

TableS4. The genes expression of metabolic pathways for floral scent in 'OH' and 'CH'

| Gene ID | Gene name | Gene annotation | OH | | | | | | | | | | | | | | | CH | | | | | | | | | | | | | | |
|---------------------|-----------|------------------------------------|--------|--------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------|---------|---------|--------|--------|--------|
| | | | R-1 | R-2 | S-1 | S-2 | L-1 | L-2 | S1-1 | S1-2 | S2-1 | S2-2 | S3-1 | S3-2 | R-1 | R-2 | R-3 | S-1 | S-2 | S-3 | L-1 | L-2 | L-3 | S1-1 | S1-2 | S1-3 | S2-1 | S2-2 | S2-3 | S3-1 | S3-2 | S3-3 |
| RcCH_v1_0_chr6.3171 | POMT | phloroglucinol O-methyltransferase | 8.98 | 12.09 | 54.47 | 50.54 | 0.39 | 1.57 | 1161.08 | 1134.28 | 3868.71 | 3813.63 | 6.83 | 5.43 | 28.68 | 26.80 | 26.53 | 76.20 | 70.54 | 74.45 | 59.52 | 57.70 | 55.19 | 384.03 | 354.64 | 359.38 | 4434.63 | 4430.41 | 4426.78 | 19.01 | 17.68 | 16.79 |
| RcCH_v1_0_chr2.3178 | OOMT1 | ocetoin O-methyltransferase | 17.88 | 17.62 | 0.00 | 0.11 | 0.00 | 0.00 | 4.41 | 4.35 | 4.08 | 3.81 | 2639.88 | 2678.97 | 463.19 | 477.45 | 480.29 | 44.33 | 44.02 | 41.68 | 3.88 | 3.69 | 3.53 | 8.47 | 8.05 | 7.91 | 0.75 | 0.70 | 0.40 | 0.00 | 0.00 | |
| RcCH_v1_0_chr2.2828 | OOMT2 | ocetoin O-methyltransferase | 1.11 | 1.20 | 0.10 | 0.36 | 0.00 | 0.00 | 6.63 | 6.60 | 8.27 | 7.24 | 2967.18 | 2923.10 | 0.00 | 0.00 | 0.18 | 0.24 | 0.25 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| RcCH_v1_0_chr6.304 | AADC-1 | aromatic amino acid decarboxylase | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.99 | 2.55 | 53.28 | 51.49 | 34.29 | 33.39 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 3.84 | 3.61 | 3.16 | 0.00 | 0.00 | 0.00 | 66.19 | 66.33 | 68.84 | 149.74 | 148.89 | 150.05 |
| RcCH_v1_0_chr1.500 | AADC-2 | aromatic amino acid decarboxylase | 0.00 | 0.09 | 1.70 | 1.14 | 0.00 | 0.05 | 2.81 | 2.26 | 4.20 | 4.10 | 0.35 | 0.42 | 0.00 | 0.00 | 0.00 | 7.20 | 5.97 | 5.95 | 0.71 | 0.95 | 0.96 | 2.88 | 2.91 | 1.92 | 2.50 | 3.13 | 3.18 | 0.00 | 0.00 | 0.00 |
| RcCH_v1_0_chr5.1075 | AADC-3 | aromatic amino acid decarboxylase | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.80 | 0.63 | 1.00 | 2.44 | 1.77 | 2.18 | 1.05 | 0.93 | 1.00 | 0.73 | 0.97 | 0.93 | 0.97 | 0.91 | 0.98 | 0.76 | 0.90 | 1.28 |
| RcCH_v1_0_chr5.1074 | AADC-4 | aromatic amino acid decarboxylase | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.15 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RcCH_v1_0_chr5.2131 | AAAT | aromatic amino acid aminomethylase | 106.78 | 101.69 | 3.14 | 3.75 | 22.36 | 19.62 | 13.56 | 13.13 | 40.86 | 40.83 | 306.71 | 305.80 | 97.82 | 95.48 | 95.10 | 19.75 | 21.10 | 20.90 | 38.34 | 39.86 | 36.65 | 7.85 | 9.30 | 9.11 | 31.34 | 28.03 | 28.18 | 81.28 | 75.76 | 80.89 |
| RcCH_v1_0_chr3.1054 | PPDC-1 | phenylpyruvic acid decarboxylase | 12.09 | 12.87 | 50.66 | 44.88 | 16.25 | 15.49 | 34.02 | 32.12 | 41.87 | 42.53 | 293.88 | 285.78 | 22.69 | 23.36 | 23.44 | 37.91 | 34.95 | 38.36 | 25.76 | 27.27 | 25.87 | 109.98 | 104.57 | 111.92 | 91.19 | 88.44 | 92.29 | 236.10 | 235.38 | 234.28 |
| RcCH_v1_0_chr7.3341 | PPDC-2 | phenylpyruvic acid decarboxylase | 0.00 | 0.00 | 0.55 | 0.93 | 0.25 | 0.67 | 0.82 | 1.06 | 0.29 | 0.19 | 0.09 | 0.04 | 0.00 | 0.00 | 0.00 | 4.99 | 5.41 | 4.40 | 43.87 | 40.74 | 41.37 | 14.82 | 16.06 | 16.73 | 5.85 | 5.98 | 6.24 | 0.00 | 0.00 | 0.02 |
| RcCH_v1_0_chr5.722 | PPDC-3 | phenylpyruvic acid decarboxylase | 17.67 | 16.27 | 17.65 | 18.08 | 9.35 | 8.84 | 18.46 | 18.52 | 34.50 | 35.13 | 32.77 | 31.18 | 19.15 | 18.37 | 16.01 | 5.77 | 4.41 | 4.18 | 2.78 | 2.80 | 2.38 | 2.99 | 3.39 | 2.29 | 8.12 | 7.52 | 7.23 | 12.46 | 13.39 | 11.93 |
| RcCH_v1_0_chr5.657 | PPDC-4 | phenylpyruvic acid decarboxylase | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.18 | 0.09 | 0.08 | 0.08 | 0.15 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.12 | 0.05 | 0.05 | 0.06 | 0.00 | 0.00 | 0.55 | 0.27 | 0.30 | 0.18 | 0.03 | 0.02 | 0.02 | |
| RcCH_v1_0_chr5.724 | PPDC-5 | phenylpyruvic acid decarboxylase | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RcCH_v1_0_chr5.4505 | PAR1 | phenylacetaldehyde reductase | 99.71 | 112.02 | 73.44 | 75.18 | 50.53 | 41.39 | 71.74 | 72.29 | 68.40 | 73.05 | 2.93 | 3.26 | 60.17 | 64.24 | 65.71 | 62.38 | 51.14 | 56.83 | 36.05 | 35.87 | 32.31 | 93.77 | 97.04 | 95.19 | 74.48 | 78.26 | 77.51 | 20.52 | 19.42 | 20.27 |
| RcCH_v1_0_chr7.2995 | PAR1_Like | phenylacetaldehyde reductase | 6.17 | 6.72 | 12.57 | 13.26 | 11.06 | 10.55 | 7.01 | 7.14 | 9.50 | 9.85 | 8.23 | 8.53 | 21.46 | 20.86 | 18.64 | 24.50 | 19.63 | 22.54 | 30.27 | 31.10 | 31.00 | 30.15 | 29.93 | 29.20 | 45.83 | 46.60 | 41.32 | 55.75 | 54.33 | 51.35 |

Note: R, root; S, stem; L, leaf.