

Supplementary Materials: Paired t-test statistics

Supplementary Materials: Tables showing statistics for the paired t-tests

Table S1: The results from the paired t-test, showing the difference between nectars made from fresh strawberries (Day 0), and nectars of strawberries been stored for 24 hours (Day 1) and 48 hours (Day 2). The AF0 is the acceptance factor of nectars after first production and AF12 is the acceptance factor of nectars after 12 weeks of storage. The Anthocyanin content is the total monomeric anthocyanin content of nectars (expressed as mg/Kg pelargonidin-3-glucoside equivalents). t represents the t-test statistic, df is the degrees of freedom, and CI 95% is the 95% Confidence Interval.

		t	df	Significance	Mean Difference	CI 95%
AF0	Day 1	12.5	119	<0.001	0.104 ± 0.091	0.088 – 0.121
	Day 2	13.6	119	<0.001	0.221 ± 0.178	0.189 – 0.253
AF12	Day 1	9.6	119	<0.001	0.073 ± 0.083	0.058 – 0.088
	Day 2	13.5	119	<0.001	0.136 ± 0.110	0.116 – 0.156
Anthocyanin Content	Day 1	7.5	89	<0.001	16.7 ± 21.0	12.3 – 21.1
	Day 2	9.6	89	<0.001	33.6 ± 33.2	26.7 – 40.5

Table S2: The results from the paired t-test, showing the difference between nectars made from fresh strawberries (Day 0), and those been stored for 24 hours (Day 1) and 48 hours (Day 2) for each ripeness stage. The AF0 is the acceptance factor of nectars after first production and AF12 is the acceptance factor of nectars after 12 weeks of storage. The Anthocyanin content is the total monomeric anthocyanin content of nectars (expressed as mg/kg pelargonidin-3-glucoside equivalents). t represents the t-test statistic, df is the degrees of freedom, and CI 95% is the 95% Confidence Interval.

Ripeness Stage			t	df	Significance	Mean Difference	CI 95%
Ripeness 1 White	AF0	Day 1	21.4	23	<0.001	0.119 ± 0.027	0.107 – 0.130
		Day 2	29.8	23	<0.001	0.468 ± 0.077	0.436 – 0.501
	AF12	Day 1	10.2	23	<0.001	0.032 ± 0.016	0.026 – 0.026
		Day 2	18.9	23	<0.001	0.145 ± 0.037	0.129 – 0.161
	Anthocyanin Content	Day 1	7.96	17	<0.001	6.7 ± 2.5	5.5 – 8.0
		Day 2	36	17	<0.001	32.4 ± 7.2	28.8 – 36.0
Ripeness 2	AF0	Day 1	12.2	23	<0.001	0.246 ± 0.099	0.204 – 0.287

White/Orange		Day 2	19.2	23	<0.001	0.369 ± 0.094	0.330 – 0.409
		Day 1	8.6	23	<0.001	0.189 ± 0.107	0.144 – 0.234
	AF12	Day 2	27.9	23	<0.001	0.307 ± 0.054	0.284 – 0.330
		Day 1	8.3	17	<0.001	43.3 ± 22.1	32.3 – 54.3
	Anthocyanin Content	Day 2	18.2	17	<0.001	79.3 ± 18.5	70.1 – 88.5
		Day 1	9.1	23	<0.001	0.069 ± 0.037	0.053 – 0.084
Ripeness 3 Orange	AF0	Day 2	14.6	23	<0.001	0.126 ± 0.043	0.108 – 0.144
		Day 1	12.5	23	<0.001	0.086 ± 0.034	0.072 – 0.100
	AF12	Day 2	17.5	23	<0.001	0.159 ± 0.045	0.141 – 0.178
		Day 1	18.9	17	<0.001	31.1 ± 7.0	27.6 – 34.6
	Anthocyanin Content	Day 2	10.8	17	<0.001	50.5 ± 19.8	40.7 – 60.4
		Day 1	11.4	23	<0.001	0.053 ± 0.023	0.043 – 0.062
Ripeness 4 Red (ripe)	AF0	Day 2	9.9	23	<0.001	0.077 ± 0.038	0.061 – 0.094
		Day 1	11.4	23	<0.001	0.026 ± 0.027	0.014 – 0.037
	AF12	Day 2	7.1	23	<0.001	0.050 ± 0.034	0.035 – 0.064
		Day 1	3.8	17	<0.001	4.7 ± 5.35	2.1 – 7.4
	Anthocyanin Content	Day 2	15.2	17	<0.001	9.2 ± 11.9	3.3 – 15.2
		Day 1	6.8	23	<0.001	0.036 ± 0.026	0.025 – 0.047
Ripeness 5 Dark Red (overripe)	AF0	Day 2	8.7	23	<0.001	0.063 ± 0.035	0.048 – 0.078
		Day 1	3.6	23	0.002	0.031 ± 0.043	0.013 – 0.049
	AF12	Day 2	1.9	23	0.066	0.020 ± 0.051	-0.001 – 0.049
		Day 1	-1	17	0.345	-2.5 ± 10.8	-7.8 – 2.9
	Anthocyanin Content	Day 2	-1	17	0.317	-3.5 ± 14.6	-10.8 – 3.7

Table S3: The results from the paired t-test, showing the difference between the total soluble acidity (in °Brix), the titratable acidity (in g/L) and the pH of purees made from fresh strawberries (Day 0), and those been stored for 24 hours (Day 1) and 48 hours (Day 2) for each ripeness stage. Also shown is the difference in firmness of the strawberries (in kg/cm²) at these time points. t represents the t-test statistic, df is the degrees of freedom, and CI 95% is the 95% Confidence Interval.

Ripeness Stage			t	df	Significance	Mean Difference	CI 95%
Ripeness 1 White	TSS (°Brix)	Day 1	0.6	5	0.584	0.08 ± 0.33	-0.28 – 0.45
		Day 2	3.3	5	0.023	0.45 ± 0.32	0.09 – 0.81
	TA (g/L)	Day 1	0.5	5	0.624	0.26 ± 1.1	-0.22 – 0.75
		Day 2	1.7	5	0.141	1.95 ± 2.55	-0.92 – 4.8
	pH	Day 1	1.1	5	0.331	0.50 ± 1.1	-0.69 – 1.69
		Day 2	1.0	5	0.367	0.43 ± 1.06	-0.68 – 1.54
	Firmness (kg/cm ²)	Day 1	-0.5	4	0.627	-0.21 ± 0.91	-1.35 – 0.92
		Day 2	-3.8	4	0.020	-0.89 ± 0.53	-1.55 – -0.24
Ripeness 2 White/Orange	TSS (°Brix)	Day 1	0.5	5	0.634	0.12 ± 0.56	-0.47 – 0.71
		Day 2	2.1	5	0.094	0.65 ± 0.77	-0.16 – 1.46
	TA (g/L)	Day 1	-0.2	5	0.875	-0.06 ± 0.83	-0.93 – 0.81
		Day 2	1.8	5	0.124	0.68 ± 0.90	-0.27 – 1.63
	pH	Day 1	0.9	5	0.407	0.05 ± 0.14	-0.10 – 0.21
		Day 2	-0.04	5	0.973	-0.003 ± 0.17	-0.18 – 0.18
	Firmness (kg/cm ²)	Day 1	0.1	4	0.911	0.01 ± 0.21	-0.25 – 0.28
		Day 2	-0.2	4	0.817	-0.03 ± 0.29	-0.40 – 0.33
Ripeness 3 Orange	TSS (°Brix)	Day 1	0.09	5	0.932	0.02 ± 0.45	-0.46 – 0.49
		Day 2	0.7	5	0.534	0.17 ± 0.61	-0.48 – 0.81
	TA (g/L)	Day 1	2.7	5	0.044	0.18 ± 0.25	0.01 – 0.54
		Day 2	7.1	5	0.001	0.86 ± 0.30	0.55 – 1.2
	pH	Day 1	2.2	5	0.081	0.14 ± 0.16	-0.03 – 0.31

Ripeness 4 Red (ripe)	Firmness (kg/cm ²)	Day 2	1.4	5	0.225	0.09 ± 0.16	-0.08 – 0.25
		Day 1	6.1	4	0.004	0.10 ± 0.04	0.05 – 0.14
		Day 2	0.7	4	0.502	0.04 ± 0.12	-0.11 – 0.19
		Day 1	1.1	5	0.328	0.13 ± 0.30	-0.18 – 0.45
	TSS (°Brix)	Day 2	0.5	5	0.653	0.12 ± 0.60	-0.51 – 0.74
		Day 1	2.3	5	0.069	0.35 ± 0.37	-0.04 – 0.74
		Day 2	3.7	5	0.013	1.65 ± 1.08	0.52 – 2.79
		Day 1	0.01	5	0.989	0.0008 ± 0.14	-0.15 – 0.15
	pH	Day 2	-2.2	5	0.076	-0.16 ± 0.17	-0.34 – 0.02
		Day 1	1.3	4	0.277	0.04 ± 0.06	-0.04 – 0.12
		Day 2	0.3	4	0.804	0.02 ± 0.14	-0.16 – 0.19
		Day 1	0.7	5	0.523	0.13 ± 0.48	-0.37 – 0.63
Ripeness 5 Dark Red (overripe)	TA (g/L)	Day 2	0.3	5	0.750	0.12 ± 0.85	-0.77 – 1.01
		Day 1	1.7	5	0.156	1.00 ± 1.47	-0.54 – 2.5
		Day 2	4.4	5	0.007	1.41 ± 0.78	0.59 – 2.23
		Day 1	-0.8	5	0.486	-0.06 ± 0.18	-0.24 – 0.13
	pH	Day 2	-1.8	5	0.124	-0.17 ± 0.22	-0.40 – 0.07
		1 Day	0.3	4	0.784	0.004 ± 0.03	-0.04 – 0.05
		Day 2					

Table S4: The average increase (as determined by a paired t-test) in AF0, AF12 and Total Monomeric Anthocyanin Content [mg/kg pg-3-glu eqv] for each cultivar at each ripeness stage, between non-stored samples (Day0) and after 1 and 2 days of post-harvest storage.

		Allegro	Malling Centenary	Sibilla 1	Sibilla 2	Magnum	Salsa
Difference in AF0 between Day 0 and Day 1	White (1)	0.111 ± 0.001 *** cC	0.074 ± 0.002 *** cA	0.130 ± 0.002 *** bD	0.105 ± 0.001 *** cB	0.159 ± 0.001 *** cE	0.133 ± 0.001 *** dD
	White/Orange (2)	0.102 ± 0.007 *** cA	0.236 ± 0.008 *** dC	0.263 ± 0.004 *** cE	0.195 ± 0.003 *** dB	0.251 ± 0.003 *** dD	0.426 ± 0.003 *** eF
	Orange (3)	0.069 ± 0.009 *** bC	0.030 ± 0.005 ** aB	0.075 ± 0.010 *** aD	0.033 ± 0.007 ** aA	0.138 ± 0.002 *** cF	0.067 ± 0.003 *** cE

	Red (4)	0.081 ± 0.005 *** bC	0.048 ± 0.005 *** bB	0.080 ± 0.005 *** aC	0.053 ± 0.023 *** bB	0.045 ± 0.003 *** aB	0.043 ± 0.005 ** bA
	Dark Red (5)	0.026 ± 0.002 *** aB	0.023 ± 0.008 ** aB	0.072 ± 0.016 ** aC	0.025 ± 0.006 ** aB	0.064 ± 0.005 *** bB	0.004 ± 0.006 ns aA
	All Ripeness Grades	0.078 ± 0.031 *** A	0.082 ± 0.081 *** A	0.124 ± 0.075 *** A	0.08 ± 0.066 *** A	0.132 ± 0.076 *** A	0.130 ± 0.159 ** A
Difference in AF0 between Day 0 and Day 2	White (1)	0.491 ± 0.001 *** eD	0.399 ± 0.010 *** eB	0.381 ± 0.001 *** cA	0.412 ± 0.003 *** eC	0.569 ± 0.002 *** dF	0.556 ± 0.001 *** eE
	White/Orange (2)	0.254 ± 0.009 *** dA	0.299 ± 0.004 *** dB	0.467 ± 0.002 *** dD	0.316 ± 0.004 *** dB	0.371 ± 0.025 *** cC	0.509 ± 0.001 *** dE
	Orange (3)	0.105 ± 0.008 *** cC	0.091 ± 0.009 *** bB	0.131 ± 0.006 *** bD	0.073 ± 0.002 *** bA	0.187 ± 0.003 *** bF	0.171 ± 0.003 *** cE
	Red (4)	0.071 ± 0.004 *** bB	0.110 ± 0.009 *** cD	0.126 ± 0.007 *** abE	0.089 ± 0.005 *** cC	0.012 ± 0.007 * aA	0.058 ± 0.007 *** aB
	Dark Red (5)	0.040 ± 0.007 ** aA	0.070 ± 0.007 *** aB	0.109 ± 0.016 *** aC	0.030 ± 0.010 ** aA	0.025 ± 0.003 *** aA	0.104 ± 0.007 *** bC
	All Ripeness Grades	0.192 ± 0.171 *** A	0.194 ± 0.135 *** A	0.243 ± 0.155 *** A	0.184 ± 0.155 *** A	0.233 ± 0.218 *** A	0.280 ± 0.216 * A
Difference in AF12 between Day 0 and Day 1	White (1)	0.040 ± 0.001 *** cD	0.005 ± 0.001 ** aA	0.029 ± 0.001 *** bC	0.045 ± 0.002 *** cE	0.025 ± 0.001 *** aB	0.051 ± 0.001 *** bF
	White/Orange (2)	0.091 ± 0.001 *** eD	0.115 ± 0.001 *** cA	0.273 ± 0.001 *** eB	0.179 ± 0.004 *** eC	0.098 ± 0.001 *** dD	0.377 ± 0.003 *** dE
	Orange (3)	0.047 ± 0.002 *** dA	0.058 ± 0.005 *** bB	0.128 ± 0.002 *** dF	0.056 ± 0.002 *** dC	0.112 ± 0.001 *** eE	0.114 ± 0.002 *** cD
	Red (4)	0.033 ± 0.002 *** bC	0.010 ± 0.002 ** aB	-0.014 ± 0.003 ** aA	0.009 ± 0.006 ns bB	0.059 ± 0.002 *** cD	0.056 ± 0.009 ** bD
	Dark Red (5)	-0.004 ± 0.004 ns aB	0.050 ± 0.008 *** bE	0.109 ± 0.006 *** cF	-0.019 ± 0.004 ** aA	0.037 ± 0.002 *** bD	0.013 ± 0.005 * aC
	All Ripeness Grades	0.041 ± 0.031 *** A	0.048 ± 0.041 *** A	0.105 ± 0.101 *** AB	0.054 ± 0.07 ** AB	0.066 ± 0.035 *** AB	0.122 ± 0.135 *** B
Difference in AF12 between Day 0 and Day 2	White (1)	0.195 ± 0.001 *** dD	0.125 ± 0.001 *** cC	0.125 ± 0.002 *** cB	0.109 ± 0.001 *** cC	0.109 ± 0.001 *** bA	0.197 ± 0.001 *** dD
	White/Orange (2)	0.305 ± 0.001 *** eD	0.249 ± 0.003 *** dA	0.273 ± 0.001 *** eB	0.294 ± 0.004 *** eC	0.304 ± 0.001 *** eD	0.416 ± 0.001 *** eE
	Orange (3)	0.096 ± 0.004 *** cA	0.118 ± 0.006 *** cB	0.215 ± 0.003 *** dF	0.144 ± 0.003 *** dC	0.203 ± 0.002 *** dE	0.180 ± 0.004 *** cD
	Red (4)	0.016 ± 0.004 ** aA	0.039 ± 0.005 *** bBC	0.047 ± 0.004 *** aC	0.033 ± 0.005 *** bB	0.121 ± 0.003 *** cD	0.041 ± 0.002 *** bBC
	Dark Red (5)	0.041 ± 0.008 ** bD	-0.019 ± 0.005 ** aB	0.099 ± 0.007 *** bE	-0.052 ± 0.009 ** aA	0.005 ± 0.002 *** aD	0.000 ± 0.005 ns aC
	All Ripeness Grades	0.131 ± 0.110 *** A	0.103 ± 0.093 *** A	0.150 ± 0.084 *** A	0.109 ± 0.119 *** A	0.157 ± 0.090 *** A	0.167 ± 0.150 *** A
Difference in Anthocyanin content between Day 0	White (1)	2.9 ± 1.2 ns bA	6.5 ± 0.4 ** bBC	5.6 ± 0.6 ** bAB	6.9 ± 0.7 ** cBC	9.3 ± 1.1 ** bC	9.3 ± 2.2 * bC
	White/Orange (2)	22.1 ± 2.5 ** dA	32.6 ± 0.4 *** cB	25.0 ± 0.8 *** dA	50.6 ± 0.9 *** eD	43.8 ± 2.2 *** dC	85.9 ± 0.9 *** eE
	Orange (3)	26.2 ± 1.1 *** dAB	43.6 ± 3.7 ** dD	32.6 ± 1.0 *** eC	30.8 ± 0.8 *** dBC	31.3 ± 2.1 ** cBC	22.2 ± 0.8 *** dA

and Day 1	Red (4)	8.1 ± 1.5 * cB	-0.6 ± 1.0 ns aA	1.6 ± 0.7 ns aA	-1.0 ± 2.5 ns bA	10.6 ± 3.4 * bB	9.9 ± 2.6 * cB
	Dark Red (5)	-7.9 ± 2.5 * aAB	-5.50 ± 2.1 * aBC	20.2 ± 0.7 *** cD	-11.3 ± 0.6 *** aA	-3.0 ± 1.8 ns aC	-7.5 ± 1.4 * aABC
	All Ripeness	10.3 ± 13.0 ** A	15.3 ± 20 * A	17.0 ± 12.1 *** A	15.2 ± 23.3 * A	18.4 ± 17.5 ** A	24.0 ± 33.6 * A
	Grades						
Difference in Anthocyanin content between Day 0 and Day 2	White (1)	33.6 ± 1.7 *** bB	27.5 ± 0.7 *** cA	24.7 ± 0.6 *** bA	34.3 ± 0.9 *** bB	28.5 ± 1.8 ** cA	45.8 ± 2.8 ** dC
	White/Orange (2)	60.0 ± 1.5 *** cA	57.3 ± 0.3 *** cA	70.5 ± 0.3 *** cB	90.9 ± 0.9 *** dC	106.1 ± 1.1 *** eD	91.2 ± 4 .0*** eC
	Orange (3)	35.7 ± 2.5 ** bAB	51.7 ± 3.9 ** dC	89.6 ± 3.2 *** dD	53.9 ± 0.3 *** cC	40.2 ± 2.0 *** dB	32.1 ± 0.9 *** cA
	Red (4)	5.0 ± 1.7 * aB	17.2 ± 3.5 * bC	22.4 ± 0.8 *** abC	-3.1 ± 4.4 ns aAB	-6.1 ± 6.5 ns bA	20.0 ± 0.7 *** bC
	Dark Red (5)	9.8 ± 2.4 * aC	-18.2 ± 2.8 ** aA	20.3 ± 1.0 *** aD	-8.0 ± 1.6 * aB	-8.4 ± 3.2 * aB	-16.8 ± 4.2 * aA
	All Ripeness	28.8 ± 20.6 *** A	27.1 ± 28.1 ** A	45.5 ± 29.9 *** A	33.6 ± 38.1 ** A	32 ± 43.2 * A	34.5 ± 36.5 ** A
	Grades						

Different lower case letters (vertical) illustrate significant differences (Tukey's test $p < 0.05$) between the different ripeness stages. Different upper case letters (horizontal) indicate significant differences (Tukey's test $p < 0.05$) between the different cultivars. *** and **, * and ns indicates significance at $p < 0.001$, $p < 0.01$, $p < 0.05$ and no significance respectively.