

C A M C O R E

ANOVA AND MULTIPLE COMPARISONS FOR PROVENANCE AND FAMILY HEIGHT

ONE YEAR MEASUREMENTS

TEST IDENTIFICATION: 32-26-01C1
SPECIES: Pinus leiophylla
COMPANY: Klabin Do Parana Agro Florestal
SITE NAME: Imbauzinho 026B
LATITUDE: 24° 16' 10" S
LONGITUDE: 50° 38' 25" W
ELEVATION: 780 m
ANNUAL PRECIPITATION: 1,473 mm

DATE PLANTED: October 1988
DATE MEASURED: October 1989

ANALYSIS OF VARIANCE

DEPENDENT VARIABLE: One Year Height (meters)

<u>SOURCE</u>	<u>DF</u>	<u>SUM OF SQUARES</u>	<u>F</u>	<u>VALUE</u>
REP	8	1.29102703	2.53	*
PROV	4	5.49878101	21.54	**
REP*PROV	32	2.04243396	3.04	**
FAM (PROV)	41	8.29316517	9.64	**
REP*FAM (PROV)	328	6.87961595	1.66	**
ERROR	2009	25.34070833		
CORRECTED TOTAL	2422	52.06542922		

* Significant at $p < .05$

** Significant at $p < .01$

TEST MEAN
0.5197 m

C.V. (%)
21.61
244

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

WALLER-DUNCAN MULTIPLE COMPARISONS FOR ONE 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		0.7940	50	Control	(999)
B		0.6817	52	Control	(998)
C		0.5275	425	Tejocote	(2)
C		0.5101	1055	Santa María Lachixio	(1)
C		0.5014	841	Tlahuitoltepec	(3)

* Control Lots: 998 = Pinus taeda, Commercial control
 999 = Pinus elliottii, Commercial control

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

<u>Family</u>	<u>Prov</u>	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>
999	*	50	93.59	0.79	19.53
16	1	53	98.15	0.71	39.54
59	2	54	100.00	0.71	35.21
998	*	52	96.30	0.68	23.91
27	3	48	89.89	0.62	22.95
13	1	52	96.30	0.58	19.15
28	3	53	98.15	0.58	19.59
60	2	53	98.15	0.55	20.79
12	1	53	98.15	0.55	21.47
25	1	54	100.00	0.54	20.46
20	1	53	98.15	0.54	23.60
29	3	54	100.00	0.54	24.80
21	1	54	100.00	0.53	22.38
45	3	54	100.00	0.53	23.06
24	1	54	100.00	0.52	18.19
66	2	52	96.30	0.52	24.80
2	1	54	100.00	0.52	23.87
10	1	52	96.30	0.52	19.76
22	1	52	96.30	0.52	23.63
36	3	52	96.30	0.52	21.98
50	2	53	98.15	0.52	18.58
41	3	54	100.00	0.52	20.70
48	2	53	98.15	0.51	23.28
38	3	54	100.00	0.51	24.82
6	1	54	100.00	0.51	20.91
42	3	53	98.15	0.51	20.58
53	2	53	98.15	0.50	18.95
8	1	54	100.00	0.50	19.54
46	3	54	100.00	0.49	24.03
3	1	52	96.30	0.49	21.32
23	1	53	98.15	0.49	24.88
34	3	53	98.15	0.49	29.95
35	3	53	98.15	0.48	23.55
19	1	53	98.15	0.48	25.48
62	2	54	100.00	0.47	23.23
32	3	52	96.30	0.47	20.42
40	3	51	94.44	0.47	20.96
1	1	52	96.30	0.47	21.52
44	3	52	96.30	0.46	25.53
7	1	50	92.59	0.44	24.19
33	3	51	94.44	0.44	26.28
51	2	53	98.15	0.44	25.71

<u>Family</u>	<u>Prov</u>	<u># Trees</u>	<u>% Survival</u>	<u>Mean Height (m)</u>	<u>C.V. (%)</u>
18	1	52	96.30	0.43	23.00
17	1	54	100.00	0.43	28.28
14	1	50	92.59	0.43	24.90
37	3	53	98.15	0.42	22.20

OVERALL		2321	97.96	0.51	27.0553
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The overall mean does not include control lots.

Provenance code: 1 = Santa María Lachixio, Mexico
 2 = Tejocote, Mexico
 3 = Tlahuitoltepec, Mexico