

**Imperial Valley Early Harvest Official Variety Trials
3 Year Data (2016-2018)**

Variety	Marketing Approval	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+	% of Mkt. Avg.	Powdery Mildew	% of Mkt. Avg.	Rhizomania Root Rating
BTS 5678	Full Approval											--- M = 150 ---		--M = 300		-- M = 100		
2018 Trial		11,230	295.0	13,466	38.2	17.7	207	0.0	89.6	43.9		--	--	--	--	5.2	97.7	--
2017 Trial		12,543	258.4	15,017	48.3	15.5	233	0.0	90.0	72.0		6.6	99.8	--	--	--	--	2.1
2016 Trial		10,874	304.0	12,603	35.8	17.6	231	0.0	92.0	--		--	--	--	--	--	--	--
Average		11,549	285.8	13,695	40.8	16.9	224	0.0	90.5	--		--	--	--	--	--	--	--
BTS 5460	Full Approval																	
2018 Trial		11,246	285.2	13,616	39.4	17.3	204	0.0	89.0	46.4		--	--	--	--	4.8	90.1	--
2017 Trial		11,760	242.3	14,434	48.4	14.9	235	0.0	88.6	64.7		6.4	96.8	--	--	--	--	1.8
2016 Trial		10,712	299.2	12,546	35.8	17.5	234	0.0	91.3	--		4.9	105.8	64.6	176.7	4.8	132.4	1.9
Average		11,239	275.6	13,532	41.2	16.6	224	0.0	89.6	--								
SV501TT	Full Approval																	
2018 Trial		11,438	279.3	13,896	40.7	17.0	192	0.0	88.9	35.9		--	--	--	--	5.1	95.8	--
2017 Trial		12,357	250.7	14,915	49.3	15.1	241	0.0	89.7	76.9		6.7	101.3	--	--	--	--	1.9
2016 Trial		11,526	293.5	13,527	39.3	17.2	236	0.0	91.2	--		3.8	82.0	24.0	65.8	2.7	74.5	2.1
Average		11,774	274.5	14,113	43.1	16.4	223	0.0	89.9	--		--	--	--	--	--	--	--
BTS 5499	Full Approval																	
2018 Trial		10,318	284.0	12,495	36.5	17.2	212	0.0	89.1	59.5		--	--	--	--	4.1	77.0	--
2017 Trial		11,337	244.0	13,784	46.4	14.9	240	0.0	89.2	84.3		6.3	95.3	--	--	--	--	2.2
2016 Trial		10,081	291.5	11,937	34.6	17.3	234	0.0	90.6	--		3.9	84.2	31.9	87.2	3.5	96.6	2.1
Average		10,579	273.2	12,738	39.2	16.5	229	0.0	89.6	--								
BTS 5600	Full Approval																	
2018 Trial		10,959	264.4	13,511	41.6	16.3	211	0.0	88.1	54.1		--	--	--	--	5.4	101.4	--
2017 Trial		12,576	244.5	15,210	51.4	14.8	240	0.0	89.5	80.1		6.8	102.8	--	--	--	--	1.4
2016 Trial		11,403	289.3	13,457	39.4	17.1	230	0.0	90.9	--		--	--	--	--	--	--	--
Average		11,646	266.1	14,059	44.1	16.1	227	0.0	89.5	--		--	--	--	--	--	--	--
SV 602TT	Full Approval																	
2018 Trial		12,201	275.6	14,692	44.1	16.6	198	0.0	89.4	37.1		--	--	--	--	5.7	107.0	--
2017 Trial		13,215	240.4	15,957	54.9	14.6	237	0.0	89.9	70.7		7.0	105.9	--	--	--	--	2.0
2016 Trial		12,106	282.3	14,254	42.9	16.6	227	0.0	91.1	--		--	--	--	--	--	--	--
Average		12,507	266.1	14,968	47.3	15.9	221	0.0	90.1	--		--	--	--	--	--	--	--

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BTS 566N	Full Approval																	
2018 Trial		9,972	273.1	12,286	36.7	16.8	208	0.0	88.0	46.7		--	--	--	--	4.9	92.0	--
2017 Trial		10,315	240.4	12,711	43.0	14.8	239	0.0	88.6	76.2		6.2	93.8	--	--	--	--	2.1
2016 Trial		9,500	281.6	11,414	33.8	16.9	238	0.0	89.7	--		--	--	--	--	--	--	--
Average		9,929	265.0	12,137	37.8	16.2	228	0.0	88.8	--		--	--	--	--	--	--	--
SV401	Full Approval																	
2018 Trial		11,545	273.8	13,956	42.3	16.6	206	0.0	89.4	57.4		--	--	--	--	7.4	139.0	--
2017 Trial		11,889	239.3	14,488	50.2	14.5	239	0.0	89.6	86.8		6.9	104.3	--	--	--	--	2.1
2016 Trial		11,536	276.8	13,705	41.7	16.4	232	0.0	90.5	--		6.2	133.8	25.7	70.2	3.5	96.6	2.0
Average		11,656	263.3	14,050	44.7	15.8	226	0.0	89.8	--		--	--	--	--	--	--	--

GRAND MEAN		11,360	271.2	13,661	42.3	16.3			89.7
97%		11,019	263.1	13,252	41.0	15.8			87.1

2018 Mean	--	--	--	--	5.3	100	--
2017 Mean	6.6	100	--	--	--	--	2.0
2016 Mean	4.6	100	36.5	100	3.6	100	2.0

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2018 Trial	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	n/a	<0.0001	<0.0001	n/a	n/a	<0.0001	
2017 Trial	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	n/a	n/a	<0.0001		0.0001	<0.0001	n/a	<0.0001
2016 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

CV

2018 Trial	6.1	2.6	5.9	5.8	1.8	5.4	0.8	16.7	n/a	n/a	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
2016 Trial	5.6	2.5	5.5	5.9	1.9		0.8		7.0	25.4	33.5	n/a

LSD (0.05)

2018 Trial	633.5	7.1	743.3	2.1	0.3	10.6	0.7	7.6	n/a	n/a	0.6	n/a
2017 Trial	689.3	9.9	765.8	2.3	0.5		0.8		0.6	n/a	n/a	0.3
2016 Trial	584.2	7.2	672.1	2.1	0.3		0.7		0.5	n/a	n/a	0.2

Cooperator

	<u>Planted</u>	<u>Harvested</u>	<u>Plot Size</u>
Paul Cameron	9/21/17	4/17/18	Plot Size: 2 rows. 30" rows.
Von Medearis	9/24/16	4/07/17	Plot Size: 2 rows. 30" rows.
Von Medearis	9/25/15	4/12/16	Plot Size: 2 rows. 30" rows.

Notes:

Experimental Trial Design : 5X5 lattice
Experimental Trial Design : 5X5 lattice
Experimental Trial Design : RCBD

* 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.

+ 2017 Erwinia Nursery Data was not used for approval due to high variability in the trial.