

2014 WESTERN REGIONAL CHIPPING POTATO TRIAL REPORT

State Agricultural Experiment Stations and the
USDA-ARS

California
Colorado
Idaho
Oregon
Texas



2014 WESTERN REGIONAL CHIPPING POTATO VARIETY TRIAL REPORT

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TABLE 1: 2014 Western Regional Chipping Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

Locations	Cooperators	Trial	Irrigation	Fertilizer N-P-K-S(lb/A)	Spacing	Planting Date	Vine Kill Date	Harvest Date	Days to Vine Kill	Days to Harvest	Herbicides	Insecticides	Fungicides
Tulelake California (CA)	R. Wilson D. Culp	Late	Sprink.	204-40-110-34S	10" x 36"	19-May	5-Sep Reglone	1-Oct	109	135	Matrix Prowl H2O Outlook	Admire	Maxim 4FS Quadris Omega F500 Bravo Weatherstick
San Luis Valley Colorado (CO)	D. Holm C. Gray	Late	Pivot	120-60-40-25-2.5Zn	12" x 34"	16-May	4-Sep Reglone	29-Sep	111	136	Outlook Eptam 7E Matrix SG	Leverage 360 Belay Movento	Quadris Luna Tranquility
Aberdeen Idaho (ID)	J. Stark R. Novy J. Whitworth P. Bain	Late	Sprink.	255-160-60	10.6" x 36"	2-May	2-Sep Mechanical	25-Sep	123	146	Eptam 7E TriCor 4F Matrix	Admire Pro	Echo Manzate flowable Gavel
Hermiston Oregon (HRM)	V. Sathuvalli	Early	Pivot	350-200-200-30-1Zn-1B	9.25" x 34"	25-Mar	21-Jul Reglone	12-Aug	118	140	Vapam Matrix Dual Magnum	Admire Coragen Agr-Mek Coragen	Quadris Ridomil
Klamath Falls Oregon (KF)	B. Charlton N. Baley	Late	Sprink.	180-80-200-215	9.25" x 36"	15-May	25-Aug Reglone	2-Oct	102	140	Prowl Matrix	Vydate C-LV Admire	Ridomil Vertisan Revus Top
Dalhart Texas (DTX)	J. C. Miller, Jr. J. Koym D. Schuering	Early	Pivot	115-50-0	9" x 28"	14-May	9-Sep Mechanical	29-Sep	118	138	Select Max Chateau Brawl Acumen Tricor	Beleaf Fulfill Movento Reaper	Quadris Penncozeb, Bravo Revus Top Scala SC Luna Tranquility Echo
Springlake Texas (STX)	J. C. Miller, Jr. J. Koym D. Schuering	Early	Pivot	155-34-34	9" x 36"	4-Apr	30-Jul Mechanical	12-Aug	125	130	Sencor Roundup Dual Treflan Choice	Movento Agrimek Venom Tracer Blackhawk Transform Cruiser Maxx	Scala Bravo Nucop

TABLE 2: 2014 Western Regional Chipping Potato Variety Trial - CLONE, PARENTS, FLOWER COLOR, ENTERED BY, YEARS IN TRIAL, SEED SOURCE, STAND, TUBER AND VINE CHARACTERISTICS, AND STEMS PER PLANT

No	Clone	Parents	Flower Color	Entered by	Year in Trial	Seed Source	Mean Stand %	Tuber Shape	Skin	Vine Size	Maturity	Stems/Plant
1	ATLANTIC	WAUSEON B5141-6	Red-purple	Check	Ck	OR/CO	97	2.0 Round	1.9 White	3.0 Medium	2.9 Med Early	2.6
2	CHIPETA	WNC612-13 WISCHIP	Red	Check	Ck	OR/CO	98	2.4 Oval	1.6 White	4.3 Large	4.0 Med-late	2.2
3	A02138-2	A96563-8 Premier Russet	White	ID	1	OR	99	3.1 Oblong	2.4 Buff	2.8 Medium	2.7 Med Early	3.3
4	AC00206-2W	AC87340-2 Dakota Pearl	White	CO	2	CO	97	1.5 Round	1.4 White	2.4 Small	2.9 Med Early	2.2
5	AC03452-2W	A98423-1C COA96141-2C	White	CO	2	CO	99	1.6 Round	1.1 White	3.4 Med-large	3.6 Med-late	3.2
6	AC05153-1W	A91814-5 Chipeta	White	CO	1	CO	98	1.7 Round	1.3 White	2.3 Small	2.0 Early	3.7
7	CO03243-3W	BC0894-2W A91790-13	Light Purple	CO	3	CO	99	1.5 Round	1.5 White	3.5 Med-large	3.7 Med-late	2.6

1 Numerical values are means of all trial locations. Stand % for Klamath Falls was taken at 30 days.

2 1.0-2.0=Round, 2.1-2.5=Oval, 2.6-3.5=Oblong, 3.6-4.0=Oblong-Long, 4.1-5.0=Long

3 1.0-2.0=White, 2.1-3.0=Light Russet, 3.1-4.0=Medium Russet, 4.1-4.5=Medium Heavy Russet, 4.6-5.0 Heavy Russet

4 1.0-2.5=Small, 2.6-3.0=Medium, 3.1-4.0=Medium-Large, 4.1-4.5=Large, 4.6-5.0=Very Large

5 1.0-2.5=Early, 2.6-3.0=Medium-Early, 3.1-3.5=Medium, 3.6-4.0= Medium-Late, 4.1-4.5=Late, 4.6-5.0=Very Late

TABLE 3: 2014 Western Regional Chipping Potato Variety Trial - TOTAL YIELD - YIELD OF U.S. #1'S (CWT/A & %)

No. Clone	Total Yield (CWT/A)							Entry Mean	Rank	U.S. No. 1's (CWT/A) / %							Entry Mean	Rank
	CA	CO	ID	HRM	KF	DTX	STX			CA	CO	ID	HRM	KF	DTX	STX		
1 ATLANTIC	457	455	322	499	534	398	203	410	4	374	409	238	418	391	319	126	325	4
2 CHIPETA	397	579	400	583	505	268	161	413	3	329	489	339	536	290	219	136	334	3
3 A02138-2	422	445	379	533	461	485	126	407	5	347	373	291	448	384	346	77	324	5
4 AC00206-2W	436	338	298	547	435	392	234	383	6	353	266	233	431	359	298	176	302	6
5 AC03452-2W	512	505	468	701	415	382	207	456	2	434	428	346	590	316	293	115	360	2
6 AC05153-1W	375	376	274	385	623	308	241	369	7	281	277	166	243	498	252	179	271	7
7 CO03243-3W	501	470	468	693		503	202	473	1	424	408	376	606		401	159	396	1
Location Mean	443	453	373	563	496	391	196			363	379	284	467	373	304	138		
										82	83	75	82	75	78	70		

TABLE 4: 2014 Western Regional Chipping Potato Variety Trial - YIELD OF U.S. #1'S >10 OZ. & YIELD <4OZ. (CWT/A & %)

No. Clone	U.S. No. 1's > 10 OZ (CWT/A) / %								Yield < 4 OZ (CWT/A) / %									
	CA	CO	ID	HRM	KF	DTX	STX	Entry Mean	Rank	CA	CO	ID	HRM	KF	DTX	STX	Entry Mean	Rank
1 ATLANTIC	135	112	78	127	164	128	2	106	2	50	33	57	67	47	48	77	54	6
	29	25	24	26	31	32	1	24	2	11	7	18	13	9	12	38	15	5
2 CHIPETA	109	163	183	316	243	112	1	161	1	34	45	26	31	22	20	21	28	7
	28	28	46	54	48	42	1	35	1	8	8	7	5	4	8	13	8	7
3 A02138-2	136	53	43	120	79	221	2	93	4	57	69	71	64	53	57	49	60	4
	32	12	11	22	17	46	2	20	3	14	15	19	12	11	12	39	17	4
4 AC00206-2W	57	25	49	60	45	85	12	48	7	68	70	45	95	58	94	58	70	3
	13	7	17	11	10	22	5	12	7	16	21	15	17	13	24	25	19	2
5 AC03452-2W	71	52	91	83	65	97	0	66	6	49	66	67	98	74	66	86	72	2
	14	10	19	12	16	25	0	14	6	10	13	14	14	18	17	42	18	3
6 AC05153-1W	61	13	15	10	260	103	4	66	5	79	94	98	103	33	56	56	74	1
	16	3	5	3	42	33	2	15	5	21	25	36	27	5	18	23	22	1
7 CO03243-3W	131	89	72	74		237	3	101	3	43	52	73	76		47	43	56	5
	26	19	15	11		47	1	20	4	9	11	16	11		9	21	13	6
Location Mean	88	63	66	99	122	123	3			54	61	62	76	48	55	56	59	
	23	15	20	20	27	35	2			13	14	18	14	10	14	29	16	

TABLE 5: 2014 Western Regional Chipping Potato Variety Trial - SPECIFIC GRAVITY

No. Clone	Specific Gravity							Entry Mean	Rank
	CA	CO	ID	HRM	KF	DTX	STX		
1 ATLANTIC	1.100	1.095	1.086	1.075	1.088	1.078	1.083	1.086	1
2 CHIPETA	1.091	1.090	1.076	1.075	1.085	1.061	1.062	1.077	6
3 A02138-2	1.094	1.091	1.084	1.074	1.091	1.080	1.075	1.084	2
4 AC00206-2W	1.089	1.089	1.076	1.072	1.082	1.072	1.074	1.079	5
5 AC03452-2W	1.083	1.081	1.073	1.059	1.079	1.061	1.050	1.069	7
6 AC05153-1W	1.089	1.091	1.079	1.070	1.088	1.078	1.075	1.081	3
7 CO03243-3W	1.089	1.090	1.084	1.073		1.069	1.071	1.079	4
Location Mean	1.091	1.090	1.080	1.071	1.085	1.071	1.070		

TABLE 6: 2014 Western Regional Chipping Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

No. Clone	Average Tuber Size (oz)							Tuber Shape																		
	CA	ID	HRM	KF	DTX	STX	Entry Mean	Length/ Width	Length/ Width	Length/ Width	Length/ Width	Length/ Width	Entry Mean	Width/ Thick	Width/ Thick	Width/ Thick	Width/ Thick	Entry Mean	(1-5, 1 = round, 5 = long)						Entry Mean	
								CA	CO	ID	HRM	KF		CO	HRM	KF	ID		CA	CO	ID	HRM	KF	DTX		STX
1 ATLANTIC	6.7	5.7	6.1	6.1	6.3	3.6	5.7	1.03	1.14	1.04	1.07	1.07	1.07	1.22	1.26	1.24	1.25	1.24	1.8	1.0	2.0	1.5	1.9	3.0	2.5	2.0
2 CHIPETA	7.1	8.4	8.3	8.1	8.5	4.9	7.6	0.97	1.20	1.17	1.15	1.12	1.12	1.21	1.24	1.23	1.33	1.25	2.0	2.0	3.0	2.2	2.3	3.0	2.5	2.4
3 A02138-2	6.4	5.4	6.3	5.5	7.0	3.5	5.7	1.77	1.54	1.50	1.25	1.23	1.46	1.13	1.21	1.14	1.67	1.29	5.0	2.0	3.3	1.8	2.9	4.0	3.0	3.1
4 AC00206-2W	5.6	5.8	5.4	5.1	4.3	4.3	5.1	0.99	1.05	1.01	0.92	0.95	0.98	1.16	1.16	1.17	1.09	1.15	1.4	1.0	1.0	1.0	1.4	2.0	2.5	1.5
5 AC03452-2W	6.2	6.0	5.5	4.6	5.4	2.9	5.1	1.00	1.08	0.99	0.90	0.98	0.99	1.21	1.23	1.28	1.25	1.24	1.6	1.0	1.5	1.0	1.6	2.0	2.5	1.6
6 AC05153-1W	5.2	4.2	4.3	7.5	5.1	3.9	5.0	1.03	1.09	1.04	0.97	1.07	1.04	1.20	1.28	1.16	1.27	1.23	1.5	1.0	1.1	1.0	2.1	3.0	2.5	1.7
7 CO03243-3W	6.8	5.8	5.9		6.6	4.5	5.9	1.06	1.10	1.06	1.01		1.06	1.15	1.16		1.20	1.17	1.6	1.0	1.1	1.0		2.0	2.5	1.5
Location Mean	6.3	5.9	6.0	6.1	6.2	3.9		1.12	1.17	1.12	1.04	1.07		1.18	1.22	1.20	1.30		2.1	1.3	1.9	1.4	2.0	2.7	2.6	

TABLE 7: 2014 Western Regional Chipping Potato Variety Trial - EXTERNAL DEFECTS - GROWTH CRACKS, SECOND GROWTH,
SHATTER BRUISE, SCAB - MEANS OF LOCATIONS

No. Clone	Growth Cracks ¹								Second Growth ¹								Greening ¹								Shatter Bruise ¹					Scab ¹				
	CA ²	CO	ID	HRM	KF	DTX	STX	Entry Mean	CA ²	CO	ID	HRM	KF	DTX	STX	Entry Mean	CA ²	CO	ID	HRM	KF	DTX	STX	Entry Mean	CA	HRM	KF	Mean	ID ³	ID	HRM	DTX	STX	Entry Mean
1 ATLANTIC	4.0	4.0	4.3	4.8	4.4	5.0	5.0	4.5	4.0	5.0	4.3	4.7	5.0	5.0	5.0	4.7	3.0	4.0	5.0	5.0	2.4	5.0	5.0	4.2	3.6	3.7		3.6	3.2	3.3	4.8	5.0	5.0	4.5
2 CHIPETA	4.0	2.0	4.0	4.7	4.0	5.0	5.0	4.1	4.0	5.0	4.5	4.3	5.0	5.0	5.0	4.7	3.0	4.0	4.0	5.0	3.1	5.0	5.0	4.2	3.4	4.2		3.8	3.5	4.0	4.3	5.0	5.0	4.6
3 A02138-2	4.0	5.0	4.8	5.0	4.5	5.0	5.0	4.8	4.0	5.0	4.8	5.0	4.8	5.0	5.0	4.8	4.0	4.0	4.0	5.0	4.4	5.0	5.0	4.5	3.6	4.2		3.9	2.9	5.0	4.3	5.0	5.0	4.8
4 AC00206-2W	4.0	5.0	4.0	4.5	4.8	5.0	5.0	4.6	5.0	5.0	5.0	4.7	4.9	5.0	5.0	4.9	3.0	4.0	3.0	5.0	4.0	5.0	5.0	4.1	3.5	4.3		3.9	3.9	3.3	5.0	5.0	5.0	4.6
5 AC03452-2W	4.0	5.0	4.8	5.0	4.9	5.0	5.0	4.8	4.0	5.0	4.8	4.2	5.0	5.0	5.0	4.7	4.0	4.0	5.0	5.0	4.3	5.0	5.0	4.6	3.3	4.8		4.0	3.1	3.0	4.3	5.0	5.0	4.3
6 AC05153-1W	4.0	4.0	5.0	2.5	4.8	5.0	5.0	4.3	4.0	5.0	5.0	4.7	5.0	5.0	5.0	4.8	3.0	5.0	5.0	5.0	3.9	5.0	5.0	4.6	3.1	3.5		3.3	3.5	3.8	4.5	5.0	5.0	4.6
7 CO03243-3W	3.0	4.0	4.8	4.8		5.0	5.0	4.4	4.0	5.0	4.8	5.0		5.0	5.0	4.8	3.0	4.0	5.0	4.8		5.0	5.0	4.5	3.8	4.5		4.1	4.3	4.8	4.8	5.0	5.0	4.9
Location Mean	3.9	4.1	4.5	4.5	4.5	5.0	5.0		4.1	5.0	4.7	4.6	4.9	5.0	5.0		3.3	4.1	4.4	5.0	3.7	5.0	5.0		3.5	4.2	####		3.5	3.9	4.6	5.0	5.0	

¹ Score 1-5, with 1=severe, 5=none.

²Tulelake, CA percents were converted to a 1-5 score

³Aberdeen, ID shatter scores obtained from bruise evaluation conducted using a shatter chamber [1-5(none)].

TABLE 8: 2014 Western Regional Chipping Potato Variety Trial - INTERNAL DEFECTS - HOLLOW HEART PLUS BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, BLACKSPOT - MEANS OF LOCATIONS

No.	Clone	Percent Hollow Heart plus Brown Center								Percent Internal Brown Spot					Percent Net Necrosis Vascular Discoloration						Blackspot Bruise ¹						
		CA	CO	ID	HRM	KF	DTX	STX	Entry Mean	CA	ID	HRM	DTX	STX	Entry Mean	CA	ID	HRM	KF ²	DTX	STX	Entry Mean	CA ³	CO	HRM ¹	KF	ID ⁴
1	ATLANTIC	3	2	18	7	5	20	0	8	3	0	3	33	25	13	0	0	3	0	0	0	1	4.0	2.8	3.3		3.4
2	CHIPETA	0	1	3	0	3	0	0	1	0	0	7	0	0	1	0	0	3	0	0	0	1	5.0	2.9	4.6		2.4
3	A02138-2	3	0	0	0	0	0	0	0	3	0	3	0	3	2	3	0	17	0	0	0	3	4.0	2.3	4.0		1.5
4	AC00206-2W	0	0	10	0	3	3	8	3	3	0	7	3	3	3	3	0	0	0	0	0	0	5.0	1.5	4.8		4.6
5	AC03452-2W	3	1	8	3	3	8	0	3	0	0	0	3	0	1	3	0	0	0	0	0	0	5.0	1.9	4.8		4.7
6	AC05153-1W	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4.0	1.8	4.0		3.3
7	CO03243-3W	5	0	3	0		8	0	3	0	0	0	0	5	1	5	0	7		0	0	2	5.0	2.1	4.5		2.9
Location Mean		2	1	6	1	3	5	1	3	1	0	3	5	5		2	0	4	0	0	0		4.6	2.2	4.3	#####	3.3

¹ Score 1-5, with 1=severe, 5=none.

² Klamath Falls, OR blackspot bruise scores include shatter, white knot and blackspot

³ Percents were converted to a 1-5 score

⁴ Aberdeen, ID blackspot scores from an abrasive peel test [1-5(none)].

TABLE 9: 2014 Western Regional Chipping Potato Variety Trial - CHIP COLOR

Clone	STX ¹ Field	DTX ¹ Field	HRM ¹		CO ¹				ID ¹			50 ² Mean	
			Field	Chip 40 Recon ^b	Chip 50 Recon ^d	Chip 40 ^a Recon ^b	Chip 50 ^c Recon ^d	Chip 40 ^a Recon ^b	Chip 50 ^c				
1 ATLANTIC	1.0	1.0	2.2	4.7	2.2	4.0	3.5	3.5	3.5	2.8	3.0	2.0	2.7
2 CHIPETA	1.0	2.0	2.3	4.5	2.0	5.0	3.0	3.0	4.0	3.5	2.5	1.6	2.3
3 A02138-2	2.0	1.0	1.7	4.0	2.3	3.0	2.0	3.0	3.0	3.2	2.8	1.3	2.2
4 AC00206-2W	1.0	1.0	1.3	3.3	1.3	1.5	1.0	2.0	2.0	1.0	1.9	1.0	1.5
5 AC03452-2W	1.0	1.0	1.0	3.5	1.7	3.0	1.0	2.0	3.0	1.0	1.5	1.0	1.5
6 AC05153-1W	1.0	1.0	1.7	3.7	1.3	2.5	1.5	2.5	2.0	3.3	2.4	1.0	1.8
7 CO03243-3W	1.0	1.0	1.2	3.5	1.2	3.5	1.0	3.0	3.0	1.9	2.0	1.0	2.0
Location Means	1.1	1.1	1.6	3.9	1.7	3.2	1.9	2.7	2.9	2.4	2.3	1.3	

¹ Color using Snack Food Association Frycolor Standards (1-5(darkest)).

^a Stored 5 weeks (CO) and 6 weeks (ID) at 40°F.

^b Stored 5 weeks (CO) at 40°F plus 3 weeks at 60°F; stored 9 weeks (HRM) at 40°F plus 3 weeks at 50-55°F; stored 6 weeks (ID) at 40°F plus 3 weeks at 65°F.

^c Stored 5 weeks (CO), 10 weeks (HRM) and 10 weeks (ID) at 50°F.

^d Stored 5 weeks (CO) at 50°F plus 3 weeks at 60°F; stored 10 weeks (HRM) at 50°F plus 3 weeks at 50-55°F.

² Mean for CO and ID

Table 10. 2014 Western Regional Chipping Potato Variety Trial - SOLIDS, DEXTROSE, SUCROSE, PROTEIN, VITAMIN C, AND GLYCOALKALOIDS - ABERDEEN, IDAHO

Clone	Solids Oven Dry (%)	Sugars		Protein (%DWB)	Vitamin C (mg/100g FWB)	Glycoalkaloids (mg/100gFWB)
		Dextrose (%FWB)	Sucrose (%FWB)			
1 ATLANTIC	22.3	0.007	0.133	6.20	25.7	5.5
2 CHIPETA	20.0	0.008	0.156	6.33	30.0	3.4
3 A02138-2	21.5	0.004	0.151	5.63	31.6	5.2
4 AC00206-2W	21.3	0.001	0.094	6.35	19.9	3.1
5 AC03452-2W	19.7	0.004	0.091	5.84	23.1	5.0
6 AC05153-1W	20.7	0.004	0.109	6.15	22.4	2.9
7 CO03243-3W	21.8	0.002	0.133	5.23	22.3	2.9
Means	21.1	0.004	0.124	5.96	25.0	4.0

FWB = fresh weight basis DWB = dry weight basis

Desirable levels of Dextrose are $\leq 0.05\%$

Sucrose levels of $\leq 0.15\%$ are excellent, 0.16-2.0% are good, and $\geq 2.1\%$ are fair to poor

Glycoalkaloids: The 2014 Lenape check from Aberdeen was 32.0 mg/100g

TABLE 11: 2014 Western Regional Chipping Potato Variety Trial - DISEASE EVALUATIONS, METRIBUZIN REACTION

No. Clone	Vert. Wilt/ Early Dying		Early Blight				Common Scab		% Net Necrosis/ vascular discoloration ¹		Pecto- bacterium	Fusarium		Metr.
	AB ¹		AB ¹		Tuber Incidence (%)	% Serious Defect	AB ¹		Incidence (%)	% Serious Defect	Soft Rot ¹ AB (0-5)	Dry Rot (0-5)		Reaction AB ²
	(0-9)	AUDPC	(0-9)	AUDPC			Foliar	% Serious Defect				F(sam)	F(sol)	
1 Atlantic	8.7	858	7.7	753	30	0	18	14	26	0	1.6	3.1	2.7	S
2 Chipeta	6.0	333	8.0	560	2	0	21	6	46	3	0.7	3.2	1.6	na
3 A02138-2	8.3	788	7.0	508	11	0	11	6	36	9	1.9	2.5	2.1	R
4 AC00206-2W	7.7	624	8.0	630	57	0	37	22	58	45	0.8	3.5	3.0	R
5 AC03452-2W	na	na	na	na	na	na	62	45	19	0	na	na	na	R
6 AC05153-1W	9.0	1173	9.0	1038	12	0	8	6	27	5	3.0	3.5	1.7	MS
7 CO03243-3W	6.7	299	7.7	504	25	0	36	23	27	0	3.4	2.9	3.3	R
MEANS	7.7	679	7.9	665.5	22.8	0.0	27.6	17.4	34.1	8.9	1.9	3.1	2.4	
LSD @ .05	1.1		0.9		24.0	12.0	17.0	9.0	24.0	17.0	2.5	0.7	0.8	

¹ Evaluations made at Aberdeen, Idaho by Jonathan Whitworth, Hermiston, Oregon by Laurie LaRoux, Tulelake by Darrin Culp; scale as indicated with highest number being most severe. For 0 to 9: 0=no symptoms; 1= trace; 2=1-5%; 3=5-10%; 4=10-20%; 5=25-40%; 6=40-60%; 7=60-70%; 8=75-90%; 9=90-100% dead or dying with typical disease symptoms. Early Blight and Vert. Wilt AUDPC: Area Under the Disease Progress Curve based on foliar readings taken 3 separate days after planting. Common Scab and Net Necrosis serious defects are the number of tubers with a 3 rating (0-5 scale) or higher, divided by the total number of tubers examined. Net necrosis data from PLRV-infected plots.

² For 0 to 5: 0=none, 5=severe as a combination of tuber area and degree impacted by Fusarium and Pectobacterium inoculations. Metribuzin Reaction measured at Aberdeen, ID. VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible

TABLE 12: 2014 Western Regional Chipping Potato Variety Trial - MERIT SCORES (1-5(best))

No.	Clone	Fresh Merit						Process Merit				
		CO	HRM	ID	DTX	STX	Entry Mean	CA	CO	ID	HRM	Entry Mean
1	ATLANTIC	3.0	1.5	2.5	3.6	3.6	2.8	4.1	1.0	3.5	2.5	2.8
2	CHIPETA	4.0	1.0	2.5	3.6	3.4	2.9	3.9	1.0	3.0	3.0	2.7
3	A02138-2	3.0	1.0	3.0	2.0	3.4	2.5	3.8	1.0	3.0	3.5	2.8
4	AC00206-2W	1.0	3.0	3.3	3.8	3.8	3.0	4.3	3.0	3.5	3.5	3.6
5	AC03452-2W	4.0	4.0	2.5	3.4	3.7	3.5	4.1	3.0	4.0	3.5	3.7
6	AC05153-1W	1.0	3.0	3.5	3.8	3.1	2.9	3.8	3.0	4.0	2.5	3.3
7	CO03243-3W	3.0	2.0	3.5	4.0	3.8	3.3	4.3	3.0	5.0	4.0	4.1
Location Mean		2.7	2.2	3.0	3.5	3.5		4.0	2.1	3.7	3.2	

TABLE 13: 2014 Western Regional Chipping Potato Variety Trial - SUMMARY

No.	Clone	Year in Trial	Total Yield ¹ Rank	US#1's Yield ¹ %	Tuber Size (oz)	Specific Gravity	Chip Color ²	Merit Score
1	ATLANTIC	CK	410 4	325 78	5.7	1.086	2.7	2.8
2	CHIPETA	CK	413 3	334 81	7.6	1.077	2.3	2.7
3	A02138-2	1	407 5	324 78	5.7	1.084	2.2	2.8
4	AC00206-2W	2	383 6	302 79	5.1	1.079	1.5	3.6
5	AC03452-2W	2	456 2	360 77	5.1	1.069	1.5	3.7
6	AC05153-1W	1	369 7	271 73	5.0	1.081	1.8	3.3
7	CO03243-3W	3	473 1	396 83	5.9	1.079	2.0	4.1

¹ (CWT/A)

²Mean for CO and ID stored at 50°F

TABLE 14: 2014 Western Regional Chipping Potato Variety Trial - 3 Year Summary of Graduating Entries

Clone	2012					2013					2014				
	Total Yield ¹ Rank	US#1's Yield ¹ %	Specific Gravity	Chip Color ²	Merit Score	Total Yield ¹ Rank	US#1's Yield ¹ %	Specific Gravity	Chip Color ²	Merit Score	Total Yield ¹ Rank	US#1's Yield ¹ %	Specific Gravity	Chip Color ³	Merit Score
ATLANTIC	412 9	327 79	1.090	2.4	3.0	425 4	333 79	1.089	2.1	3.0	410 4	325 78	1.086	2.5	2.8
CHIPETA	520 2	436 82	1.079	2.2	3.8	395 8	321 82	1.079	1.9	2.8	413 3	334 81	1.077	2.3	2.7
CO03243-3W	525 1	455 85	1.082	1.7	3.8	466 2	389 83	1.081	1.5	4.3	473 1	396 83	1.079	1.7	4.1
Trial Mean	452	354 75	1.084	1.8	3.5	414	312 75	1.083	1.5	3.3	416	330 78	1.080	1.9	3.3

3 Year Average (2012-2014)

Clone	Total Yield ¹	US#1's Yield ¹ %	Specific Gravity	Chip Color ³	Merit Score	Noted Weaknesses	Noted Strengths
CHIPETA	443	364 82	1.078	2.1	3.1		
CO03243-3W	488	413 84	1.081	1.6	4.0		
Mean ³	427	332	1.082	1.7	3.4		

¹(CWT/A)

²Mean for CO and ID stored at 50°F

³Mean for CO and ID stored at 50°F

⁴Mean includes all trial entries 2012-2014

Comments and Information from States

Hermiston, Oregon ¹			Sugar Ends ²	Skinning (1-9 none)	Sprouting (1-9 none)	Eye Depth (1-5 shal.)	Shape unif (1-5 uniform)		
1	ATLANTIC	Rot x2, SB x1, Lenticels, rhizoc x1	2.5	7.8	9.0	4.0	4.0		
2	CHIPETA	large x3, FBE x2, netted x1, sticky stolon x1, skinning x4	2.3	6.0	7.7	3.8	3.5		
3	A02138-2	russet skin	2.1	8.0	9.0	3.7	3.2		
4	AC00206-2W	sticky stolon x4, nice x3	1.4	8.7	8.3	3.8	4.5		
5	AC03452-2W	Pty x2, pear, FBE x3, Fresh Market?	1.6	7.7	9.0	3.7	4.0		
6	AC05153-1W	GC x4, SB x2, too many defects	1.6	8.2	9.0	4.0	4.3		
7	CO03243-3W	rot x2, FBE x2, sticky x2, lenticels	1.6	9.0	8.0	3.8	4.5		
Tulelake, California			Tuber/plant	Stem End Bruising ³	Shape Uniformity ⁴	Eye Depth (1-5 shal.)	Vert wilt ⁵ 19-Aug	Vert wilt ⁶ (AUDPC)	
1	ATLANTIC	Stem-end bruising, hard bite, uniform shape, nice	6.5	10	4.1	3.6	5.5	521.3	
2	CHIPETA	Lower yield, low internal defects	5.3	0	3.8	3.6	3.0	189.0	
3	A02138-2	Russet, low internal defects	6.3	5	3.8	4.0	3.6	308.7	
4	AC00206-2W	Low percent total culls, round, shallow eyes	7.4	3	4.3	4.0	4.6	295.0	
5	AC03452-2W	High tuber set, low specific gravity, high yield	7.7	0	4.1	3.4	4.0	230.6	
6	AC05153-1W	Low yield, small average tuber size, high stem-end bruising	7.0	13	4.3	3.4	7.0	884.0	
7	CO03243-3W	Stem-end bruising, uniform, high yield, nice	6.8	15	4.4	3.6	3.0	186.4	
Aberdeen, Idaho Comments ⁷			Sugar Ends ⁸	Tubers/plant	Vert wilt ⁹	Early Blight ⁹			
1	ATLANTIC	deepends, ATS, some knobs	40	5.8	1.00	1.9			
2	CHIPETA	big, rough	31	4.7	2.25	2.0			
3	A02138-2	oblong, MLRusset	26	7.1	1.25	1.8			
4	AC00206-2W	big, ATS, green, more uniform	0	5.2	1.25	1.8			
5	AC03452-2W	deepends, flat	0	7.7	2.63	2.3			
6	AC05153-1W	med round	3	6.5	1.00	1.0			
7	CO03243-3W	big, ATS, buff, nice, uniform	0	8.0	2.00	2.3			

¹SB=shatter bruise, FBE=folded bud end, GC=growth crack

²Scale 1-5, 5=dark

³% of total

⁴1-5, 5=very uniform

⁵Vert wilt rating (0-9 scale)

⁶Area Under Disease Product Curve. Based on readings taken 80, 92, 99 days after planting.

⁷ATS = Attached stolons

⁸Sugar ends in percent

⁹Early Blight and Vert wilt rating 1-5, 1=severe

Comments and Information from States

Klamath Falls, Oregon Comments			Eye depth ¹	tuber/plant	
1	ATLANTIC	Green, russetting, flat, bruised	2	7.4	
2	CHIPETA	Lumpy, oversized, folded bud ends, black dot, shatter bruised	3	5.4	
3	A02138-2	Dented, pears, oblong, impact bruise, misshaped, russting	4	7.2	
4	AC00206-2W	Typy, no skinning, smooth, smaller, minimal bruising	4	7.0	
5	AC03452-2W	Lenticel scaring, dented, smooth, fair, shatter bruised	4	7.8	
6	AC05153-1W	Fusarium dry rot, some black dot, russetting, sticky stolon	4	7.4	
7	CO03243-3W				
Dalhart, Texas Comments ²			Eye depth ¹	tuber/plant	Good Chips
1	ATLANTIC	nice shape, poor internals, buff skin, Chip Notes Drop/Keep, 1GH	4.0	4.1	47%
2	CHIPETA	large tubers, light set, Chip Notes Drop/Keep	4.0	2.0	48%
3	A02138-2	drop, too long, processor, Chip Notes Drop-, 1 HH, 1 Mech	4.0	4.5	34%
4	AC00206-2W	nice size, nice shape, Chip Notes Drop, 9 Brown Center	4.0	5.8	51%
5	AC03452-2W	rough+, Chip Notes Keep	3.5	4.5	74%
6	AC05153-1W	nice shape, nice size, Chip Notes BOT	4.0	4.1	92%
7	CO03243-3W	BOT, very smooth, nice size, Chip Notes Nice, 1GH	4.0	4.9	68%
Springlake, Texas Comments			Eye depth ¹	tuber/plant	Good Chips
1	ATLANTIC	poor internals, buff skin, nice shape, internals??, Chip Notes 1Mech, 10vas	4.0	4.7	73%
2	CHIPETA	large tubers, rough, lenticeles, Chip Notes 8vas	4.0	2.7	45%
3	A02138-2	pointed, too oblong, poor shape, low yield, buff skin, Chip Notes 5 vas, 4 oil center	4.0	3.0	59%
4	AC00206-2W	light set, nice size, very nice shape, smooth, Chip Notes 1WW 1GH, BOT, 8vas	4.0	4.5	86%
5	AC03452-2W	some poor shape, yield+, heavy set, smooth, Chip Notes BOT, 4vas	4.0	5.9	95%
6	AC05153-1W	nice, smooth+, nice shape, Chip Notes 2WW, 1 vas, BOT	4.0	5.1	93%
7	CO03243-3W	nice, buff skin, nice shape, nice size, yield+, Chip Notes 2Mech, 1HH, Nice, 10vas	4.0	3.8	88%

¹1-5, 5=shallow

²GH=Greenheads, BOT=Best Of Trial, HH=Hollow Heart, Vas=Vascular heat necrosis, Dark=high sugars, Mech=Mechanical damage

***Dalhart, Texas reported higher than normal precipitation during the growing season.**

****Springlake, Texas reported above average precipitation May, June, July and August.
There was a freeze May 14th.**