	4.21	24.31	6.00
436	1	47	97.92	4.16	24.97	6.10
450	4	36	100.00	4.14	33.48	5.80
500	2	55	91.67	4.03	18.99	5.82
495	4	58	96.67	3.94	27.16	5.26
510	2	82	97.62	3.81	30.39	5.13
412	1	6	50.00	3.75	44.07	6.10

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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	1990	94.76	4.61	23.73	6.58

The overall mean does not include control lots.

Provenance code: 1 = Araslaya, Honduras
2 = Dursuna, Honduras
4 = Puerto Lempira, Honduras

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