

**Supplementary Materials:** The following are available online at [www.mdpi.com/xxx/s1](http://www.mdpi.com/xxx/s1)

**Table S1.** Percent weight loss linear regression models and fit statistics for Figure 1A-C.

Storage			
Cultivar	temperature (°C)	Model $y = storage\ duration$	Adjusted r <sup>2</sup>
FM (A)	-3.1	$y = 0.7544 + 0.9767x$	0.6470
	0.6	$y = 1.121 + 1.046x$	0.5397
	3.5	$y = -0.7941 + 1.491x$	0.8020
MJE (B)	-3.1	$y = 0.4634 + 0.5826x$	0.6938
	0.6	$y = 0.9683 + 0.7475x$	0.6177
	3.5	$y = 0.3491 + 1.110x$	0.6717
SB (C)	-3.1	$y = 2.236 + 2.197x - 0.01728x^2$	0.8378
	0.6	$y = -0.7738 + 4.382x - 0.1834x^2$	0.7143
	3.5	$y = 0.5541 + 3.540x$	0.8663

**Table S2.** Failure to open (FTO) logistic regression models for Figure 1D-F.

Cultivar	Explanatory variable	Estimate	Wald Chi-	Pr > ChiSq
			Square	
FM (D)	Intercept	-5.97	48.30	<.0001
	Storage duration (D)	0.70	48.07	<.0001
	Storage temperature (T)	-3.1	2.65	0.0074
		0.6	1.69	0.1324
		3.5	0.00	.
	D*T	-3.1	-0.37	0.0015
		0.6	0.39	0.0019
		3.5	0.00	.
MJE (E)	Intercept	-7.11	63.68	<.0001
	Storage duration (D)	0.68	57.45	<.0001
	Storage temperature (T)	-3.1	-0.94	0.0095
		0.6	-2.77	<.0001
	3.5	0	.	.
SB (F)	Intercept	-4.12	102.33	<.0001
	Storage duration (D)	0.52	118.83	<.0001
	Storage temperature (T)	-3.1	-0.80	0.0055
		0.6	-1.99	<.0001
	3.5	0	.	.

**Table S3.** Failure to open (FTO) storage temperature treatment comparisons using least squares means and Tukey HSD Figure 1D-F.

Cultivar	Storage duration (weeks)	Storage temperature (°C)	Comparison (°C)	Estimate	Adj. <i>p</i> value	Adjusted		Odds ratio	Adj. lower CI	Adj. upper CI
						lower CI	upper CI		for odds ratio	for odds ratio
FM (D)	4	-3.1	0.6	1.06	0.1074	-0.171	2.306	2.908	0.843	10.030
		-3.1	3.5	1.16	0.0931	-0.145	2.483	3.219	0.864	11.980
		0.6	3.5	0.10	0.9868	-1.428	1.631	1.107	0.240	5.110
	8	-3.1	0.6	1.17	0.0003	0.466	1.884	3.240	1.594	6.586
		-3.1	3.5	-0.31	0.5116	-0.995	0.358	0.727	0.369	1.431
		0.6	3.5	-1.49	<.0001	-2.266	-0.722	0.224	0.104	0.485
	12	-3.1	0.6	1.28	0.0156	0.196	2.370	3.610	1.217	10.706
		-3.1	3.5	-1.80	0.0023	-3.069	-0.543	0.164	0.046	0.581
		0.6	3.5	-3.09	<.0001	-4.415	-1.765	0.045	0.012	0.171
MJE (E)	-3.1	0.6	1.82	0.0024	0.544	3.110	6.220	1.724	22.435	
	-3.1	3.5	-0.94	0.0257	-1.807	-0.091	0.387	0.164	0.912	
	0.6	3.5	-2.77	<.0001	-4.046	-1.508	0.062	0.017	0.221	
SB (F)	-3.1	0.6	1.19	0.0006	0.444	1.944	3.300	1.559	6.988	
	-3.1	3.5	-0.80	0.0151	-1.476	-0.125	0.449	0.228	0.882	
	0.6	3.5	-1.99	<.0001	-2.762	-1.22	0.136	0.063	0.293	

**Table S4.** Flower diameter linear regression models and fit statistics Figure 2A-C.

Cultivar	Storage temperature (°C)	Model $y = storage\ duration$	Adj. r <sup>2</sup>
FM (A)	-3.1	$y = 11.36 + 0.2393x - 0.1075x^2$	0.8428
	0.6	$y = 11.69 - 0.2462x$	0.2903
	3.5	$y = 11.65 + 0.31882x - 0.1170x^2$	0.8457
MJE (B)	-3.1	$y = 11.69 - 0.2736x$	0.3457
	0.6	$y = 11.21 - 0.2064x$	0.2738
	3.5	$y = 11.81 - 0.3954x$	0.5993
SB (C)	-3.1	$y = 10.68 + 0.0053x - 0.0729x^2$	0.7783
	0.6	$y = 11.60 - 0.3266x$	0.4050
	3.5	$y = 11.66 - 0.2269x - 0.0579x^2$	0.6056

**Table S5.** Flower deformity logistic regression models for Figure 2D-F.

Cultivar	Explanatory variable	Estimate	Wald Chi-Square	Pr > ChiSq
FM (D)	Intercept	-1.69	46.62	<.0001
	Storage duration (D)	0.18	33.01	<.0001
	Storage temperature (T)	-3.1	10.13	0.0015
		0.6	-0.35	0.1588
		3.5	0	.
MJE (E)	Intercept	-3.87	89.47	<.0001
	Storage duration (D)	0.29	47.22	<.0001
	Storage temperature (T)	-3.1	48.19	<.0001
		0.6	-0.89	0.0234
		3.5	-3.87	89.47
SB (F)	Intercept	-3.39	83.41	<.0001
	Storage duration (D)	0.41	63.82	<.0001
	Storage temperature (T)	-3.1	8.65	0.0033
		0.6	-1.16	0.0027
		3.5	0	.

**Table S6.** Flower deformity storage temperature treatment comparisons using least squares means and Tukey HSD Figure 2D-F.

Cultivar	Storage temperature (°C)			Adj. p value	Adjusted lower CI	Adjusted upper CI	Odds ratio	Adj. lower CI for odds ratio	Adj. upper CI for odds ratio
		Comparison	Estimate						
FM (D)	-3.1	0.6	1.14	<.0001	0.556	1.736	3.147	1.745	5.675
	-3.1	3.5	0.79	0.0042	0.208	1.371	2.203	1.232	3.942
	0.6	3.5	-0.35	0.3362	-0.949	0.236	0.700	0.387	1.267
MJE (E)	-3.1	0.6	3.18	<.0001	2.308	4.057	24.119	10.058	57.836
	-3.1	3.5	2.28	<.0001	1.512	3.054	9.814	4.540	21.218
	0.6	3.5	-0.89	0.0605	-1.828	0.0302	0.407	0.161	1.031
SB (F)	-3.1	0.6	2.13	<.0001	1.274	3.002	8.483	3.576	20.127
	-3.1	3.5	0.96	0.0091	0.197	1.741	2.637	1.218	5.707
	0.6	3.5	-1.16	0.0075	-2.080	-0.256	0.311	0.125	0.774

**Table S7.** Failure to open (FTO) logistic regression models for Figure 5A-C.

Cultivar	Explanatory variable	Wald Chi-Square		
		Estimate	Square	Pr > ChiSq
FM (A)	Intercept	-4.63	75.208	<.0001
	Storage duration (D)	0.20	26.191	<.0001
	Storage temperature (T)	-0.6	0.31	0.3394
		0.7	0	.
MJE (B)	Intercept	. -13.33	10.666	0.0011
	Storage duration (D)	0.75	7.994	0.0047
	Storage temperature (T)	-0.6	-12.94	0.004
		0.7	0	10.666
SB (C)	Intercept	-3.72	82.744	<.0001
	Storage duration (D)	0.22	45.410	<.0001
	Storage temperature (T)	-0.6	-0.74	7.0460
		0.7	0	.

**Table S8.** Failure to open (FTO) storage temperature treatment comparisons using least squares means and Tukey HSD Figure 5A-C.

Cultivar	Storage temperature (°C)	Comparison	Estimate	Adj. <i>p</i> value	Adjusted lower CI	Adjusted upper CI	Odds ratio	Adj. lower CI for odds ratio	Adj. upper CI for odds ratio
FM (A)	-0.6	0.7	1.368	ns	.	.	.	.	.
MJE (B)	-0.6	0.7	<0.001	ns	.	.	.	.	.
SB (C)	-0.6	0.7	-0.7405	0.0079	-1.287	-0.193	0.477	0.276	0.824

**Table S9.** Flower deformity logistic regression models for Figure 5D-F.

Cultivar	Explanatory variable	Wald Chi-		
		Estimate	Square	Pr > ChiSq
FM (D)	Intercept	-2.96	95.709	<.0001
	Storage duration (D)	0.25	90.808	<.0001
	Storage temperature (T)	-0.6	6.648	0.0099
		0.7	0	.
MJE (E)	Intercept	-7.34	53.153	<.0001
	Storage duration (D)	0.47	40.992	<.0001
	Storage temperature (T)	-0.6	12.930	0.0003
		0.7	0	.
SB (F)	Intercept	-3.96	61.087	<.0001
	Storage duration (D)	0.18	18.708	<.0001
	Storage temperature (T)	-0.6	4.431	0.0353
		0.7	0	.

**Table S10.** Flower deformity storage temperature treatment comparisons using least squares means and Tukey HSD Figure 5D-F.

Cultivar	Storage temperature (°C)	Comparison	Estimate	Adj. <i>p</i> value	Adjusted lower CI	Adjusted upper CI	Odds ratio	Adj. lower CI for odds ratio	Adj. upper CI for odds ratio
FM (D)	-0.6	0.7	-0.60	0.0099	-1.066	-0.145	0.545	0.344	0.865
MJE (E)	-0.6	0.7	-1.42	0.0003	-2.208	-0.650	0.239	0.110	0.522
SB (F)	-0.6	0.7	-0.82	0.0353	-1.585	-0.0566	0.440	0.205	0.945