













Variety	Year	Rootstock	First Bloom Date	5% Bloom Date	Days Before (-) or After (+) Bing	Full Bloom Date	Days Before (-) or After (+) Bing	Harvest Date	Days Before (-) or After (+) Bing	Total Soluble Solids (%)	CTIFL Color Skin	CTIFL Color Flesh	Pitting Rating (1=Good, 4=Bad)	Stem Pull (g)	Fruit Dia. (mm)	Firmness (g/mm)	% 9 row +	% 8 row +	Titratable Acidity (%)	% Natural Crack	% Crack 2 hour soak	Crop Size	Taste (Mild/Strong)	Texture (Soft/Firm)
Royal Helen	2011	Z Stem	15-Apr			25-Apr		25-Jul	12	24.5	6	5.5		1440	32.3	371	100	72				Light		
	2012	Z Stem	13-Apr	15-Apr	2	22-Apr	2	23-Jul	17	20.5	4.5	4.5	2.4	1307	31.8	354	92	8				Light/Med		
	2013	Z Stem	30-Mar	31-Mar	0	5-Apr	-2	11-Jul	12	20.5	6	5	3.64	1374	31.6	298	92	8		42		Heavy	Medium	Fairly Firm
	2014	Z Stem	3-Apr	7-Apr	2	9-Apr	1	6-Jul	13	21.6	5.5	5	2.8	1014	33.2	389	100	57			22	Medium	Mild	Fairly Soft
	2015	Z Stem		22-Mar	2	27-Mar	1	24-Jun	9	22	6	5.5	2.88	1236	33.0	439	91.7	33.3			16	Med/Light	Medium	Fairly Firm
	2016	Z Stem	27-Mar	29-Mar	2	2-Apr	0	30-Jun	13	21.8	5.5	5	2.68	1057	33.2	372	100	64.7	0.51	44	14	Medium	Medium	Firm
	2017	Z Stem	8-Apr	11-Apr	3	18-Apr	0	13-Jul	10	17.4	6	5.5	2.68	1401	29.3	330			0.63				Medium	Fairly Firm
	2018	Z Stem	2-Apr	7-Apr	3	16-Apr	2	7-Jul	9	19.5	6.5	6	2.64	1063	30.2	246			0.69	4	40	Med/Heavy		
	2019	Z Stem	13-Apr	16-Apr	0	19-Apr	0	15-Jul	14	20.5	6	5.5	2.62	1068	31.6	313			0.7	10	10			
	2020	Z Stem	24-Mar	29-Mar	0	8-Apr	0	7-Jul	11	20.8	5.5	5.5	2.5	1045	31.86	359.61			0.79	2	0			
	2021	Z Stem	2-Apr	5-Apr	1	12-Apr	0	13-Jul	15	18.2	5.5	5.5		1228	29.9	308.9	92	24	1.19	4	8			
Royal Helen AVERAGES			26-Mar	5-Apr	1.5 Days After Bing	12-Apr	0.5 Days After Bing	10-Jul	12 Days After Bing	20.7	5.7	5.3	2.8	1203.0	31.6	343.6	95.4	38.1	0.8	17.7	15.7			
Sandra Rose	2005	Mazzard	21-Mar			6-Apr	3	5-Jul		19.5	6	5			31.1	243	80	0		25		Medium	Mild	Firm
	2006	Mazzard	10-Apr			21-Apr	5	3-Jul	-3	17.1	6	5			31.4	205	89	13		26		Light	Strong	Medium
	2007	Mazzard	1-Apr			16-Apr	6	28-Jun	0	22.3	6	6			32.2	286	86	33				Medium	Mild	Firm
	2009	Mazzard	15-Apr	18-Apr	2	26-Apr	4	7-Jul	3	17.6	6	4		842	32.6	237	88	12				Heavy		
	2010	Mazzard	30-Mar	9-Apr	4	17-Apr	5	12-Jul	3	20.8	5	4		1035	31.4	244	88	8		12		Light		
	2011	Mazzard	15-Apr	19-Apr	5	28-Apr	4	15-Jul	2	22	6	5		973	30.7	294	88	24				Light/Med		
	2012	Mazzard	13-Apr	15-Apr	2	23-Apr	3	6-Jul	0	20.3	5.5	5		747	31.5	308	84	16		10		Light	Medium	Firm
	2013	Mazzard	31-Mar	4-Apr	4	10-Apr	3	29-Jun	0	17.3	6	5.5		978	31.4	304	84	8		63		Medium		
	2014	Mazzard	5-Apr	8-Apr	3	14-Apr	6	24-Jun	1	20.4	6	6		986	32.6	330	100	16			22	Medium	Medium	Fairly Firm
	2015	Mazzard		27-Mar	7	30-Mar	4	11-Jun	-4	20.6	6	5	2.72	981	31.7	303	96	4			16	Medium	Medium	Fairly Firm
	2016	Mazzard	30-Mar	2-Apr	6	7-Apr	5	10-Jun	-7	20.8	5	4.5	2.52	1079	31.0	337	80	4	0.77	22	16	Medium	Strong	Fairly Firm
2017	Mazzard	13-Apr	15-Apr	7	21-Apr	3	30-Jun	-3	17.8	5	5	2.48	976	30.6	267			1.05		8				
2018	Mazzard	6-Apr	8-Apr	4	18-Apr	4	22-Jun	-6	20.4	6	5.5	2.68	562	30.1	322			0.76	12	16	Light			
2021	Mazzard	1-Apr	8-Apr	4	15-Apr	3	25-Jun	-3	21.1	5.5	5.5		904	30.1	221	92	12	0.95	2	6				
Sandra Rose AVERAGES			5-Apr	9-Apr	4.5 Days After Bing	16-Apr	4 Days After Bing	29-Jun	1.5 Days Before Bing	19.9	5.7	5.1	2.6	914.8	31.3	278.5	87.9	12.5	0.9	21.5	14.0			
Santina	2005	Mazzard	21-Mar			7-Apr	4	16-Jun		15.9	6	4		741	30.4	312	68	8		90		Light	Mild	Firm
	2006	Mazzard	11-Apr			19-Apr	3	30-Jun	-7	16.8	6	5			28.5	190	24	0		38		Med/Light	Mild	Firm
	2007	Mazzard	1-Apr			12-Apr	2	25-Jun	-3	17.1	6	6			31.6	381	96	24				Light	Medium	Firm
	2009	Mazzard	17-Apr	19-Apr	3	23-Apr	1	27-Jun	-7	14.7	6	5		1186	30.3	281	68	4				Med/Heavy		
	2010	Mazzard	1-Apr	8-Apr	3	14-Apr	2	27-Jun	-12	16.1	4.5	3		1511	29.7	306	52	0		20		Light		
	2011	Mazzard	10-Apr	20-Apr	6	26-Apr	2	7-Jul	-6	16.1	5	3.5		1279	29.4	317	32	0				Light/Med		
	2012	Mazzard	13-Apr	15-Apr	2	22-Apr	2	29-Jun	-7	15.8	5.5	5		1119	30.4	269	76	0		53		Medium		
	2013	Mazzard	1-Apr	2-Apr	2	6-Apr	-1	21-Jun	-8	17.5	6.5	5.5	2.72	1065	31.4	365	92	0		47		Light	Medium	Fairly Firm
	2014	Mazzard	5-Apr	8-Apr	3	11-Apr	3	19-Jun	-4	20	6	5.5		1014	32.1	418	100	9			44	Med/Light		
	2015	Mazzard		25-Mar	5	28-Mar	2	8-Jun	-7	17.8	6	5.5	2.8	1082	31.8	355	100	4			26	Med/Light	Mild	Medium
	2016	Mazzard	28-Mar	31-Mar	4	2-Apr	0	7-Jun	-10	17.6	5.5	5	2.52	1071	32.6	306	100	25	0.51		26	Med/Light	Mild	Fairly Soft
2017	Mazzard	7-Apr	11-Apr	3	19-Apr	1	26-Jun	-7	17.2	5.5	5	2.64	1040	30.4	326			0.63	19	8		Mild	Fairly Soft	
2018	Mazzard	4-Apr	8-Apr	4	16-Apr	2	22-Jun	-6	18.5	6	5	2.68	599	31.6	335			0.54	17	14	Medium			
2019	Mazzard	11-Apr	15-Apr	-1	19-Apr	0	25-Jun	-6	16.5	6.5	6	2.68	1086	29.6	319			0.51	4	6				
2020	Mazzard							21-Jun	-5	21.8	6.5	5.5	2.7	932	30.54	282.04			0.56	20	18			
2021	Mazzard	5-Apr	8-Apr	4	14-Apr	2	22-Jun	-6	21.1	6	5		1023	29.867	384.664	96	8	0.93	25	22				
Santina AVERAGES			5-Apr	9-Apr	3 Days After Bing	14-Apr	2 Days After Bing	23-Jun	6.5 Days Before Bing	17.5	5.8	5.0	2.7	1053.5	30.6	321.7	75.3	6.8	0.6	33.3	20.5			





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Sovereign (13S-21-1)	2005	Mazzard	27-Mar			6-Apr	3	4-Aug	36	19.3	6	5			28.5	312	8	0		15		Light	Mild	Firm	
	2006	Mazzard	11-Apr			22-Apr	6	14-Aug	39	18.6	6	6			28.6	359	28	0				Medium	Medium	Medium	
	2007	Mazzard	3-Apr			14-Apr	4	13-Aug	46	23.4	6	6			29.4	350	40	0				Light	Medium	Firm	
	2009	Mazzard	16-Apr	19-Apr	3	24-Apr	2	12-Aug	37	19.5	6	4		569	30.7	253	76	4				Med/Heavy			
	2010	Mazzard	6-Apr	11-Apr	6	13-Apr	1	17-Aug	39	21.2	5.5	5		724	29.0	395	40	0				Light			
	2011	Mazzard	16-Apr	21-Apr	7	30-Apr	4	7-Aug	25	18.5	5.5	4		871	29.9	431	76	12		23			Med/Heavy		
	2012	Mazzard	14-Apr	16-Apr	3	22-Apr	2	6-Aug	31	16.9	5	4		671	29.6	406	48	0				Heavy			
	2013	Mazzard	31-Mar	4-Apr	4	7-Apr	0	25-Jul	26	19.7	6	5	2.72	880	29.7	320	48	0		33			Medium	Strong	Firm
	2014	Mazzard	5-Apr	7-Apr	2	9-Apr	1	19-Jul	26	21.5	6	5		1021	30.5	428	84	0				4	Medium		
	2015	Mazzard		23-Mar	3	28-Mar	2	6-Jul	21	20.1	6	5	2.88	800	29.6	377	52	0				4	Medium	Medium	Firm
	2016	Mazzard	29-Mar	2-Apr	6	7-Apr	5	22-Jul	35	20.9	6	5.5		834	30.0	541	84	8	0.67	13	4	Medium	Medium	Firm	
	2017	Mazzard	13-Apr	14-Apr	6	23-Apr	5	3-Aug	30	20.7	6	5.5		748	31.0	383			0.94		4				
	2018	Mazzard	7-Apr	10-Apr	6	18-Apr	4	26-Jul	28	21	6.5	5	2.82	580	30.1	324			0.76	2	0	Light			
	2019	Mazzard	13-Apr	16-Apr	0	19-Apr	0	2-Aug	32	21.1	5.5	5		839	30	357			0.83	4	2				
2020	Mazzard	3-Apr	6-Apr	7	10-Apr	2	29-Jul	33	20.8	6	5		791	29.23	268.52			0.72	2	0					
2021	Mazzard	5-Apr	8-Apr	4	15-Apr	3	26-Jul	28	19.2	5.5	5		806	29	286.5	64	8	1.14	2	2					
Sovereign AVERAGES			7-Apr	10-Apr	4.5 Days After Bing	15-Apr	3 Days After Bing	1-Aug	32 Days After Bing	20.2	5.8	5.0	2.8	779.5	29.7	361.8	54.0	2.7	0.8	11.8	2.5				
Staccato	2005	Mazzard	21-Mar			4-Apr	1	29-Jul	30	18.2	6	5			30.9	334	84	8		10		Light	Mild	Soft	
	2006	Mazzard	6-Apr			16-Apr	0	7-Aug	32	19.2	6	5			31.5	318	93	1				Light	Mild	Firm	
	2007	Mazzard	29-Mar			7-Apr	-3	2-Aug	35	19.5	6	6			31.5	336	92	10				Light	Medium	Firm	
	2009	Mazzard	13-Apr	16-Apr	0	21-Apr	-1	12-Aug	37	20.5	6	5		694	31.4	254	88	13				Med/Heavy			
	2010	Mazzard	28-Mar	2-Apr	-3	14-Apr	2	9-Aug	31	19	5.5	4		1039	30.2	423	65	4				Light			
	2011	Mazzard	9-Apr	18-Apr	4	24-Apr	0	4-Aug	22	17.6	5.5	4		1023	31.4	393	96	52		5			Medium		
	2012	Mazzard	11-Apr	13-Apr	0	21-Apr	1	3-Aug	28	18.2	5.5	5.5		913	31.0	417	88	4		5			Heavy/Med	Mild	Firm
	2013	Mazzard	30-Mar	2-Apr	2	6-Apr	-1	22-Jul	23	20.1	6	5.5	2.36	1093	30.7	339	72	8		17			Med/Light	Strong/Med	Fairly Firm
	2014	Mazzard	3-Apr	7-Apr	2	9-Apr	1	17-Jul	24	19.7	6	5		1080	32.4	359	100	24			6		Medium	Strong	Fairly Firm
	2015	Mazzard		22-Mar	2	27-Mar	1	6-Jul	21	21.5	6	5	2.92	1070	30.9	322	76	0			8		Med/Light	Medium	Fairly Firm
	2016	Mazzard	28-Mar	31-Mar	4	2-Apr	0	21-Jul	34	21.5	6	5.5		957	32.4	504	100	26.1	0.53	9	4	Med/Light	Medium	Firm	
	2017	Mazzard	8-Apr	10-Apr	2	21-Apr	3	1-Aug	28	21.5	7	6		746	30.0	316			0.73		16				
	2018	Mazzard	2-Apr	6-Apr	2	10-Apr	-4	18-Jul	20	21.7	6	6	2.8	602	30.6	358			0.84	6	4	Light			
	2019	Mazzard	12-Apr	16-Apr	0	19-Apr	0	31-Jul	30	20.1	5.5	5.5		822	30.1	322			0.77	2	8				
2020	Mazzard							20-Jul	24	20.9	6	5		850	30.35	294.46			0.78	0	20				
Staccato AVERAGES			4-Apr	7-Apr	1.5 Days After Bing	12-Apr	Same as Bing	27-Jul	28 Days After Bing	19.9	5.9	5.2	2.7	907.4	31.0	352.6	86.8	13.6	0.7	6.8	9.4				
Stardust	2006	Gisela 6	14-Apr			14-Apr	4	13-Jul	1	16.9	Blush			31.0	260	72	4				Heavy	Medium	Firm		
	2007	Gisela 6	7-Apr			29-Apr	9	16-Jul	8	25.9	Blush		554	28.9	374	32	0				Light	Medium	Medium		
	2008	Gisela 6	14-Apr			29-Apr	7	21-Jul	8	18.7	Blush		715	29.6	225	12	4				Light	Mild	Soft		
	2009	Gisela 6	20-Apr	22-Apr	6	29-Apr	7	18-Jul	8	18.7	Blush		765	28.7	233	48	0					Heavy			
	2010	Gisela 6	14-Apr	15-Apr	10	18-Apr	6	16-Jul	7	18	Blush		1180	32.0	268	96	16					Light			
	2011	Gisela 6	21-Apr	25-Apr	11	2-May	8	18-Jul	-2	19.1	Blush		1243	31.5	302	100	60		32			Medium			
	2012	Gisela 6	15-Apr	19-Apr	6	23-Apr	3	17-Jul	8	17.6	Blush		900	30.6	259	80	8		1			Med/Heavy	Mild	Medium	
	2013	Gisela 6	6-Apr	7-Apr	7	18-Apr	11	6-Jul	5	18.5	Blush		2.8	715	30.3	266	64	0		40		Med/Heavy			
	2014	Gisela 6	8-Apr	10-Apr	5	13-Apr	5	2-Jul	3	17	Blush			868	32.3	309	100	13				Med/Heavy	Mild	Fairly Firm	
	2015	Gisela 6		27-Mar	7	8-Apr	12	18-Jun	3	17	Blush		2.6	834	31.5	352	88	4				Med/Heavy			
	2016	Gisela 6	2-Apr	4-Apr	8	8-Apr	6	23-Jun	6	17.9	Blush		2.4	773	30.9	352	72	4	0.44	16	8	Med/Heavy	Mild	Fairly Firm	
	2017	Gisela 6	15-Apr	17-Apr	9	23-Apr	5	7-Jul	4	17.7	Blush		2.48	601	30.3	280			0.52	28	8				
	2018	Gisela 6	8-Apr	14-Apr	10	21-Apr	7	3-Jul	1	19.8	Blush		2.52	695	31.4	305			0.6			Medium			
	2020	Gisela 6	5-Apr	9-Apr	10	13-Apr	5	3-Jul	2	18.2	Blush		2.6	672	32	268				14	12				
2021	Gisela 6	6-Apr	13-Apr	9	18-Apr	6	2-Jul	4	17.2	Blush			813	26.5	235.1	16	0	0.58	4	0					
Stardust AVERAGES			11-Apr	13-Apr	8 Days After Bing	19-Apr	7 Days After Bing	8-Jul	4 Days After Bing	18.5	Blush		2.6	809.2	30.5	285.9	65.0	9.4	0.5	19.3	8.0				



