

NEW YORK STATE 2014 PROCESSING PEA CULTIVAR TRIAL REPORT

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Additional Comments: Overall rating – 5 best and 1 worst. This rating takes into account plant type, berry type and yield – if plant and pods looked good and yield was average, it still got a higher rating. * Indicates a 4 or better. **Twiney** – tendrils on afila type very tightly intertwined.

****CS-430AF** – early season, a few mottled pods, tasty berries, very high percentage of double pods, plant habit 4.5, sized up fast, overall rating 4.5.

EXP-16505 – early season, good plant vigor, very high percentage of double pods, pods quite hard, plant habit 3, overall rating 3.5.

433 – early season, quite recumbent for an afila, lots of pods, plant habit 2.5, overall rating 3.5.

ES414 – early season, good plant vigor, pods are hard, plant habit 3, very good yield, overall rating 3.5.

Spring – early season standard, good plant vigor, plant habit 2.5, good yield, overall rating 3.5.

***SV0956QH** – early season, looks like it will yield, uniform plants, smaller sieve size index, plant habit 3, overall rating 4.0.

437 – good plant vigor, a three – four sieve, mostly single pods, plant habit 3, overall rating 3.5.

***BSC2014** – foliage did not brown as fast as other early cultivars, sized up fast, very high percentage of double pods, very good yield, plant habit 3.5, overall rating 4.

***Topps** – a few off type plants, plant habit 2.5, sized up fast, overall rating 4.0.

SV0955QH – a few light green berries in the sample, plant habit 2.5, very good yield, overall rating 3.5.

PLSM14 – slightly afila, good plant vigor, plant habit 3, very high percentage of double pods, very good yield, smaller sieve size index, overall rating 3.5.

Portage – lower plant population than most, sized up fast, plant habit 3.5, overall rating 3.0.

***PLS226** – very high percentage of double pods, plant habit 3, smaller sieve size index, sized up fast, overall rating 4.0.

***CS436AF** – berries a bit more glossy than others, very high percentage of double pods, plant habit 3.5, sized up fast, overall rating 4.0.

***490** – long, slender pods, berries a bit more glossy than others, very high percentage of double pods, plant habit 2.5, very good yield, overall rating 4.0

****SV8112QH** – plant habit 4.5, overall rating 5.0.

****Reliance** – plant habit 4.5, smaller sieve size index, very nice plant and pod combination, overall rating 4.5.

****SV0935QF** – lots of pods located high on the plant, very twiney, plant habit 4.5, overall rating 5.0.

CS424F – good sized berries – mostly four and five sieve, plant habit 2.5, very good yield, overall rating 3.5.

***PLS228** – very high percentage of double pods, plant habit 3.5, smaller sieve size index, overall rating 4.0.

***SV0969QH** – a bit smaller sieve, good yield, plant habit 3, overall rating 4.0.

***Tonic** – commercial standard, plant habit 3.5, very good yield, overall rating 4.0.

***CS-437F** – some plants slimy at the base of the plant, nice, long pods, berries a bit more glossy than others, plant habit 2.5, overall rating 4.0.

PLS585 – we missed sampling this one, plant habit 3, very small sieve type, overall rating 4.0.

***PLS167** – good plant stand, petite variety, plant habit 3.5, overall rating 4.0.

Exp-32963 – slight root rot, plant habit 2, overall rating 3.5.

Additional comments continued:

****DLSC7091058** – some pods entwined in tendrils (deformed), a few pods had sunscald, plant habit 5, very good yield, overall rating 4.5.

BSC2030 – afilea that is recumbent, gaps in the stand, very high percentage of double pods, plant habit 3.5, overall rating 3.5.

****EX08540794** – processor asked us to harvest this at a higher tenderometer reading, plant habit 4.5, very good yield, overall rating 5.

***Ricco** – good plant vigor, an afilea that is recumbent, long pods, very high percentage of double pods, should yield, plant habit 3, overall rating 4.0.

***PLS10** – an afilea that is recumbent, long pods, very high percentage of double pods, plant habit 3.5, overall rating 4.0.

****SV7688QF** – good yield, plant habit 5, a nice plant and pod combination, overall rating 4.5.

Bolero – some plants had no pods, base of the plants were slimy, plant habit 2.5, very good yield, overall rating 3.5.

***SV1036QF** – good plant vigor, plant habit 4, very good yield, overall rating 4.0.

***507** – good plant vigor, lots of pods, plant habit 2.5, smaller sieve size index, overall rating 4.

BSC5051 – huge yield but very indeterminate, late maturing, berries a bit more glossy than others, not impressive, plant habit 2.5, overall rating 3.0.

***552** – very high percentage of double pods, plant habit 4, smaller sieve size index, overall rating 4.0.

***PLS595** – took a little longer to come out of the ground, long pods that should help yield, very high percentage of double pods, plant habit 3.5, overall rating 4.5.

***513** – very high percentage of double pods, nice healthy looking plants, plant habit 3.5, overall rating 4.

Grundy – very high percentage of double pods, a few blonde berries, sized up fast, plant habit 3, overall rating 4.

529 – lower plant population than most, some plants dying, plant habit 3.5, overall rating 3.5

***506** – berries a bit more glossy than others, plant habit 4, overall rating 4.

***PLS685** – very high percentage of double pods, plant habit 3.5, very good yield, overall rating 4.

BSC3661 – plant habit 3.5, very good yield, overall rating 3.5.

***Hudson** – slightly afilea, plant habit 3, overall rating 4.

BSC4241A – lower plant population than most, very high percentage of double pods, plant habit 2.5, overall rating 3.5.

SV0893QF – quite indeterminate, lower plant population than most, not impressive, plant habit 3, very good yield, overall rating 3.

BSC985 – very late season, a true petite variety, highest pods per plant, hard to shell with mechanical sheller, several plants did not have usable pods, lower plant population than most, indeterminate, plant habit 4.5, overall rating 3.5.

***Mundial** – very late season, recumbent plants with lots of short pods, plant habit 2, overall rating 4.

Prometheus – very late season, lots of pods (most triples), some blonde or cream colored berries, several plants had no pods, still should yield, plant habit 2.5, very good yield, overall rating 4.

We wish to thank the NYS Vegetable Research Council and Association and cooperating seed companies for their financial support of the project.

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Table 1 - Cultivar List and Maturity From Seed Source

Cultivar	HU	Seed Source	Leaf Type	Seed Treatment	Seed Count/lb	Germ. %	Sieve Size	Nodes to Flower
Spring (std)	1155	Seminis	Normal	A, C, Cr	2124	95	3.9	9 to 10
BSC2014	1160	Brotherton	Normal	Maxim/Apron	2408	99		9
433	1170	GV	Afila	Maxim/Apron/ Cruiser	na	na		7 to 8
ES 414 (std)	1195	Seminis	Normal	A, C, Cr	2855	100	3.55	10
SV0956QH	1205	Seminis	Normal	A, C, Cr	2948	95	3.2	10
437	1230	GV	Normal	Maxim/Apron/ Cruiser	2456	96		
EXP-16505	1250	Crites	Normal	Maxim, Apron XL	2223	98		
CS-430AF	1260	Crites	Afila	Maxim, Apron XL	2041	94		
490	1280	GV	Normal	Maxim/Apron/ Cruiser	2300	98		
SV0955QH	1290	Seminis	Normal	A, C, Cr	2732	97		
Topps	1300	PLS	Normal	Maxim/Apron/ Cruiser	2475	95	3.5	na
BSC5051	1300	Brotherton	Normal	Maxim/Apron	2224	91		10
Tonic (std)	1300	Brotherton	Normal	Maxim/Apron	2067	91	3.5	10
Portage (std)	1325	Crites	Afila	Maxim, Apron XL	2268	97	3.78	10
SV0935QF	1340	Seminis	DetA	A, C, Cr	2513	95		
PLS226	1340	PLS	Afila	Maxim/Apron/ Cruiser	2103	95	3.5	10
PLSM-14	1350	PLS	Normal	Maxim/Apron/ Cruiser	2564	98	3.7	9
SV 0969QH	1360	Seminis	Normal	A, C, Cr	2877	95		
PLS 228	1380	PLS	Afila	Maxim/Apron/ Cruiser	2193	95	3.5	10
CS436AF	1390	Crites	Afila	Maxim, Apron XL	2191	96		
CS-424F	1405	Crites	Normal	Maxim, Apron XL	2214	97	4	
Reliance	1420	Seminis	DetA	A, C, Cr	2953	90	3.2	
SV8112QH	1430	Seminis	DetA	A, C, Cr	2621	94		
PLS 167	1440	PLS	Afila	Maxim/Apron/ Cruiser	3105	95	3.1	10
SV1058QH	1450	Seminis	DetA	A, C, Cr	2299	95		
CS-437F	1460	Crites	Normal	Maxim, Apron XL	2457	97		
8540794 DA 1470	1470	Seminis	DetA	A, C, Cr	3318	95		
SV7688QF	1480	Seminis	DetA	A, C, Cr	2659	95		
Exp-32963	1490	Crites	Normal	Maxim, Apron XL	2495	97		
Bolero (std)	1510	Pureline	Normal	Maxim/Apron/ Cruiser	2174	95	3.75	14
SV 0893QF	1525	Seminis	Normal	A, C, Cr	2377	95		
SV1036QF	1525	Seminis	Afila	A, C, Cr	2109	96	3.8	
Ricco	1530	GV	Afila	Maxim/Apron/ Cruiser	na	na	3.7	16
BSC3661	1530	Brotherton	Normal	Maxim/Apron	2285	97		15
BSC2030	1532	Brotherton	Normal	Maxim/Apron	2272	97		10
Hudson	1540	Crites	Normal	Maxim, Apron XL	2489	94		
PLS 595	1540	PLS	Afila	Maxim/Apron/ Cruiser	2456	97		13
PLS 10	1540	PLS	Afila	Maxim/Apron/ Cruiser	2267	95	3.6	11
513	1550	GV	Normal	Maxim/Apron/ Cruiser	2475	95		
552	1560	GV	Afila	Maxim/Apron/ Cruiser	3226	98		
529	1560	GV	Afila	Maxim/Apron/ Cruiser	2421	91		
506	1560	GV	Afila	Maxim/Apron/ Cruiser	2568	93		
BSC4241A	1570	Brotherton	Normal	Maxim/Apron	2268	94		15
BSC985	1570	Brotherton	Afila	Maxim/Apron	4826	98		15
507	1580	GV	Afila	Maxim/Apron/ Cruiser	na	na		
PLS 585	1580	PLS	Afila	Maxim/Apron/ Cruiser	3195		3.1	10
PLS 685	1600	PLS	Afila	Maxim/Apron/ Cruiser	2242			
Grundy	1600	GV	Normal	Maxim/Apron/ Cruiser	2150	97	3.8	16
Mundial	1600	Seminis	Normal	A, C, Cr	3534	100	3.25	15-16
Prometheus	1650	Seminis	Normal	A, C, Cr	3017	95	3.4	16

Table 2. Maturity Sieve Distribution and Yield - (in order of maturity)

Cultivar	Days to harv	Heat Units to Harv.	Adjusted Heat U based on 100 TU	Sieve 1 %	Sieve 2 %	Sieve 3 %	Sieve 4 %	Sieve 5%	Sieve 6%	Sieve size index	Ten.	#/A	Adjusted Yield based on 100 TU	Plants per A (1000)	Plts. per foot
CS-430AF	52	1205	1174	3	4	13	35	40	5	4.2	115	8193	7764	554	6.4
	54	1271	1162	0	2	9	29	52	8	4.6	155	8374	6844	396	4.5
EXP-16505	52	1205	1193	4	6	9	18	48	15	4.5	106	7216	7048	465	5.3
	54	1271	1188	1	2	12	31	47	6	4.4	142	7162	5995	388	4.5
433	54	1271	1194	0	1	7	19	51	21	4.8	138	9394	8321	540	6.2
	55	1309	1198	1	2	6	24	49	19	4.7	155	9587	8037	382	4.4
ES 414 (std)	54	1271	1195	0	3	15	39	38	3	4.2	138	10084	9020	548	6.3
Spring (std)	51	1177	1197	2	3	8	17	48	22	4.7	90	8066	8346	498	5.7
	52	1205	1202	2	5	9	19	42	22	4.6	102	8207	8161	412	4.7
	54	1271	1218	1	1	4	19	39	35	5.0	126	8854	8116	475	5.4
SV0956QH	52	1205	1227	13	15	25	31	15	1	3.4	89	7659	7967	508	5.8
	54	1271	1220	4	8	21	36	29	3	3.9	125	9325	8616	430	4.9
437	55	1309	1270	4	4	15	31	36	10	4.3	119	7699	7158	465	5.3
BSC2014	55	1309	1283	5	12	28	38	15	1	3.5	113	9950	9586	525	6.0
	56	1348	1295	3	9	26	42	19	1	3.7	127	10012	9265	477	5.5
Topps	55	1309	1287	3	5	13	36	34	9	4.2	111	8643	8335	535	6.1
SV0955QH	54	1271	1286	5	9	26	37	18	4	3.7	92	7732	7947	529	6.1
	55	1309	1323	8	9	20	28	27	7	3.9	93	8799	8995	379	4.4
	56	1348	1331	5	7	19	28	28	13	4.1	109	9380	9137	390	4.5
	57	1387	1326	2	5	17	32	31	13	4.2	130	11623	10774	583	6.7
PLSM-14	55	1309	1318	2	9	28	45	15	1	3.6	95	8001	8131	507	5.8
	56	1348	1333	3	7	22	40	27	1	3.9	107	9213	9008	475	5.5
	57	1387	1327	1	3	17	40	36	4	4.2	130	9761	8921	448	5.1
Portage (std)	56	1348	1339	5	6	17	34	35	3	4.0	105	7725	7594	374	4.3
	57	1387	1345	4	7	19	45	24	2	3.9	121	9246	8658	412	4.7
PLS226	56	1348	1341	10	13	27	36	11	3	3.3	104	6980	6878	539	6.2
	57	1387	1344	3	8	31	47	11	1	3.6	121	8727	8129	469	5.4
CS436AF	57	1387	1350	5	9	30	42	13	1	3.6	119	9376	8854	550	6.3
490	57	1387	1352	1	3	10	34	45	7	4.4	117	10912	10426	449	5.2
SV8112QH	58	1424	1361	3	5	20	43	27	2	4.0	132	9442	8555	553	6.3
	59	1451	1362	3	4	17	33	41	2	4.1	145	9173	7922	457	5.2
Reliance	57	1387	1365	5	11	33	39	12	1	3.5	111	8647	8339	475	5.5

Table 2 Continued:

Cultivar	Days to harv	Heat Units to Harv.	Adjusted Heat U based on 100 TU	Sieve 1 %	Sieve 2 %	Sieve 3 %	Sieve 4 %	Sieve 5%	Sieve 6%	Sieve size index	Ten.	#/A	Adjusted Yield based on 100 TU	Plants per A (1000)	Plts. per foot
SV0935QF	57	1387	1370	3	10	27	40	19	1	3.7	109	7964	7722	504	5.8
	58	1424	1375	2	6	21	44	26	2	3.9	124	7873	7192	407	4.7
	59	1451	1370	2	3	21	44	27	2	4.0	140	9427	8298	524	6.0
CS-424F	58	1424	1389	3	3	9	33	47	5	4.4	117	10984	10499	507	5.8
	59	1451	1397	2	4	13	35	39	6	4.3	127	10777	10021	451	5.2
PLS 228	57	1387	1372	6	13	33	40	9	0	3.4	107	8280	8075	635	7.3
	58	1424	1397	5	10	28	43	13	1	3.6	113	8712	8339	460	5.3
SV 0969QH	58	1424	1401	6	13	35	39	7	0	3.3	111	7536	7219	485	5.6
	59	1451	1396	6	12	41	36	4	0	3.3	127	8120	7355	417	4.8
Tonic (std)	58	1424	1403	3	5	13	28	37	14	4.4	111	10066	9767	467	5.4
CS-437F	58	1424	1407	6	9	26	41	17	2	3.7	108	7325	7092	426	4.9
	59	1451	1404	4	6	21	43	24	3	3.9	123	7314	6661	433	5.0
PLS 585	61	1502	1412	6	13	48	31	2	0	3.1	145	8948	7688	449	5.2
PLS 167	58	1424	1429	13	20	40	22	3	0	2.9	97	8040	8115	589	6.8
	59	1451	1418	7	18	40	32	3	0	3.1	117	8407	7940	531	6.1
Exp-32963	59	1451	1424	4	5	17	35	32	8	4.1	114	9365	8983	509	5.8
	61	1502	1430	3	5	17	39	31	6	4.1	136	9075	8067	381	4.4
SV1058QH	59	1451	1426	2	6	30	39	20	3	3.8	113	9482	9127	599	6.9
	60	1474	1407	2	4	26	41	23	3	3.9	133	8843	7909	431	4.9
BSC2030	59	1451	1426	5	9	28	35	21	2	3.7	112	6839	6494	438	5.0
	61	1502	1437	3	5	25	48	17	3	3.8	133	8004	7089	352	4.0
8540794 DA 1470	59	1451	1413	3	8	38	39	11	1	3.5	119	9721	9189	594	6.8
	61	1502	1403	2	3	24	52	18	1	3.9	150	10821	9430	438	5.0
Ricco	60	1474	1441	4	4	17	38	32	6	4.1	116	8287	7830	485	5.6
	61	1502	1419	2	2	16	46	28	6	4.2	142	9903	8736	495	5.7
PLS 10	59	1451	1444	4	10	28	36	18	2	3.6	104	7877	7774	631	7.2
	60	1474	1453	5	8	24	42	20	2	3.7	110	7772	7482	485	5.6
	61	1502	1445	4	7	25	42	19	2	3.8	129	9641	8839	548	6.3
SV7688QF	61	1502	1463	3	9	39	35	11	2	3.5	119	9525	8984	581	6.7
	62	1534	1451	2	2	24	38	26	8	4.1	142	8803	7636	429	4.9
Bolero (std)	60	1474	1469	10	10	22	35	19	3	3.6	103	7932	7857	534	6.1
	61	1502	1464	4	6	22	42	23	2	3.9	119	9576	9044	534	6.1

Table 2 Continued:

Cultivar	Days to harv	Heat Units to Harv.	Adjusted Heat U based on 100 TU	Sieve 1 %	Sieve 2 %	Sieve 3 %	Sieve 4 %	Sieve 5%	Sieve 6%	Sieve size index	Ten.	#/A	Adjusted Yield based on 100 TU	Plants per A (1000)	Plts. per foot
SV1036QF	60	1474	1470	5	7	19	41	25	3	3.9	102	8955	8899	485	5.6
	61	1502	1461	2	4	15	44	30	4	4.1	121	10015	9437	477	5.5
507	61	1502	1481	10	13	26	29	18	4	3.5	111	6912	6613	519	6.0
	62	1534	1506	10	10	28	34	15	4	3.5	114	7293	6901	431	5.0
BSC5051	63	1565	1484	2	3	14	34	41	6	4.3	141	12774	11635	514	5.9
552	60	1474	1467	9	18	42	25	4	1	3.1	104	8178	8076	538	6.2
	61	1502	1484	6	14	45	29	5	0	3.2	109	8846	8594	490	5.6
PLS 595	60	1474	1487	6	9	29	37	16	3	3.6	93	7427	7614	532	6.1
	61	1502	1502	6	10	29	35	17	3	3.6	100	8643	8643	421	4.8
	62	1534	1496	2	3	20	50	23	3	4.0	119	9467	8935	428	4.9
513	62	1534	1499	5	6	25	44	19	2	3.7	118	7982	7488	435	5.0
	63	1565	1504	3	6	21	45	24	2	3.9	131	10320	9461	373	4.3
Grundy	61	1502	1469	5	8	25	39	19	3	3.8	116	8563	8106	527	6.0
	62	1534	1505	2	5	20	45	23	4	4.0	115	7964	7554	361	4.1
529	62	1534	1506	7	8	21	42	20	2	3.8	114	8099	7707	402	4.6
	63	1565	1512	5	6	18	42	27	3	4.0	126	7278	6541	358	4.1
506	61	1502	1492	8	12	34	36	10	1	3.4	105	7648	7508	436	5.0
	62	1534	1509	3	7	22	46	20	1	3.8	113	6839	6484	348	4.0
PLS 685	62	1534	1511	3	8	24	46	17	2	3.7	111	9743	9426	576	6.6
BSC3661	62	1534	1531	7	10	30	40	12	1	3.5	101	7605	7568	443	5.1
	63	1565	1530	2	8	24	42	22	1	3.8	117	10004	9519	359	4.1
Hudson	62	1534	1589	6	10	32	41	10	1	3.5	90	8396	9171	490	5.6
	63	1565	1536	5	7	23	41	21	3	3.8	114	9126	8724	500	5.7
BSC4241A	63	1565	1543	6	6	16	31	31	10	4.1	111	6966	6658	376	4.3
	64	1598	1557	6	5	14	29	35	11	4.2	121	7623	7044	327	3.8
SV 0893QF	64	1598	1561	2	4	18	42	27	6	4.1	118	9979	9466	402	4.6
	65	1622	1569	2	4	14	38	36	5	4.2	126	11442	10704	410	4.7
BSC985	66	1645	1632	34	40	25	2	0	0	2.0	107	5158	4972	299	3.4
Mundial	66	1645	1659	5	9	28	47	11	0	3.5	93	8135	8331	433	5.0
	68	1706	1673	2	5	23	55	15	0	3.8	116	8636	8178	329	3.8
Prometheus	66	1645	1661	2	5	24	57	12	0	3.7	92	8618	8842	436	5.0
	68	1706	1679	0	4	16	58	21	0	4.0	114	10302	9919	372	4.3