

**Additional File 4: Growth and gene expression in thinned [A] and un-thinned fruit [B] of ‘Golden Delicious Smoothie’.** The table shows data corresponding to Figure 4 for Fruit diameter (Figure 4A), Cell layers (Figure 4B), Relative cell production rate (RCPR; Figure 4C) and Cell area (Figure 4D). The table also shows expression data for *MdANT1* and *MdANT2* from Figure 5. Fruit diameter was not measured at 10 days after full bloom (DAFB). RCPR data were rounded off to the third decimal point. Expression of a gene is presented relative to its expression at 0 DAFB in thinned fruit. Gene expression was normalized using *MdGAPDH* and *MdACTIN*. The mean and standard error of four biological replicates are presented.

**A.**

DAFB	Fruit diameter (mm)	Cell layers	RCPR (cell cell <sup>-1</sup> day <sup>-1</sup> )	Cell area (× 1000 μm <sup>2</sup> )	<i>MdANT1</i> (Relative expression)	<i>MdANT2</i> (Relative expression)
0	3.2 ± 0.03	12.7 ± 0.73		0.30 ± 0.01	1.00 ± 0.21	1.00 ± 0.13
8	5.5 ± 0.03	23.7 ± 0.60	0.09 ± 0.006	0.38 ± 0.002	1.17 ± 0.22	1.67 ± 0.39
11	-	42.7 ± 0.60	0.20 ± 0.013	0.48 ± 0.05	0.91 ± 0.16	0.85 ± 0.10
18	11.9 ± 0.27	76.3 ± 0.89	0.09 ± 0.003	0.58 ± 0.01	0.71 ± 0.18	1.22 ± 0.14
25	20.2 ± 0.39	120.8 ± 1.07	0.06 ± 0.003	1.47 ± 0.04	1.04 ± 0.2	2.92 ± 0.62
32	26.5 ± 0.29	122.4 ± 1.05	0.002 ± .001	3.16 ± 0.11	0.29 ± 0.08	0.69 ± 0.08
50	41.0 ± 0.4	124.1 ± 0.34	0.001 ± 0.001	5.16 ± 0.17	0.12 ± 0.02	0.30 ± 0.05
79	59.9 ± 0.19	122.5 ± 0.28	0.000 ± 0.000	18.13 ± 0.74	0.03 ± 0.007	0.06 ± 0.02
128	78.7 ± 0.55	125.0 ± 1.73	0.000 ± 0.000	24.89 ± 0.46	0.21 ± 0.05	0.06 ± 0.02
150	83.0 ± 0.25	123.5 ± 0.34	0.000 ± 0.000	45.08 ± 2.33	0.01 ± 0.002	0.02 ± 0.003

**B.**

DAFB	Fruit diameter (mm)	Cell layers	RCPR (cell cell <sup>-1</sup> day <sup>-1</sup> )	Cell area (× 1000 μm <sup>2</sup> )	<i>MdANTI</i> (Relative expression)	<i>MdANT2</i> (Relative expression)
0	3.1 ± 0.04	12.8 ± 0.19		0.32 ± 0.01	0.97 ± 0.16	0.76 ± 0.09
8	5.6 ± 0.18	23.4 ± 0.44	0.09 ± 0.003	0.38 ± 0.01	1.11 ± 0.25	1.62 ± 0.5
11	-	41.6 ± 0.50	0.19 ± 0.006	0.46 ± 0.01	1.06 ± 0.18	1.15 ± 0.21
18	11.1 ± 0.78	73.5 ± 0.69	0.07 ± 0.006	0.58 ± 0.01	0.80 ± 0.16	1.12 ± 0.17
25	17.4 ± 0.98	86.0 ± 1.19	0.01 ± 0.004	1.4 ± 0.03	0.55 ± 0.16	0.62 ± 0.09
32	23.5 ± 0.86	90.3 ± 0.49	0.004 ± 0.003	3.7 ± 0.40	0.10 ± 0.02	0.38 ± 0.06
50	36.5 ± 0.32	92.1 ± 0.24	0.001 ± 0.001	5.8 ± 0.11	0.13 ± 0.02	0.16 ± 0.03
79	50.6 ± 1.16	92.0 ± 0.41	0.000 ± 0.000	19.9 ± 1.24	0.02 ± 0.01	0.05 ± 0.01
128	67.1 ± 1.05	92.1 ± 0.14	0.000 ± 0.000	22.3 ± 0.54	0.16 ± 0.03	0.05 ± 0.01
150	71.8 ± 1.41	93.2 ± 0.3	0.000 ± 0.000	40.8 ± 1.82	0.01 ± 0.002	0.01 ± 0.003