

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

THREE YEAR MEASUREMENT

TEST IDENTIFICATION: 13-02-11C

SPECIES: Pinus tecunumanii var ochoterenae
Guatemalan and Honduran Populations

COMPANY: Carton de Colombia

SITE NAME: Finca San Jose

ELEVATION (m): 1750

ANNUAL PRECIPITATION (mm): 1949 - 2060

| <u>PROVENANCE</u> | <u>NUMBER OF TREES</u> | <u>PERCENT SURVIVAL</u> | <u>MEAN HEIGHT METERS</u> | <u>MEAN DIAMETER CENTIMETERS</u> | <u>VOLUME CUBIC METERS/ha</u> |
|-------------------|----------------------------|-----------------------------|-----------------------------------|--|---------------------------------------|
| San Jeronimo | 409 | 96 | 6.85 | 11.8 | 32.3 |
| Control 200 | 50 | 93 | 6.66 | 11.6 | 28.8 |
| La Soledad | 306 | 94 | 6.12 | 11.3 | 26.0 |
| Celaque | 414 | 96 | 6.17 | 10.4 | 23.1 |
| San Lorenzo | 256 | 95 | 5.89 | 10.7 | 22.9 |
| San Vicente | 409 | 95 | 5.96 | 10.5 | 22.3 |
| Las Trancas | 93 | 95 | 5.74 | 10.5 | 20.9 |
| Control 206 | 51 | 94 | 5.71 | 10.1 | 20.4 |

CONTROL LOT: 200 = Commercial control Pinus tecunumanii
206 = Pinus oocarpa Agudos, Brasil

NOTE: Tree volume with bark was calculated using a formula for juvenile trees: Volume(cubic meters) = .00003 D²H, where D = D.B.H. in centimeters and H = total height in meters.

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

THREE YEAR MEASUREMENT

TEST IDENTIFICATION: 13-02-11C

SPECIES: Pinus tecunumanii var ochoterenae

Guatemalan and Honduran Populations

COMPANY: Carton de Colombia

SITE NAME: Finca San Jose

ELEVATION (m): 1750

ANNUAL PRECIPITATION (mm): 1949 - 2060

| <u>FAMILY</u> | <u>NUMBER OF TREES</u> | <u>PERCENT SURVIVAL</u> | <u>MEAN HEIGHT METERS</u> | <u>MEAN DIAMETER CENTIMETERS</u> | <u>INDIVIDUAL TREE VOLUME CUBIC METERS</u> |
|---------------|----------------------------|-----------------------------|-----------------------------------|--|--|
| 15 | 43 | 93 | 7.28 | 12.8 | 0.03687 |
| 35 | 51 | 94 | 7.34 | 12.4 | 0.03459 |
| 10 | 53 | 98 | 6.90 | 11.7 | 0.03000 |
| 33 | 52 | 96 | 6.66 | 11.8 | 0.02900 |
| 39 | 52 | 96 | 6.73 | 11.5 | 0.02851 |
| 31 | 53 | 98 | 6.50 | 11.7 | 0.02834 |
| *200 | 50 | 93 | 6.66 | 11.6 | 0.02798 |
| 37 | 53 | 98 | 6.74 | 11.3 | 0.02754 |
| 18 | 52 | 96 | 6.78 | 11.5 | 0.02749 |
| 146 | 52 | 96 | 5.91 | 11.9 | 0.02697 |
| 136 | 51 | 94 | 6.41 | 11.5 | 0.02642 |
| 272 | 50 | 93 | 6.45 | 11.3 | 0.02552 |
| 283 | 53 | 98 | 6.61 | 11.0 | 0.02515 |
| 83 | 53 | 98 | 6.07 | 11.4 | 0.02493 |
| 70 | 53 | 98 | 6.13 | 11.2 | 0.02481 |
| 144 | 51 | 94 | 6.18 | 11.2 | 0.02472 |
| 264 | 53 | 98 | 6.29 | 11.2 | 0.02465 |
| 6 | 50 | 93 | 6.37 | 11.0 | 0.02405 |
| 89 | 52 | 96 | 6.17 | 11.1 | 0.02367 |
| 73 | 53 | 98 | 6.14 | 10.9 | 0.02321 |
| 138 | 49 | 91 | 6.10 | 10.8 | 0.02309 |
| 97 | 53 | 98 | 6.26 | 10.6 | 0.02292 |
| 60 | 50 | 93 | 5.99 | 10.8 | 0.02225 |
| 263 | 53 | 98 | 6.11 | 10.2 | 0.02126 |
| 44 | 50 | 93 | 5.75 | 10.7 | 0.02125 |
| 193 | 52 | 96 | 5.84 | 10.7 | 0.02112 |
| 262 | 53 | 98 | 6.42 | 10.2 | 0.02104 |
| 77 | 52 | 96 | 5.78 | 10.4 | 0.02089 |
| 220 | 39 | 89 | 5.79 | 10.6 | 0.02072 |

CONTINUED NEXT PAGE....

13-02-11C CONTINUED

| <u>FAMILY</u> | <u>NUMBER OF TREES</u> | <u>PERCENT SURVIVAL</u> | <u>MEAN HEIGHT METERS</u> | <u>MEAN DIAMETER CENTIMETERS</u> | <u>INDIVIDUAL TREE VOLUME CUBIC METERS</u> |
|---------------|----------------------------|-----------------------------|-----------------------------------|--|--|
| 90 | 51 | 94 | 5.77 | 10.5 | 0.02034 |
| 85 | 53 | 98 | 5.88 | 10.2 | 0.01982 |
| 267 | 52 | 96 | 6.18 | 10.1 | 0.01957 |
| *206 | 51 | 94 | 5.71 | 10.1 | 0.01942 |
| 12 | 51 | 94 | 5.41 | 10.5 | 0.01934 |
| 217 | 54 | 100 | 5.70 | 10.4 | 0.01921 |
| 92 | 48 | 89 | 6.09 | 9.9 | 0.01899 |
| 275 | 49 | 91 | 5.63 | 9.7 | 0.01856 |
| 269 | 51 | 94 | 5.61 | 9.9 | 0.01790 |
| 87 | 47 | 87 | 5.59 | 9.7 | 0.01747 |
| ----- | | | | | |
| **OVERALL | 1887 | 95 | 6.21 | 10.9 | 0.02384 |
| ----- | | | | | |

* CONTROL LOTS: 200 = Commercial Control Pinus tecunumanii
 206 = Pinus oocarpa Agudos, Brasil

**Overall mean does not include control lots.

NOTE: Tree volume with bark was calculated using a formula for
 juvenile trees: Volume(cubic meters) = .00003 D² H, where
 D = D.B.H. in centimeters and H = total height in meters.