

Table S3 MYB-expressing sugarcane cell wall composition.

| | | Total lignin | | Acid-insoluble lignin | | Acid-soluble lignin | | Ash Content | | Glucose | | Xylose | | Galactose | | Arabinose | |
|-----------|----|--------------|-------------|-----------------------|-------------|---------------------|-------------|-------------|-------------|--------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | | % | +/- | % | +/- | % | +/- | % | +/- | % | +/- | % | +/- | % | +/- | % | +/- |
| Control | | 23.37 | 0.39 | 17.92 | 0.38 | 5.45 | 0.10 | 0.13 | 0.07 | 47.17 | 0.45 | 20.23 | 0.28 | 0.10 | 0.08 | 1.69 | 0.22 |
| MYB31 ORF | 13 | 21.74 | 0.15 | 16.49 | 0.09 | 5.25 | 0.18 | 0.10 | 0.05 | 48.77 | 0.33 | 20.27 | 0.17 | 0.00 | 0.00 | 1.49 | 0.06 |
| | 11 | 22.23 | 0.15 | 16.60 | 0.17 | 5.64 | 0.11 | 0.19 | 0.02 | 45.45 | 0.41 | 22.05 | 0.15 | 1.24 | 0.02 | 2.95 | 0.03 |
| | 2 | 22.50 | 0.04 | 17.61 | 0.09 | 4.89 | 0.07 | 0.11 | 0.01 | 47.79 | 0.30 | 20.83 | 0.13 | 1.05 | 0.02 | 2.21 | 0.04 |
| | 7 | 23.07 | 0.30 | 17.61 | 0.22 | 5.45 | 0.12 | 0.18 | 0.02 | 46.74 | 0.61 | 22.11 | 0.17 | 0.00 | 0.00 | 2.24 | 0.06 |
| | 1 | 23.08 | 0.29 | 17.86 | 0.24 | 5.22 | 0.14 | 0.11 | 0.03 | 45.08 | 0.18 | 23.14 | 0.18 | 0.98 | 0.01 | 2.24 | 0.03 |
| | 8 | 23.88 | 0.40 | 18.47 | 0.40 | 5.41 | 0.04 | 0.04 | 0.08 | 46.01 | 0.82 | 21.34 | 0.37 | 1.24 | 0.05 | 2.71 | 0.07 |
| | 9 | 24.97 | 0.47 | 19.72 | 0.40 | 5.25 | 0.11 | 0.12 | 0.09 | 46.88 | 0.56 | 20.88 | 0.39 | 1.07 | 0.05 | 2.28 | 0.03 |
| MYB31 UTR | 27 | 21.03 | 0.19 | 16.29 | 0.14 | 4.74 | 0.05 | 0.27 | 0.05 | 51.76 | 0.51 | 24.27 | 0.23 | 0.00 | 0.00 | 2.19 | 0.05 |
| | 2 | 21.18 | 0.18 | 15.63 | 0.12 | 5.55 | 0.12 | 0.05 | 0.04 | 45.63 | 0.41 | 22.03 | 0.32 | 1.33 | 0.02 | 3.02 | 0.05 |
| | 18 | 21.48 | 0.19 | 15.57 | 0.18 | 5.91 | 0.08 | 0.08 | 0.04 | 47.40 | 0.36 | 22.11 | 0.26 | 1.28 | 0.00 | 2.71 | 0.06 |
| | 11 | 22.25 | 0.07 | 17.10 | 0.09 | 5.16 | 0.14 | 0.13 | 0.02 | 46.05 | 0.14 | 22.44 | 0.08 | 1.06 | 0.05 | 2.58 | 0.03 |
| | 12 | 22.40 | 0.16 | 17.01 | 0.04 | 5.39 | 0.15 | 0.06 | 0.05 | 47.12 | 0.31 | 20.56 | 0.14 | 0.00 | 0.00 | 2.06 | 0.02 |
| | 7 | 22.79 | 0.11 | 17.13 | 0.06 | 5.66 | 0.15 | 0.13 | 0.04 | 45.38 | 0.17 | 20.15 | 0.15 | 0.32 | 0.26 | 1.92 | 0.05 |
| | 20 | 22.86 | 0.07 | 17.47 | 0.05 | 5.40 | 0.12 | 0.13 | 0.02 | 47.60 | 0.15 | 21.38 | 0.13 | 0.00 | 0.00 | 1.84 | 0.08 |
| MYB42 ORF | 14 | 18.51 | 0.13 | 12.84 | 0.07 | 5.67 | 0.20 | 0.36 | 0.03 | 49.24 | 0.14 | 21.28 | 0.22 | 1.08 | 0.02 | 2.63 | 0.04 |
| | 16 | 20.86 | 0.05 | 15.25 | 0.01 | 5.61 | 0.04 | 0.16 | 0.06 | 49.62 | 0.38 | 20.81 | 0.08 | 0.32 | 0.26 | 2.14 | 0.03 |
| | 23 | 21.58 | 0.22 | 15.85 | 0.25 | 5.73 | 0.06 | 0.03 | 0.05 | 47.86 | 0.18 | 19.60 | 0.34 | 0.30 | 0.24 | 2.17 | 0.05 |
| | 11 | 22.05 | 0.09 | 16.94 | 0.12 | 5.11 | 0.07 | 0.06 | 0.05 | 47.92 | 0.38 | 22.67 | 0.24 | 0.98 | 0.02 | 2.08 | 0.02 |
| | 18 | 22.38 | 0.10 | 16.76 | 0.09 | 5.62 | 0.01 | 0.10 | 0.04 | 48.69 | 0.55 | 19.90 | 0.09 | 0.00 | 0.00 | 1.96 | 0.02 |
| | 21 | 22.47 | 0.14 | 17.74 | 0.07 | 4.73 | 0.15 | 0.19 | 0.01 | 48.85 | 1.12 | 21.82 | 0.38 | 0.00 | 0.00 | 1.21 | 0.08 |
| | 26 | 22.99 | 0.09 | 17.68 | 0.01 | 5.30 | 0.10 | 0.29 | 0.06 | 46.61 | 0.33 | 21.61 | 0.22 | 1.10 | 0.06 | 2.50 | 0.06 |
| MYB42 UTR | 28 | 19.42 | 0.29 | 13.78 | 0.34 | 5.64 | 0.05 | 0.05 | 0.06 | 50.55 | 0.13 | 21.78 | 0.48 | 0.63 | 0.26 | 2.60 | 0.04 |
| | 6 | 20.21 | 0.03 | 14.40 | 0.06 | 5.81 | 0.08 | 0.07 | 0.02 | 46.41 | 0.16 | 23.28 | 0.14 | 1.15 | 0.04 | 3.03 | 0.01 |
| | 32 | 20.91 | 0.24 | 15.46 | 0.14 | 5.45 | 0.14 | 0.23 | 0.06 | 47.83 | 0.29 | 21.53 | 0.11 | 0.28 | 0.23 | 1.96 | 0.05 |
| | 30 | 21.51 | 0.30 | 15.29 | 0.19 | 6.21 | 0.20 | 0.14 | 0.06 | 49.12 | 0.28 | 23.94 | 0.23 | 1.21 | 0.02 | 2.63 | 0.03 |
| | 15 | 22.57 | 0.10 | 16.73 | 0.08 | 5.84 | 0.06 | 0.07 | 0.01 | 47.10 | 0.31 | 21.59 | 0.22 | 0.00 | 0.00 | 1.72 | 0.07 |
| | 26 | 23.48 | 0.11 | 18.36 | 0.07 | 5.12 | 0.08 | 0.10 | 0.02 | 47.41 | 0.45 | 23.58 | 0.28 | 0.00 | 0.00 | 1.67 | 0.03 |
| | 16 | 24.15 | 0.21 | 18.98 | 0.14 | 5.17 | 0.08 | 0.21 | 0.03 | 47.06 | 0.31 | 20.89 | 0.18 | 0.00 | 0.00 | 1.41 | 0.04 |