

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT THREE YEAR MEASUREMENTS

TEST IDENTIFICATION: 15-15-08A
SPECIES: Pinus maximinoi
COMPANY: CENIBRA Florestal
SITE NAME: Fazenda Primavera
LATITUDE: 18° 38' 03" S
LONGITUDE: 42° 51' 18" W
ELEVATION: 850 m
ANNUAL PRECIPITATION: 1300 - 1500 mm

DATE PLANTED: December 1986
DATE MEASURED: March 1990

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	43.91236005	2.30 ns
PROV	3	12.86811983	1.79 ns
REP*PROV	24	57.37064476	1.36 ns
FAM(PROV)	13	34.38751208	1.50 ns
REP*FAM(PROV)	104	183.44709904	1.46 **
ERROR	656	794.85000000	
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CORRECTED TOTAL	808	1122.39236094	

ns: Not significant

** Significant at $p < .01$

TEST MEAN C.V. (%)
5.42 m 20.30

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

The analysis of variance 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>
La Cañada	141	87.04	5.66	19.52	6.95
Tapiquil	484	89.63	5.44	22.08	6.46
San Jeronimo	134	82.72	5.22	22.38	6.45
* Control 999	50	92.59	5.14	20.71	7.80

***** 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>
324	6	49	90.74	5.94	19.26	7.06
449	12	42	77.78	5.79	19.29	7.17
448	12	51	94.44	5.70	18.08	7.22
303	6	46	85.19	5.59	23.96	6.52
461	9	45	83.33	5.57	21.55	6.72
337	6	50	92.59	5.55	24.48	6.80
336	6	52	96.30	5.54	18.39	6.95
453-	12	48	88.89	5.50	21.30	6.46
333	6	49	90.74	5.43	22.09	6.56
300	6	49	90.74	5.41	22.93	6.51
331	6	50	92.59	5.38	20.87	6.16
315	6	48	88.89	5.23	16.96	6.33
327	6	44	81.48	5.23	27.63	5.81
458	9	45	83.33	5.19	25.27	6.33
999	*	50	92.59	5.14	20.71	7.80
312	6	47	87.04	5.09	21.44	5.76
476	9	44	81.48	4.89	17.64	6.29
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OVERALL		759	87.85	5.44	21.76	6.55
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The overall means do not include control lots.

Provenance code: 6 = Tapiquil, Honduras
 9 = San Jeronimo (Chiapas), Mexico
 12 = La Cañada, Mexico

* Control lot: 999 = P. caribaea var. hondurensis, seed orchard, Aracruz

C A M C O R E

SURVIVAL REPORT

TEST IDENTIFICATION: 15-16-15C

SPECIES: Pinus maximinoi

COMPANY: Florestas Rio Doce

DATE PLANTED: December 1987

DATE MEASURED: February 1990

***** BY FAMILY *****

<u>Provenance</u>	<u>Family</u>	<u>Percent Survival</u>
16	508	62.96
16	510	83.33
16	516	48.15
16	517	33.33
16	520	48.15
16	521	48.15
16	523	70.37
16	528	66.67
16	535	51.85
16	538	37.04
17	543	40.74
17	545	44.44
17	547	38.89
17	551	33.33
17	554	46.30
17	558	24.07
17	559	53.70
17	562	51.85
18	569	35.19
18	574	53.70
18	575	55.56
18	579	24.07
18	585	70.37
18	587	29.63
18	588	53.70
18	592	66.67
18	594	85.19
19	597	53.70
19	603	74.07
19	614	48.15
19	621	81.48
19	622	64.81
19	623	75.93
19	625	48.15
19	624	37.04

<u>Provenance</u>	<u>Family</u>	<u>Percent Survival</u>
19	626	38.89
20	640	75.93
20	641	48.15
20	642	64.81
20	651	74.07
20	652	77.78
20	653	92.59
20	654	70.37
20	655	68.52
20	656	68.52
*	39	61.11
*	50	68.52
*	69	59.26
*	352	68.52
*	458	83.33
*	496	44.44

***** BY PROVENANCE *****

	<u>Provenance</u>	<u>Percent Survival</u>
*	Control 458	83.33
(20)	Yuscaran, Honduras	71.19
*	Control 50	68.52
*	Control 352	68.52
*	Control 39	61.11
*	Control 69	59.26
(19)	El Portillo, Hond. (Ocotepeque)	58.02
(16)	San Jeronimo, Mexico (Oaxaca)	55.00
(18)	Las Compuertas, Honduras	52.67
*	Control 496	44.44
(17)	Candelaria, Mexico	41.67

***** BY REPLICATION *****

<u>Replication</u>	<u>Percent Survival</u>
1	57.84
2	50.98
3	57.52
4	52.61
5	57.52
6	60.13
7	56.54
8	59.80
9	59.80