

Focus on CSIR Research in Tree Improvement

CSIR Natural Resources
and the
Environment

Clone Information Sheet

SGR1266

Species: *Eucalyptus grandis*
Use: Sawtimber clone
Properties: Low split, Medium - high growth
Generation: Second
Developed: CSIR with support of Northern Timbers and NCT, partially funded by DACST Innovation Fund
Released by: 2002
Availability: Top Crop and Sunshine Seedling Services nurseries
Status: Pre-commercial, released for tests

Clonal performance information:

Test site: Wilgeboom, Mpumalanga, RSA
24°56'S 30°57'E
MAP: 1 348mm
Soil: Hutton

Age at assessment: **Growth:** 8 years 7 months;
Wood properties: 10 years

Controls: **38046:** Unsifted bulk of second generation (F1) seed from seedling seed orchard 2,4 and 5 at JDM Keet
38047: Unsifted bulk of first generation (P0) seed from rogued clonal seed orchards 1 and 2 at JDM Keet

Clonal performance:

| Trait | Clone Mean | Std Error | % Improvement over mean of controls | Comments |
|------------------------|------------------------|----------------------|-------------------------------------|--|
| Volume | 0.779 m ³ | 0.139 m ³ | 15% | Mean individual tree |
| Stem Form | 6.712 | 0.093 | 7% | 1: malformed 8: straight |
| Disease Tolerance | 0.303 | 0.055 | -2% | 0: no visual sign of infection, 4: chronic infection |
| Total Radial Shrinkage | 2.788% | 0.080% | 27% | |
| Weighted mean density | 0.528gcm ³ | 0.034 | -3% | Not selected for density Measured with gamma ray densitometry. Airdrydensity at 10% |
| Density Gradient | 0.0010 | 0.0003 | -50% | Not selected for density |
| Basic Density | 0.426gcm ⁻³ | | | Calculated from weighted density |

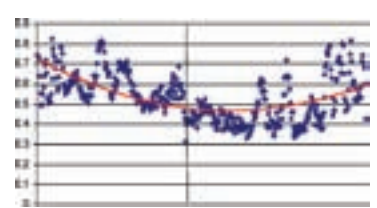
Splitting: Assessed 72 hours after felling



SGR1266: bottom of lowest merchantable log



High volume clone rejected as a low split selection in the same trial



Density gradient of a ramet from bark to bark

Disclaimer: The information contained in this information sheet is based on the results of specific research trials. The CSIR however, provides no guarantees whatsoever, explicitly or by implication regarding these clones and trial results and does not warrant merchantability of the material.

DNA fingerprint for clonal identification

Clone Information Sheet

SGR1353

Species: *Eucalyptus grandis*
Use: Sawtimber clone
Properties: Medium - low split, Medium - high growth
Generation: Second
Developed: CSIR with support of Northern Timbers and NCT, partially funded by DACST Innovation Fund
Released by: 2002
Availability: Top Crop and Sunshine Seedling Services nurseries Spring 2003
Status: Pre-commercial, released for testing

Clonal performance information:

Test site: Wilgeboom, Mpumalanga, RSA
 24°56'S 30°57'E
MAP: 1 348mm
Altitude: 945m
Soil: Hutton

Age at assessment: **Growth:** 8 years 7 months;
Wood properties: 10 years

Controls: **38046:** Unsifted bulk of second generation (F1) seed from seedling seed orchard 2,4 and 5 at JDM Keet
38047: Unsifted bulk of first generation (P0) seed from rogued clonal seed orchards 1 and 2 at JDM Keet

Contact details:

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Clonal performance:

| Trait | Clone Mean | Std Error | % Improvement over mean of controls | Comments |
|------------------------|------------------------|----------------------|-------------------------------------|---|
| Volume | 0.900 m ³ | 0.066 m ³ | 33% | Mean individual tree |
| Stem Form | 7.178 | 0.387 | 15% | 1: malformed 8: straight |
| Disease Tolerance | 0.233 | 0.172 | 21% | 0: no visual sign of infection, 4: chronic infection |
| Total Radial Shrinkage | 3.322% | 0.315% | 13% | |
| Weighted mean density | 0.497gcm ⁻³ | 0.013 | -8% | Not selected for density Measured with gamma ray densitometry. Air dry density at 10% |
| Density Gradient | 0.0005 | 0.0004 | 0% | Not selected for density |
| Basic Density | 0.408gcm ⁻³ | | | Calculated from weighted density |

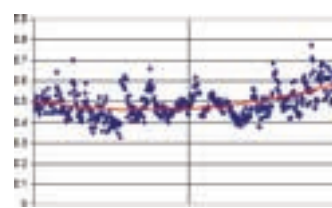
Splitting: Assessed 72 hours after felling



SGR1353: bottom of lowest merchantable log



High volume clone rejected as a low split selection in the same trial



Density gradient of a ramet from bark to bark



DNA fingerprint for clonal identification

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