

***** QUARTILE MEANS *****

THREE YEAR MEASUREMENT

TEST IDENTIFICATION: 03-05-08A

SPECIES: Pinus tecunumanii (Belize)

COMPANY: COPINUS

SITE NAME: Serra do Cabral

ELEVATION (m): 1080

LATITUDE: 17°38'S

LONGITUDE: 44°25'W

ANNUAL PRECIPITATION (mm): 1400

DESCRIPTION: There are a total of 49 families represented in this test plus three control lots. The four quartiles, FIRST, SECOND, THIRD and FOURTH, represent the 49 families divided into four groups according to their ordered rank by individual tree volume. Each quartile contains 25% of the families. Values for control lots have also been calculated.

QUARTILE	PERCENT SURVIVAL	MEAN HEIGHT METERS	MEAN DIAMETER CENTIMETERS	MEAN STEM STRAIGHTNESS	**INDIVIDUAL TREE VOLUME CUBIC METERS
FIRST QUARTILE	94	3.53	3.2	2.2	0.00133
CONTROL LOT TA	93	3.28	3.3	2.9	0.00129
SECOND QUARTILE	91	3.40	3.1	2.2	0.00117
CONTROL LOT 202	98	3.31	2.9	2.2	0.00116
THIRD QUARTILE	94	3.24	2.8	2.0	0.00095
FOURTH QUARTILE	91	3.06	2.6	2.2	0.00077
CONTROL LOT 201	91	2.60	2.6	1.7	0.00068

TREATMENT MEANS	93	3.31	2.9	2.1	0.00106
CONTROL LOT MEANS	94	3.07	2.9	2.3	0.00105

CONTROL LOTS: 201=Pinus oocarpa Chiquimula, Guatemala
 202=Pinus tecunumanii Mt. Pine Ridge, Belize
 TA=Commercial Control Pinus caribaea var hondurensis

** 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.

FAMILIES IN QUARTILES: FIRST: 51 93 80 59 58 43 60 29 34 44 50 25
 SECOND: 84 83 72 103 69 85 79 45 113 62 36 48 37
 THIRD: 61 117 96 18 46 21 42 49 40 76 75 57
 FOURTH: 30 82 77 91 38 64 78 97 55 52 47 66

NOTE: Stem straightness ranked from 1 to 6. 1=poorest to 6=best

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

THREE YEAR MEASUREMENT

TEST IDENTIFICATION: 03-05-08A

SPECIES: Pinus tecunumanii (Belize)

COMPANY: COPINUS

<u>FAMILY</u>	<u>PERCENT SURVIVAL</u>	<u>MEAN HEIGHT METERS</u>	<u>MEAN DIAMETER CENTIMETERS</u>	<u>MEAN STEM STRAIGHTNESS</u>	<u>**INDIVIDUAL TREE VOLUME CUBIC METERS</u>
51	100	3.61	3.5	2.3	0.00155
93	98	3.77	3.4	1.9	0.00154
80	96	3.59	3.3	2.2	0.00144
59	81	3.65	3.3	2.2	0.00137
58	84	3.42	3.3	2.7	0.00132
*TA	93	3.28	3.3	2.9	0.00129
43	93	3.39	3.1	2.1	0.00127
60	93	3.47	3.1	2.5	0.00126
29	96	3.33	3.0	1.8	0.00126
34	100	3.59	3.1	2.6	0.00125
44	94	3.43	3.0	2.0	0.00124
50	96	3.46	3.3	2.2	0.00123
25	93	3.60	3.1	2.1	0.00122
84	100	3.53	3.2	2.3	0.00122
83	100	3.38	3.1	1.9	0.00121
72	89	3.50	3.0	2.2	0.00121
103	90	3.29	3.2	2.0	0.00121
69	89	3.25	3.0	1.6	0.00120
85	94	3.49	3.2	2.2	0.00119
79	92	3.47	3.0	2.3	0.00117
45	94	3.53	3.0	2.4	0.00117
113	100	3.40	3.1	2.1	0.00116
*202	98	3.31	2.9	2.2	0.00116
62	83	3.23	3.0	2.1	0.00111
36	76	3.55	3.0	2.3	0.00111
48	96	3.28	3.0	2.4	0.00110
37	83	3.27	2.9	2.1	0.00107
61	93	3.20	3.0	2.3	0.00107
117	92	3.31	3.0	2.1	0.00106
96	96	3.30	3.0	2.3	0.00101
18	88	3.13	2.8	2.2	0.00098
46	98	3.32	2.8	1.8	0.00097
21	98	3.15	2.8	1.8	0.00094
42	98	3.42	2.8	1.6	0.00093
49	96	3.16	2.7	1.9	0.00092
40	96	3.25	2.7	2.1	0.00090
76	87	3.12	2.8	2.2	0.00090

CONTINUED NEXT PAGE...

(PAGE 2)

03-05-08A THREE YEAR MEASUREMENTS CONTINUED

<u>FAMILY</u>	<u>PERCENT SURVIVAL</u>	<u>MEAN HEIGHT METERS</u>	<u>MEAN DIAMETER CENTIMETERS</u>	<u>MEAN STEM STRAIGHTNESS</u>	<u>**INDIVIDUAL TREE VOLUME CUBIC METERS</u>
75	98	3.33	2.8	1.9	0.00090
57	91	3.25	2.7	2.1	0.00088
30	93	3.32	2.7	1.8	0.00088
82	93	3.09	2.7	2.0	0.00088
77	94	3.04	2.6	2.1	0.00087
91	85	3.23	2.7	2.0	0.00084
38	91	3.14	2.6	2.0	0.00081
64	83	3.27	2.6	2.7	0.00080
78	96	3.05	2.6	2.5	0.00075
97	87	3.10	2.5	1.6	0.00074
55	94	2.73	2.4	2.4	0.00072
*201	91	2.60	2.6	1.7	0.00068
52	89	3.02	2.4	2.4	0.00067
47	95	2.84	2.4	2.2	0.00066
66	96	2.95	2.3	2.4	0.00064

* CONTROL LOTS: 201=Pinus oocarpa Chiquimula, Guatemala
 202=Pinus tecunumanii Mt. Pine Ridge, Belize
 TA=Commercial Control Pinus caribaea var hondurensis

** 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.

NOTE: Stem straightness ranked from 1 to 6. 1=poorest to 6=best