

**Imperial Valley Early Harvest Official Variety Trials
3 Year Data (2017-2019)**

Variety	Approval Status for 2019-20 crop	Extractable Sugar/ Acre	Extractable Sugar/ Ton	Gross Sugar/ Acre	Tons/ Acre	% Sugar	Final Stand ^{1/}	% Bolt	Purity	Percent Emergence		Curly Top	% of Mkt.	Erwinia Root Rot+ (DI)	% of Mkt. Avg.	Powdery Mildew	% of Mkt. Avg.	Rhizomania Root Rating
												--- M = 150 ---		--M = 300		-- M = 100		
BTS 5678	Full Approval																	
2019 Trial		11,448	316.8	13,453	36.1	18.6	213	0.0	90.8	65.1		5.7	97.2	31.3	144.0	6.1	126.8	1.5
2018 Trial		11,230	295.0	13,466	38.2	17.7	207	0.0	89.6	43.9		6.6	100.9	51.4	169.9	5.2	94.5	1.6
2017 Trial		12,543	258.4	15,017	48.3	15.5	233	0.0	90.0	72.0		6.6	99.1	--	--	--	--	2.1
Average		11,740	290.1	13,979	40.9	17.3	218	0.0	90.1	60.3		--	--	--	--	--	--	--
SV501	Full Approval																	
2019 Trial		11,306	326.4	13,240	34.8	19.1	196	0.0	91.0	42.0		5.8	98.9	2.2	10.2	4.7	97.7	2.1
2018 Trial		11,438	279.3	13,896	40.7	17.0	192	0.0	88.9	35.9		6.7	102.4	4.1	13.6	5.1	92.7	1.4
2017 Trial		12,357	250.7	14,915	49.3	15.1	241	0.0	89.7	76.9		6.7	100.6	--	--	--	--	1.9
Average		11,700	285.5	14,017	41.6	17.1	210	0.0	89.9	51.6								
BTS 5775	Full Approval																	
2019 Trial		11,514	328.2	13,478	35.1	19.2	214	0.0	91.0	61.8		6.0	102.3	36.2	166.5	3.8	79.0	2.1
2018 Trial		10,491	277.2	12,877	37.6	17.0	202	0.0	88.2	52.2		6.8	103.9	57.0	188.4	3.6	65.5	1.5
2017 Trial		11,672	243.7	14,357	48.0	15.0	240	0.0	88.7	85.5		--	--	--	--	--	--	--
Average		11,226	283.0	13,571	40.2	17.1	219	0.0	89.3	66.5		--	--					
BTS 5460	Full Approval																	
2019 Trial		10,945	313.3	12,903	35.1	18.5	212	0.0	90.6	71.0		5.8	98.9	45.3	208.2	4.3	89.4	1.4
2018 Trial		11,246	285.2	13,616	39.4	17.3	204	0.0	89.0	46.4		6.2	94.8	52.4	173.2	4.8	87.3	1.0
2017 Trial		11,760	242.3	14,434	48.4	14.9	235	0.0	88.6	64.7		6.4	96.1	--	--	--	--	1.8
Average		11,317	280.3	13,651	41.0	16.9	217	0.0	89.4	60.7								
SV401	Not available for sale for 2020 crop																	
2019 Trial		12,254	312.0	14,382	39.4	18.3	208	0.0	91.0	53.8		6.1	104.1	16.4	75.4	5.9	122.6	2.5
2018 Trial		11,545	273.8	13,956	42.3	16.6	206	0.0	89.4	57.4		6.7	102.4	16.0	52.9	7.4	134.5	3.2
2017 Trial		11,889	239.3	14,488	50.2	14.5	239	0.0	89.6	86.8		6.9	103.6	--	--	--	--	2.1
Average		11,896	275.0	14,275	44.0	16.5	218	0.0	90.0	66.0								
SV 972	Full Approval																	
2019 Trial		11,957	309.0	14,052	38.9	18.1	208	0.0	91.0	49.9		6.1	104.1	12.3	56.5	3.9	81.0	1.8
2018 Trial		11,343	279.9	13,586	41.2	16.8	203	0.0	89.7	48.2		6.8	103.9	11.9	39.3	6.1	110.9	1.0
2017 Trial		12,638	236.0	15,261	53.7	14.3	233	0.0	90.1	68.4		--	--	--	--	--	--	--
Average		11,979	275.0	14,300	44.6	16.4	215	0.0	90.3	55.5		--	--	--	--	--	--	--
SV 602	Full Approval																	
2019 Trial		12,058	305.9	14,191	39.1	18.0	209	0.0	90.8	50.1		6.0	102.3	5.3	24.4	6.7	139.2	1.7
2018 Trial		12,201	275.6	14,692	44.1	16.6	198	0.0	89.4	37.1		6.9	105.5	14.0	46.3	5.7	103.6	1.7
2017 Trial		13,215	240.4	15,957	54.9	14.6	237	0.0	89.9	70.7		7.0	105.2	--	--	--	--	2.0
Average		12,491	274.0	14,947	46.0	16.4	215	0.0	90.0	52.6								

**Imperial Valley Early Harvest Official Variety Trials
3 Year Data (2017-2019)**

Variety	Approval Status for 2019-20 crop	Extractable Sugar/ Acre	Extractable Sugar/ Ton	Gross Sugar/ Acre	Tons/ Acre	% Sugar	Final Stand ^{1/}	% Bolt	Purity	Percent Emergence		Curly Top	% of Mkt.	Erwinia Root Rot+ (DI)	% of Mkt. Avg.	Powdery Mildew	% of Mkt. Avg.	Rhizomania Root Rating
BTS 566N	Full Approval																	
2019 Trial		9,440	304.5	11,247	31.8	18.2	208	0.0	90.0	72.7		5.4	92.1	14.2	65.1	4.4	91.4	1.9
2018 Trial		9,972	273.1	12,286	36.7	16.8	208	0.0	88.0	46.7		6.3	96.3	36.0	119.0	4.9	89.1	1.8
2017 Trial		10,315	240.4	12,711	43.0	14.8	239	0.0	88.6	76.2		6.2	93.1	--	--	--	--	2.1
Average		9,909	272.7	12,081	37.2	16.6	218	0.0	88.9	65.2		--	--	--	--	--	--	--
BTS 5600	Full Approval																	
2019 Trial		11,930	305.4	14,166	39.0	18.1	208	0.0	90.2	66.0		6.1	104.1	27.2	125.2	4.6	95.6	0.8
2018 Trial		10,959	264.4	13,511	41.6	16.3	211	0.0	88.1	54.1		6.4	97.8	37.9	125.3	5.4	98.2	0.6
2017 Trial		12,576	244.5	15,210	51.4	14.8	240	0.0	89.5	80.1		6.8	102.1	--	--	--	--	1.4
Average		11,822	271.4	14,296	44.0	16.4	220	0.0	89.3	66.7								

Mean of Fully Approved (18-19)		11,554	278.4	13,892	42.1	16.7	216	0	89.7
97% of Fully Approved (18-19)		11,207	270.1	13,475	40.8	16.2	210	0	87.0

2019 Mean	5.9	100	21.8	100	4.8	100	1.7
2018 Mean	6.5	100	30.3	100	5.5	100	1.6
2017 Mean	6.7	100	--	--	--	--	1.9

Pr>F

2019 Trial	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	n/a	0.036	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
2018 Trial	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	n/a	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
2017 Trial	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	n/a	n/a	<0.0001		0.0001	<0.0001	<0.0001	<0.0001	<0.0001

CV

2019 Trial	8.3	1.9	8.2	8.5	1.4	3.4		0.7	12.0		4.2	44.2	25.0	n/a
2018 Trial	6.1	2.6	5.9	5.8	1.8	5.4		0.8	16.7		4.0	37.8	12.5	n/a
2017 Trial	6.2	4.1	5.6	4.9	3.1			1.0			6.0	62.7	n/a	n/a

LSD (0.05)

2019 Trial	922.3	6.0	1014.2	3.0	0.3	7.1		0.6	6.6		0.3	7.8	n/a	0.6
2018 Trial	633.5	7.1	743.3	2.1	0.3	10.6		0.7	7.6		0.4	n/a	0.6	0.6
2017 Trial	689.3	9.9	765.8	2.3	0.5			0.8			0.6	n/a	n/a	0.3

Cooperator

Imperial Ag	<u>Planted</u>	<u>Harvested</u>
Paul Cameron	10/31/19	6/5/19
Von Medearis	9/21/17	4/17/18
	9/24/16	4/07/17

Plot Size

Plot Size: 2 rows. 30" rows.
Plot Size: 2 rows. 30" rows.
Plot Size: 2 rows. 30" rows.

Notes:

Experimental Trial Design : 4X5 lattice
Experimental Trial Design : 5X5 lattice
Experimental Trial Design : 5X5 lattice

* Emergence counts taken prior to thinning and converted to a percent.

** Final Stand counts converted to beets per 100 foot of row. Final stand counts taken after thinning.

*** 2018 Powdery Mildew Ratings taken from 2017-2018 Mamer Warva Early Harvest Official Trial Location. Ratings are on 1-10 scale. 1=clean, 10= completely covered in disease.
Ratings taken by Israel Santiago and Mark Bloomquist.