

2022 Kern County Potato Variety Trial

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Kern County 2022 Potato Variety Trial

There are three sub-trials in this project

Southwest regional trial:

This trial continues the association that the California potato industry has had with Colorado State University and Texas A & M University in the formation of the Southwest Region Trials. Advanced varieties are made available by CSU and TAMU each year for testing in regional trials. These varieties include russets, whites, reds, and specialty types. These varieties are replicated four times to minimize variations and to have an accurate measure of their true potential for yield, quality, and resistance.

The Kern County Potato Variety Selection Trial:

The Kern County trial primarily consists of varieties developed by various university and the private breeders from North America. Selections in the replicated trial are replicated four times. Varieties in the replicated trial could be dropped after the first or second year, or go into a final third year of evaluation.

Observational trial:

Potato varieties with little history or data will be first looked at in the observational trial. It will consist of varieties from all breeders to test how they perform under Kern county conditions. Varieties that have proven merit in the observational trial will likely move up to the Kern County replicated trial the following year.

Planting and harvesting



Planted on February 15, 2022.



Harvested on June 6, 2022.

Field day



Field day, June 8, 2022.

Southwest Regional Trial

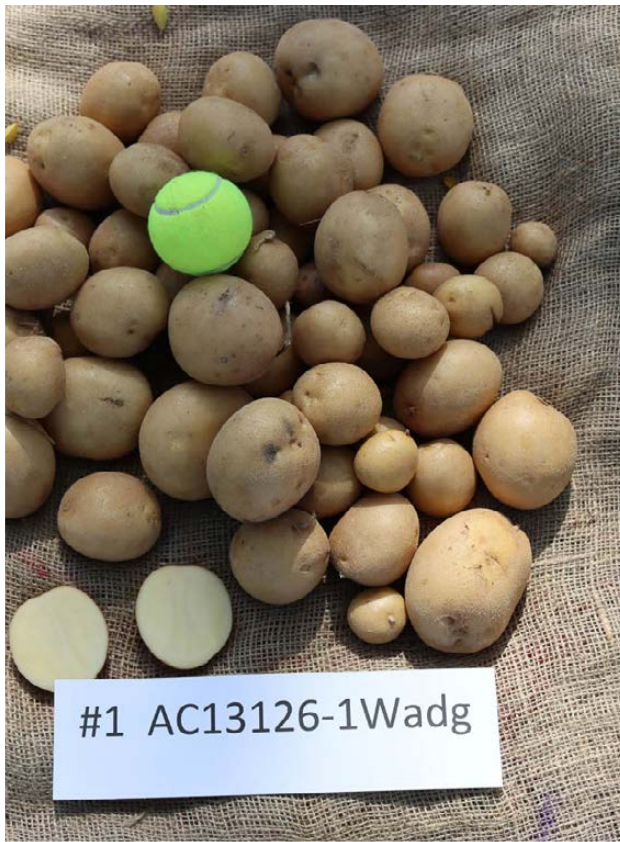
11 Entries

Highest Yield

- CO14226-3W/Y(yellow), 254.6 cwt
- AORTX09037-5W (chipper), 228 cwt

Standards

- Yukon Gold (yellow), 155 cwt
- Red Lasoda (red), 233 cwt
- Atlantic (chipper), 156 cwt
- Snowden (chipper), 185 cwt



1. AC13126-1Wadg 175.80 cwt



2. CO14035-4R 146.71 cwt



3. CO14226-3W/Y 252.38 cwt



4. AORTX09037-5W 225.01 cwt



#5 YUKON GOLD-CHECK

5. Yukon Gold

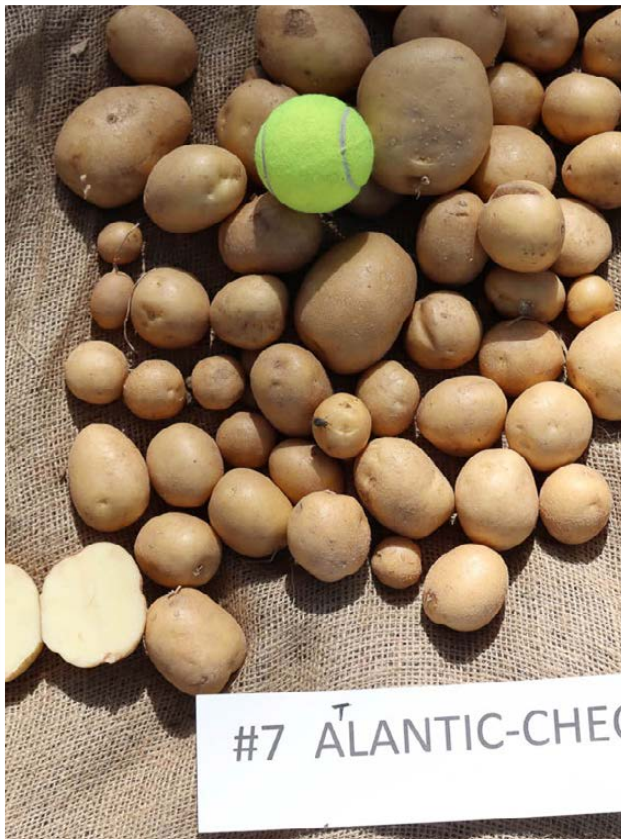
148.96 cwt



#6 CHIEFTAIN-CHECK

6. Chieftain

180.50 cwt



#7 ATLANTIC-CHECK

7. Atlantic

151.40 cwt



#8 RUSSET NORKOTAH-

8. Russet Norkotah

111.49 cwt



9. Red Lasoda

224.81 cwt



10. Snowden

182.75 cwt



11. CO14105-1R

128.54 cwt

Kern County Replicated Trial

13 Entries

Highest Yield

- Christel (white)**, 329.5 cw
- Constance (yellow)**, 328.5 cwt
- Almera (yellow), 323 cwt

Standards

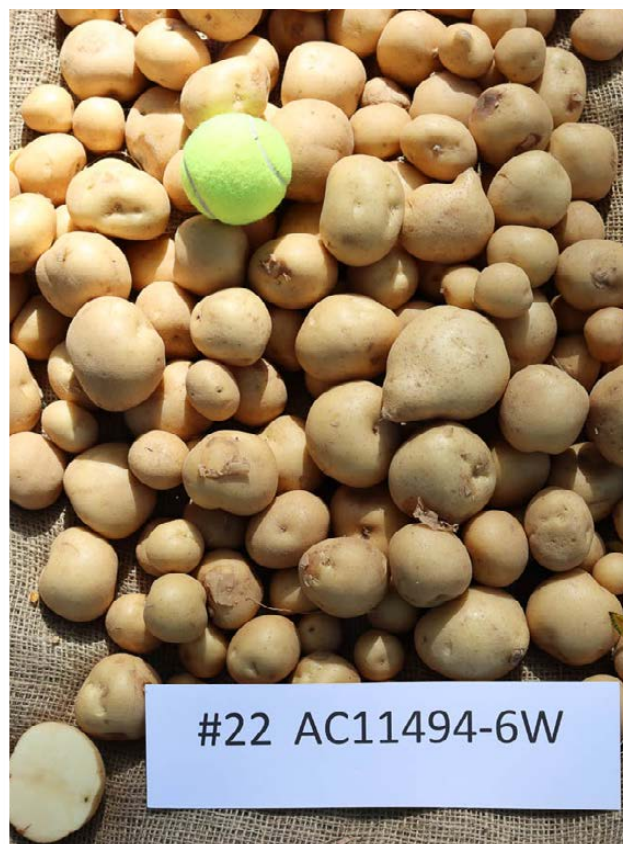
- Yukon Gold (yellow), 155 cwt
- Red Lasoda (red) 233 cwt
- Atlantic (chipper), 156 cwt
- Snowden (chipper), 185 cwt



#21 CO13232-5W

21. CO13232-5W

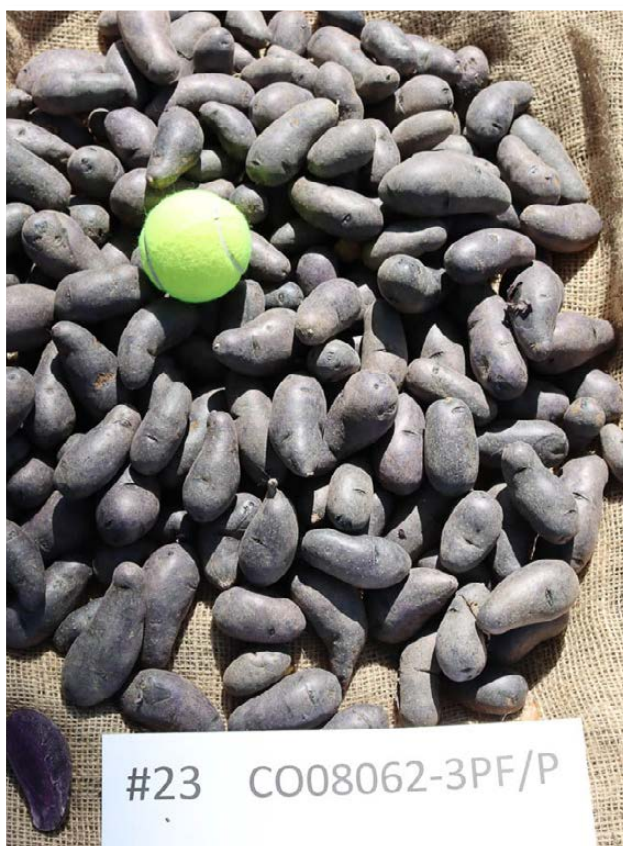
173.97 cwt



#22 AC11494-6W

22. AC11494-6W

222.76 cwt



#23 CO08062-3PF/P

23. CO08062-3PF/P

130.88 cwt



#24 DIVA

24. Diva

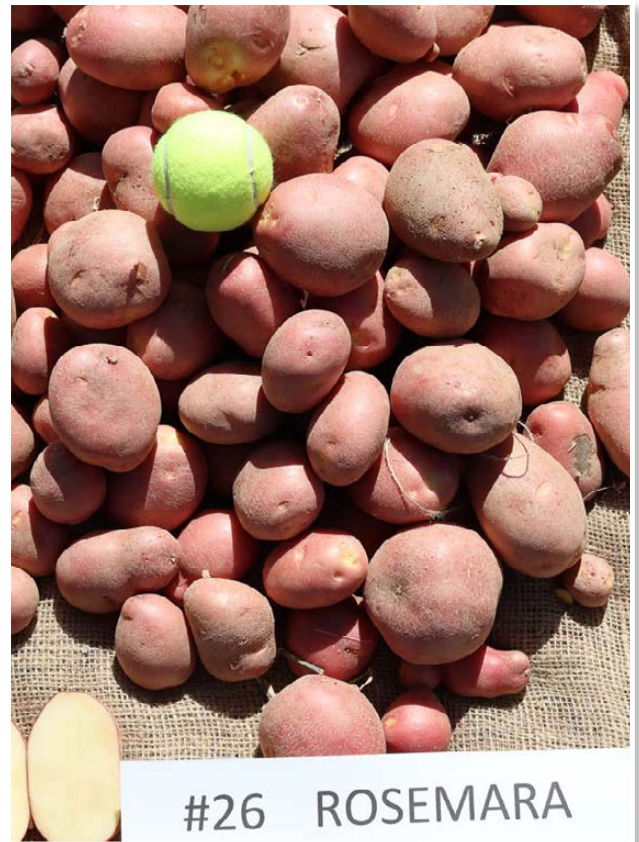
203.98 cwt



#25 PRIMABELLA

25. Primabella

286.57 cwt



#26 ROSEMARA

26. Rosemara

263.40 cwt



#27 MEISTER

27. Meister

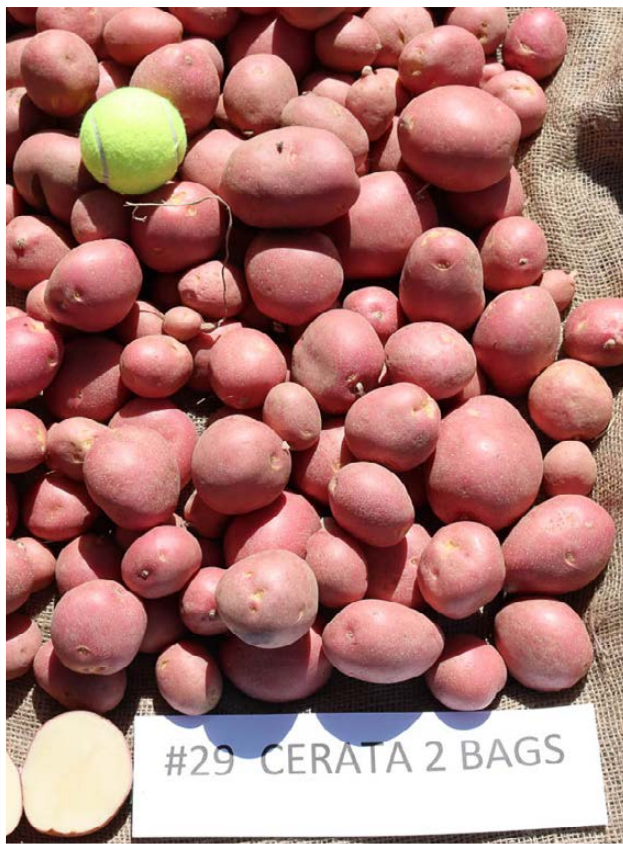
274.33 cwt



#28 ALMERA

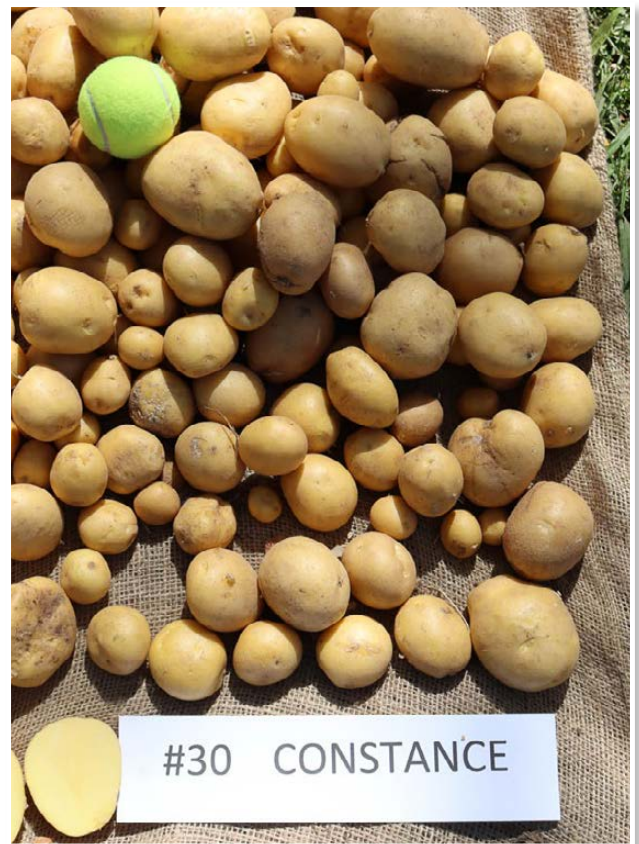
28. Almera

316.80 cwt



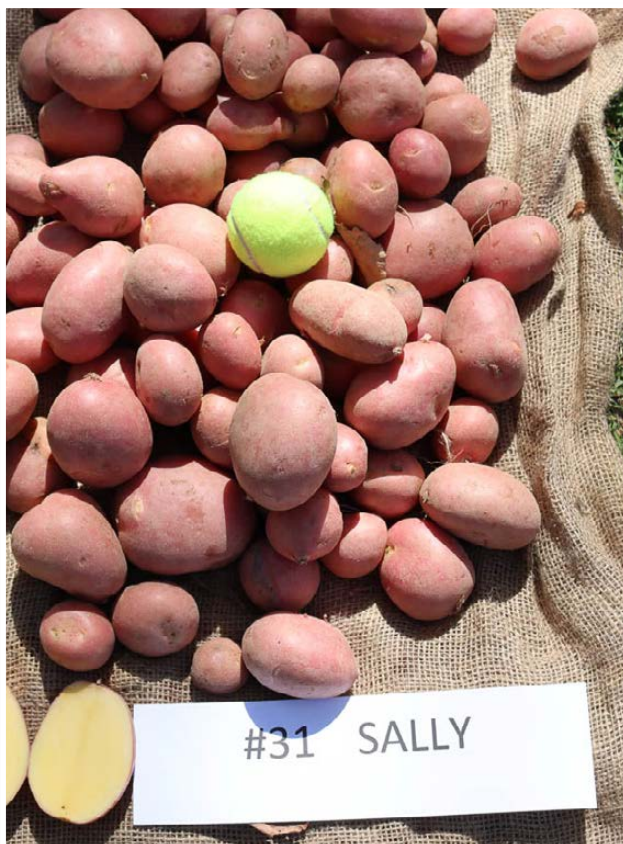
29. Cerata

230.71 cwt



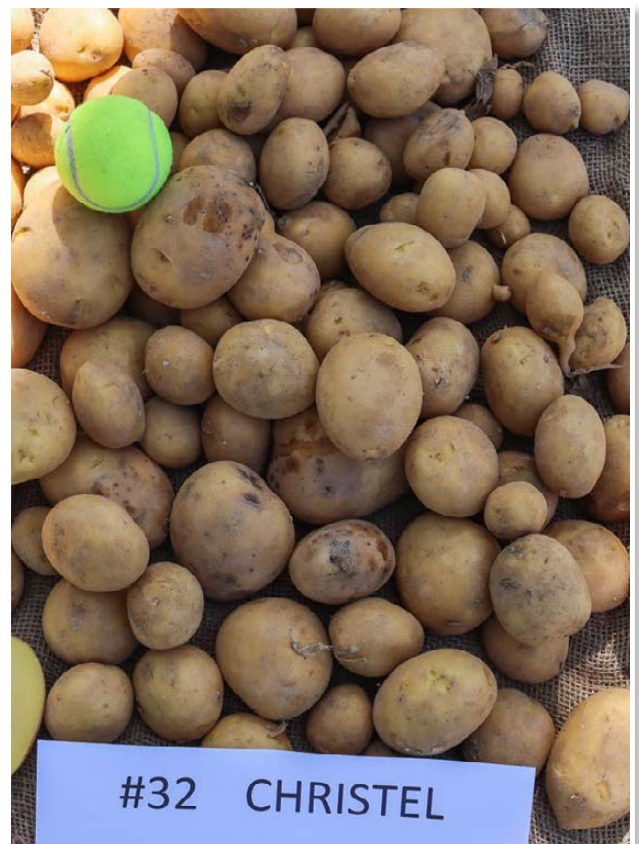
30. Constance

324.97 cwt



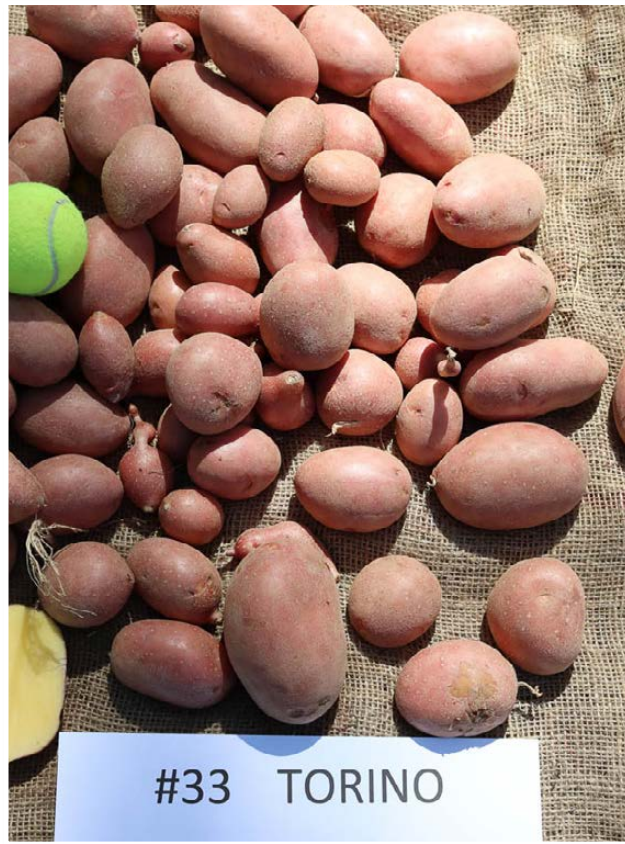
31. Sally

190.51 cwt



32. Christel

327.11 cwt



33. Torino

214.60 cwt

Observational Trial

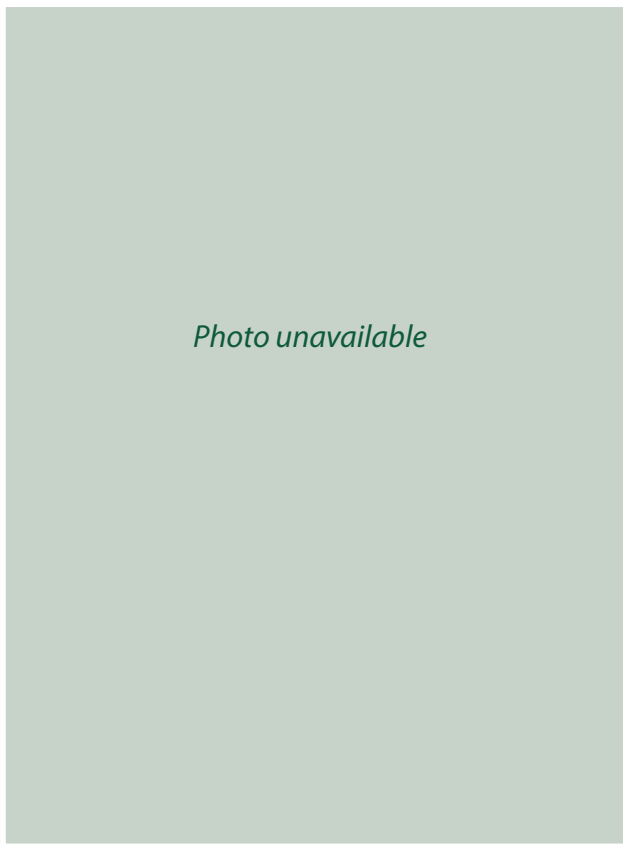
61 Entries

Five High Yields

- Acoustic (W), 610 cwt
- Red Rascal (R), 571 cwt
- NDTX14156-3P/WP (P), 557 cwt
- Ashley (Y), 498 cwt

Standards

- Yukon Gold (yellow), 155 cwt
- Red Lasoda (red), 233 cwt
- Atlantic (chipper), 156 cwt
- Snowden (chipper), 185 cwt



100. RP2008-6Y

227.87 cwt



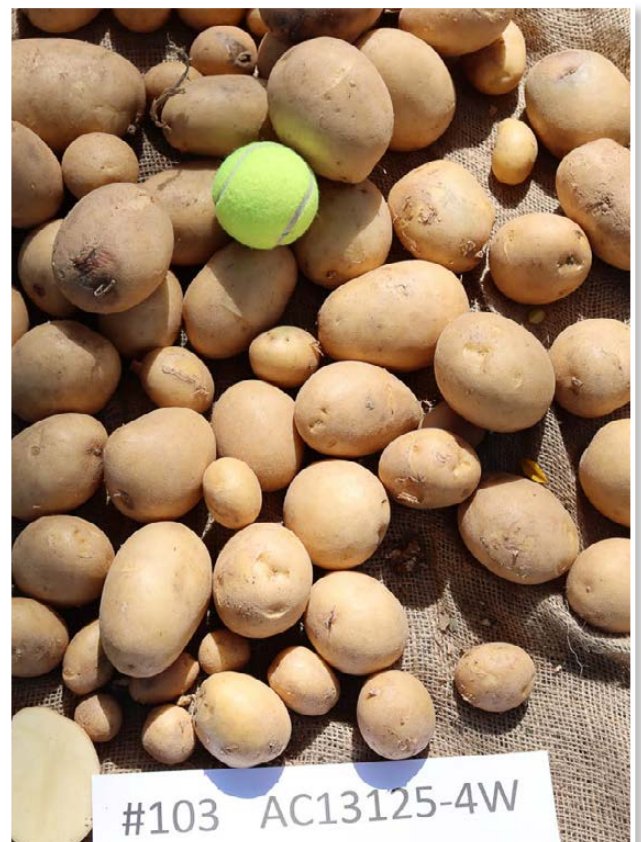
101. AC11436-1RU

257.28 cwt



102. AC11573-3R/Y

169.07 cwt



103. AC13125-4W

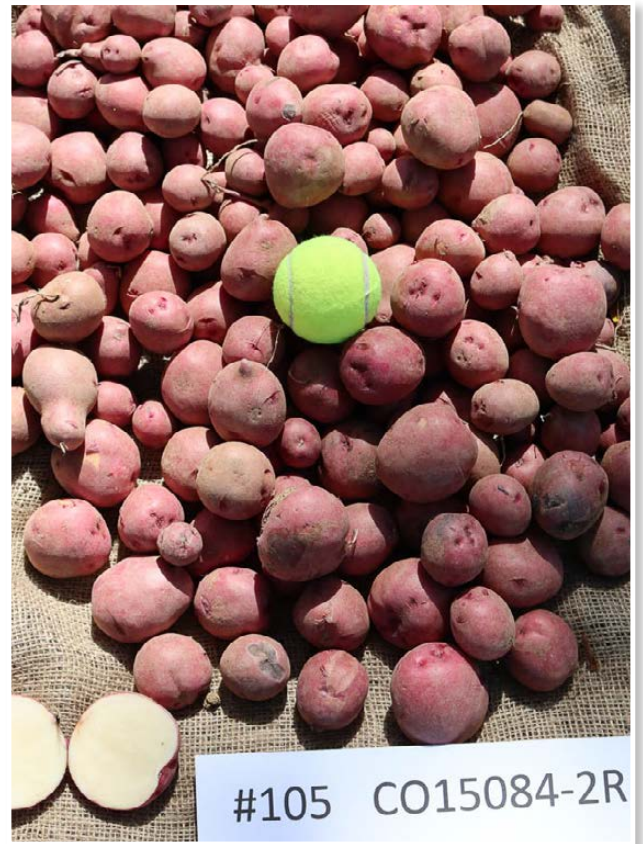
200.92 cwt



#104 RP2011-14Y

104. RP2011-14Y

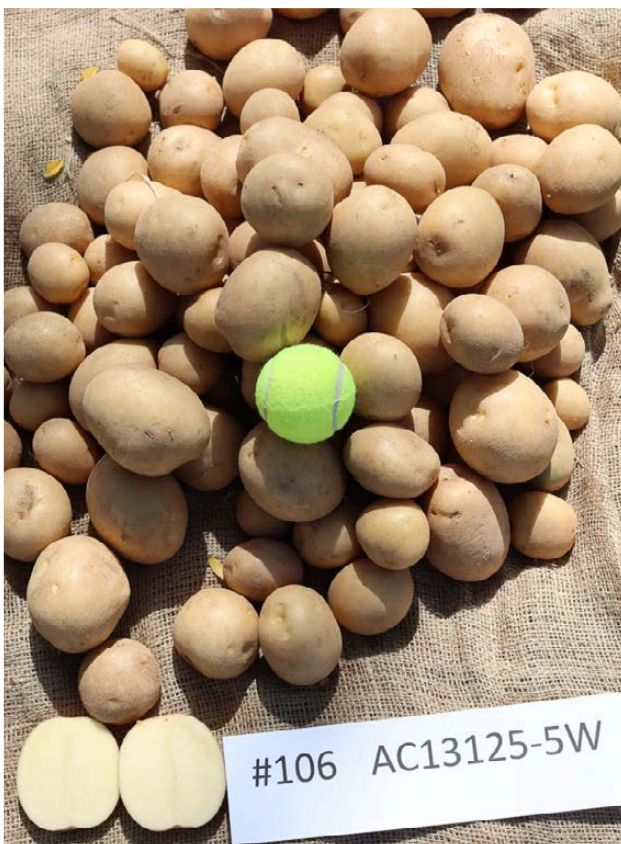
260.95 cwt



#105 CO15084-2R

105. CO15084-2R

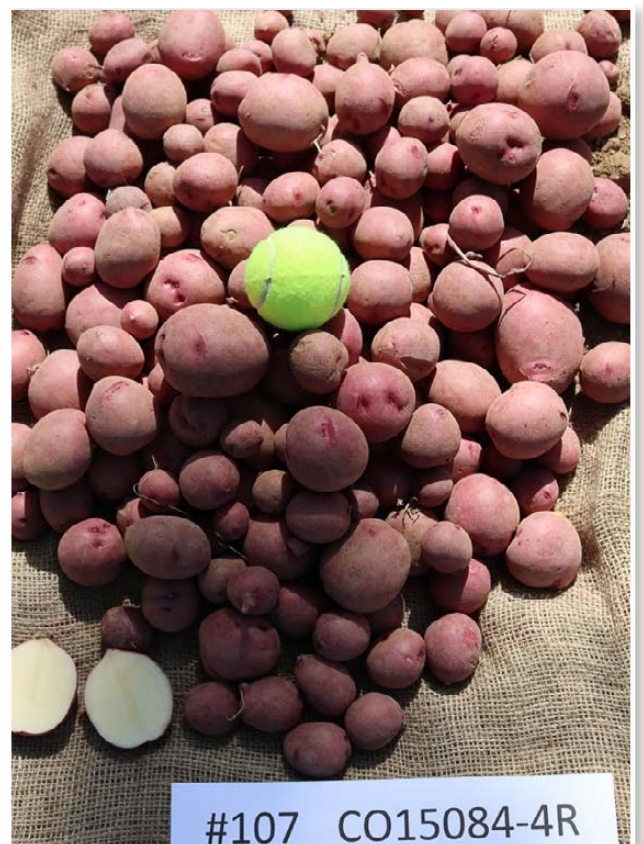
156.82 cwt



#106 AC13125-5W

106. AC13125-5W

236.86 cwt



#107 CO15084-4R

107. CO15084-4R

157.22 cwt



108. Yellow Rascal

205.01 cwt



109. CO14371-3RU

127.01 cwt



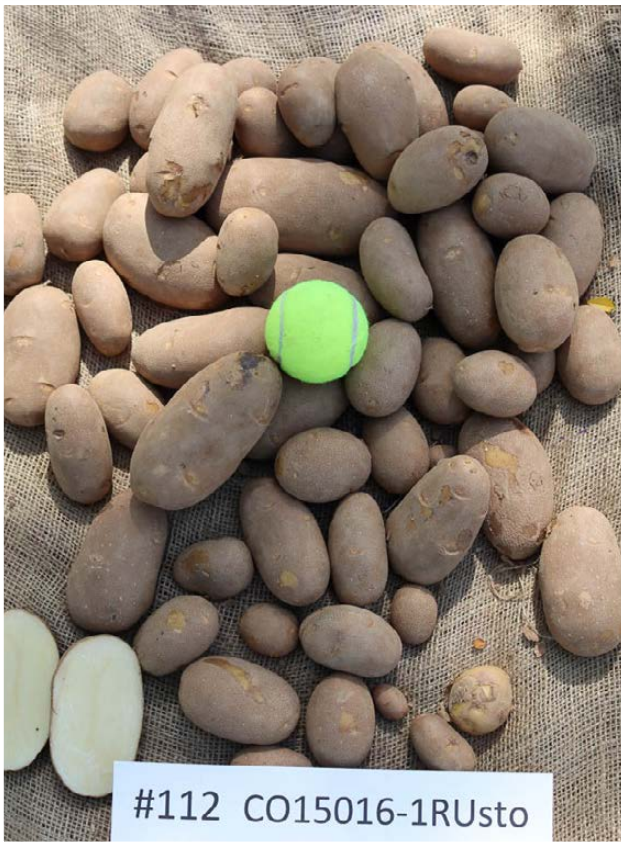
110. CO15206-7R

223.79 cwt



111. PSS11-19-12

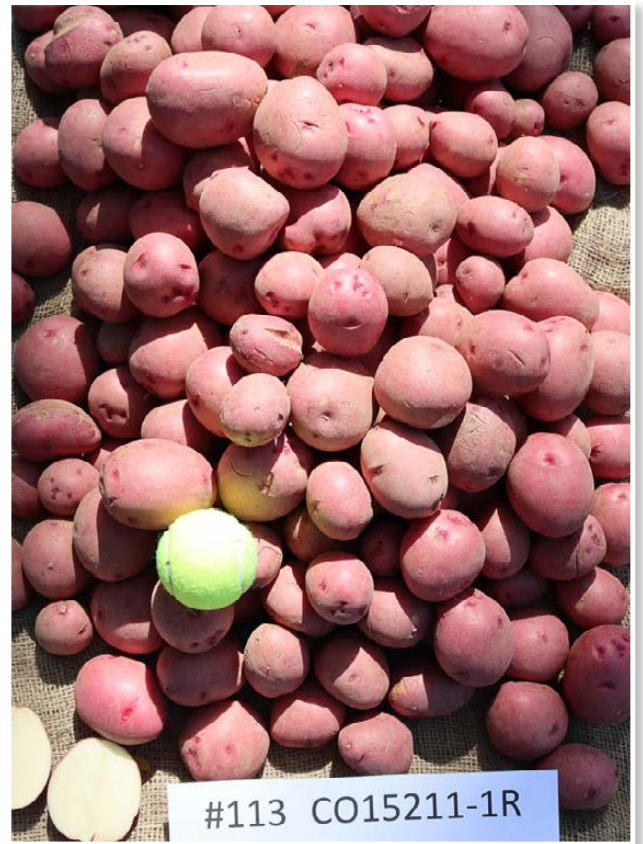
306.28 cwt



#112 CO15016-1RUsto

112. CO15016-1RUsto

121.29 cwt



#113 CO15211-1R

113. CO15211-1R

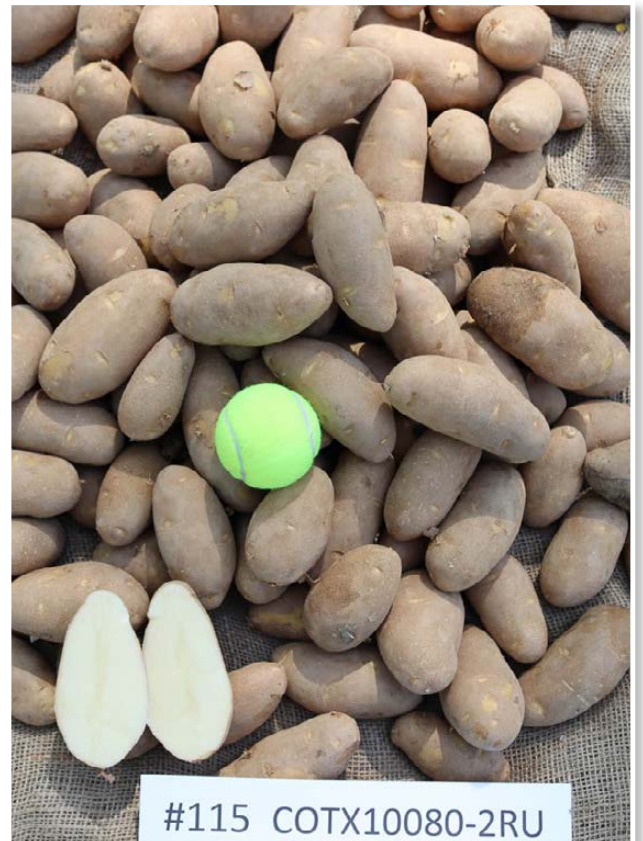
381.42 cwt



#114 CO15211-5R

114. CO15211-5R

181.32 cwt



#115 COTX10080-2RU

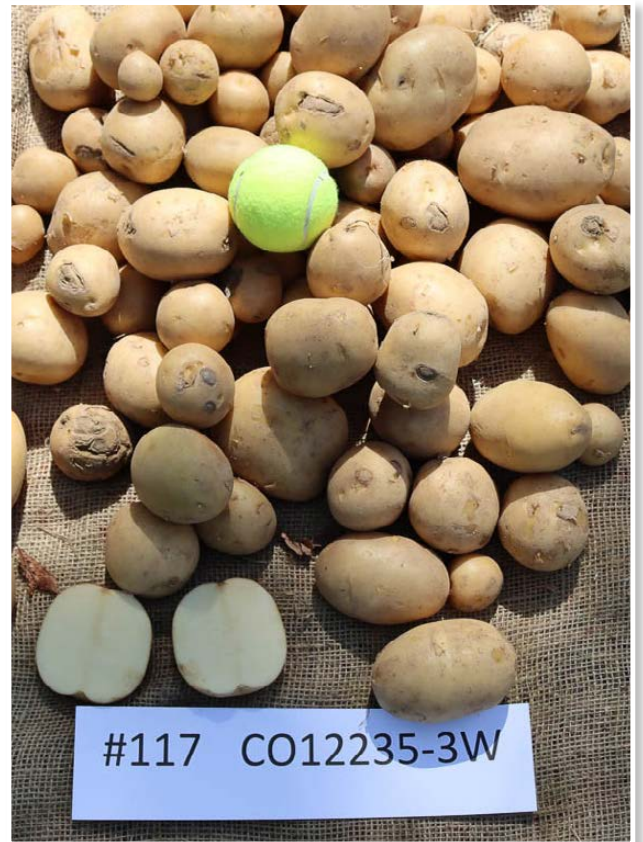
115. COTX10080-2RU

292.40 cwt



116. Ashley

497.81 cwt



117. CO12235-3W

193.57 cwt



118. AC12080-4RU

262.99 cwt



119. CO11037-5W

124.96 cwt



120. AC12090-3RU

404.70 cwt



121. CO11266-1W/Y

320.98 cwt



122. CO13003-1RU

393.27 cwt



123. TX17797S-11Y/Y

404.70 cwt



#124 CO12293-1W

124. CO12293-1W

354.47 cwt



#125 CO12378-1RU

125. CO12378-1RU

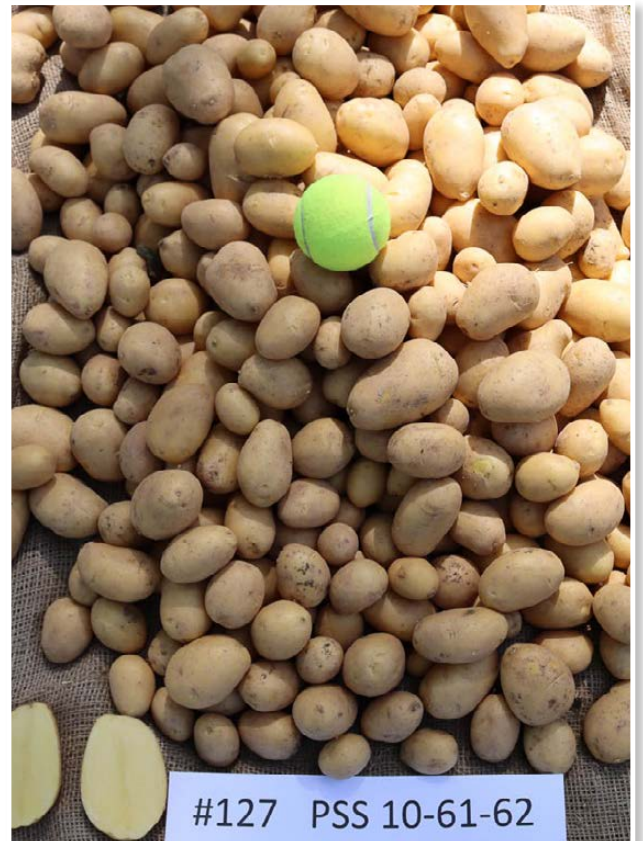
320.98 cwt



#126 TX17788F-4R/R

126. TX17788F-4R/R

264.22 cwt



#127 PSS 10-61-62

127. PSS 10-61-62

296.48 cwt



128. CO10085-1RU

370.81 cwt



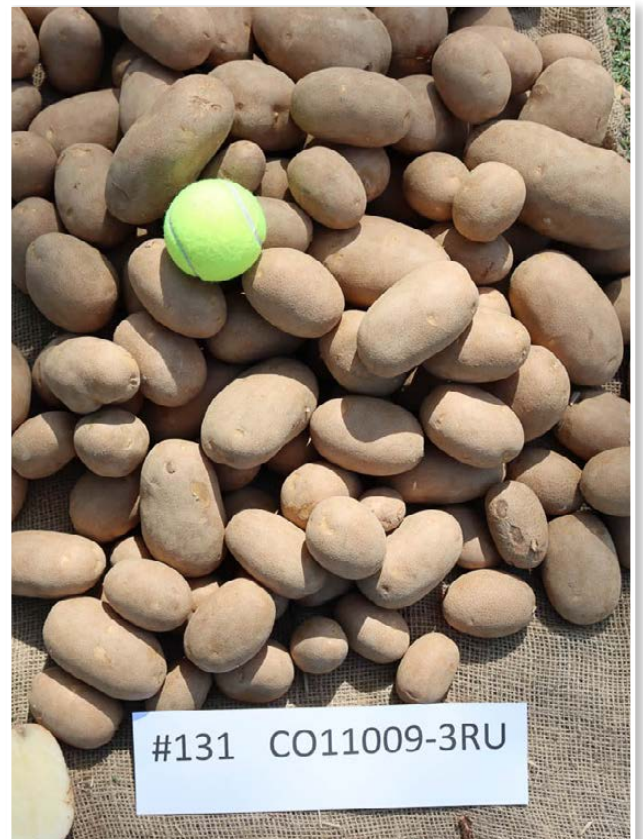
129. PSS 11-178-35

414.09 cwt



130. TX17805-8R/R

393.27 cwt



131. CO11009-3RU

342.22 cwt



132. CO11023-2W

218.07 cwt



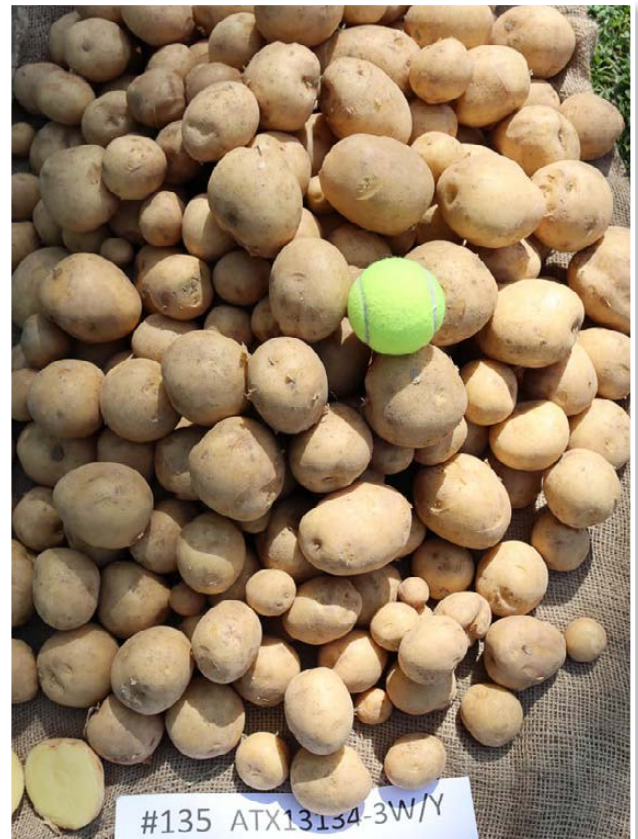
133. CO11250-1W/Y

329.15 cwt



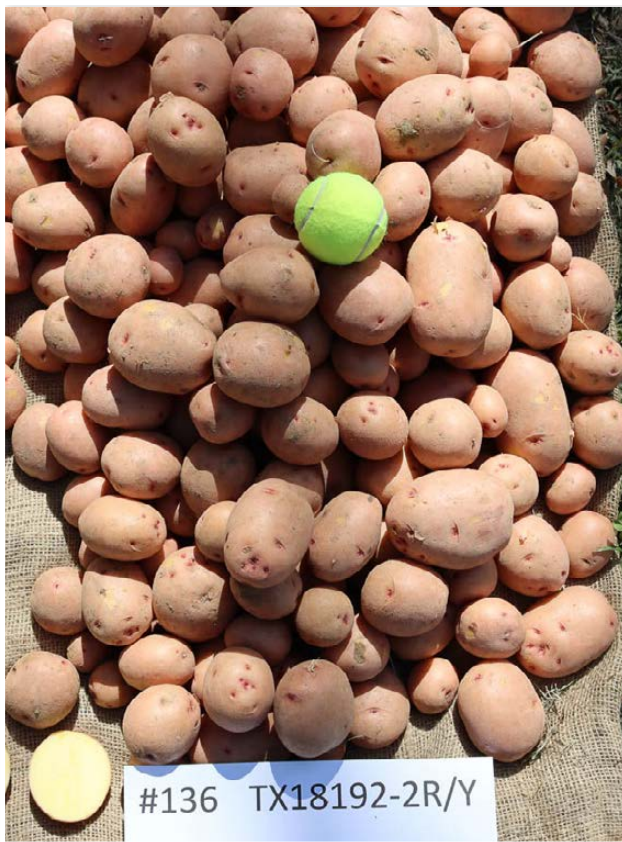
cwt134. NDTX14156-3P/WP

557.03 cwt



135. ATX13134-3W/Y

453.71 cwt



136. TX18192-2R/Y 441.86 cwt



137. TX17755-2PSPLASH 477.80 cwt



138. NDTX12248Y-1R 334.87 cwt



139. TX17734-1Y/Y 310.37 cwt



140. Colomba

415.73 cwt



141. Salinero

400.21 cwt



142. Crimson Tide

439.00 cwt



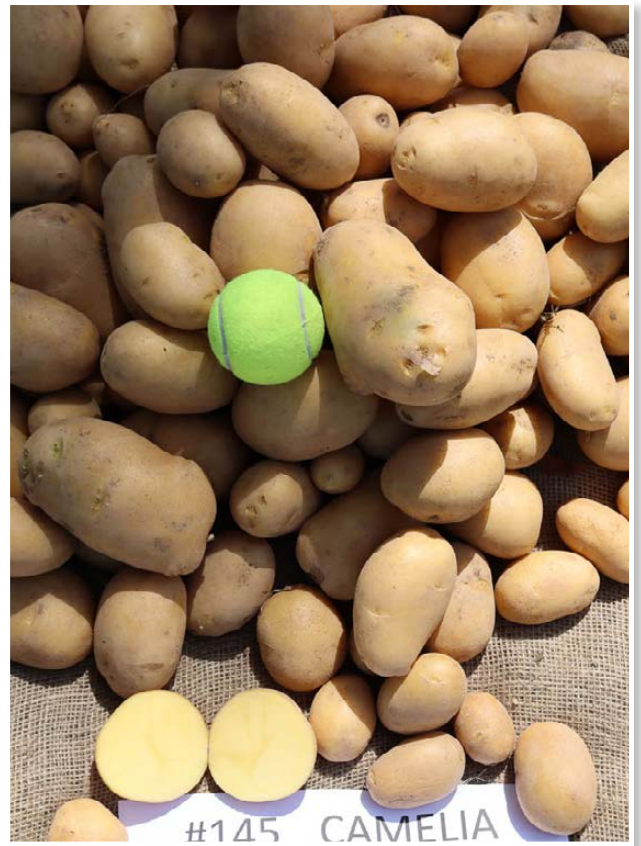
143. Maggie

412.05 cwt



144. AAC Midnight

343.85 cwt



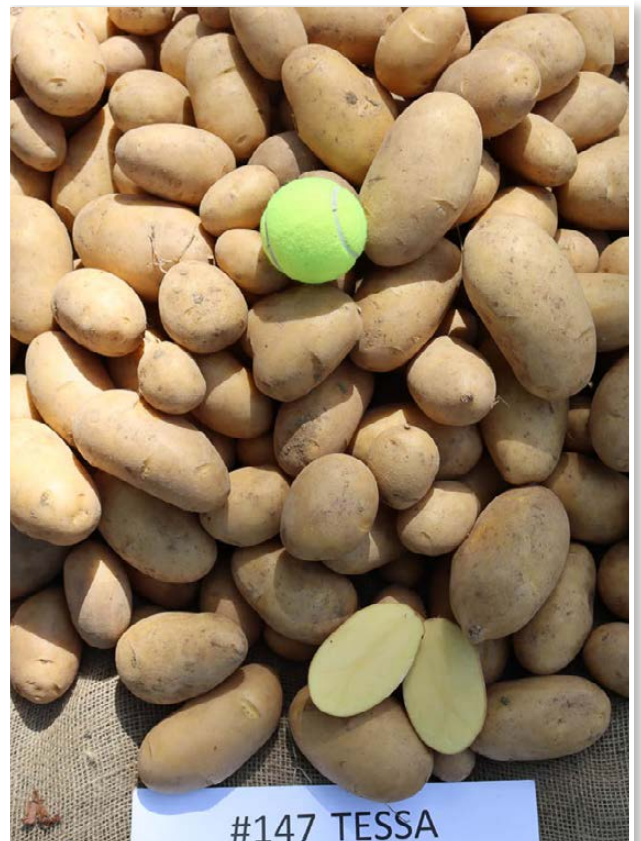
145. Camellia

443.50 cwt



146. Red Rascal

570.91 cwt



147. Tessa

442.27 cwt



148. Acoustic 610.11 cwt



149. Paroli 472.90 cwt



150. NDA050237B-1R 419.81 cwt



151. RP2015-J 343.85 cwt



152. RP2009-5R

419.81 cwt



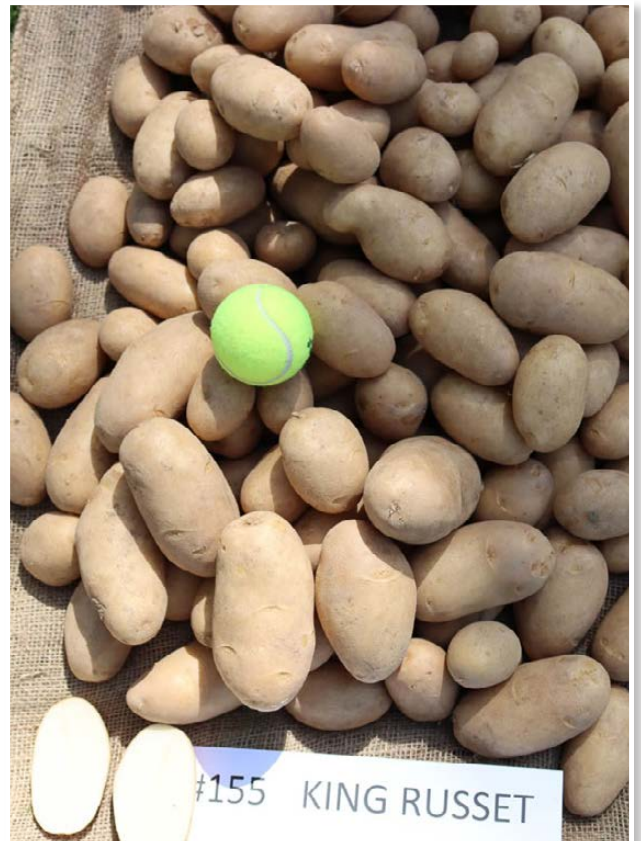
153. RP2011-02Y

450.85 cwt



154. Malou

472.49 cwt



155. King Russet

359.37 cwt



156. Sinatra

278.51 cwt



157. Lilly

453.71 cwt



158. Natascha

93.93 cwt



159. Belmonda

272.80 cwt



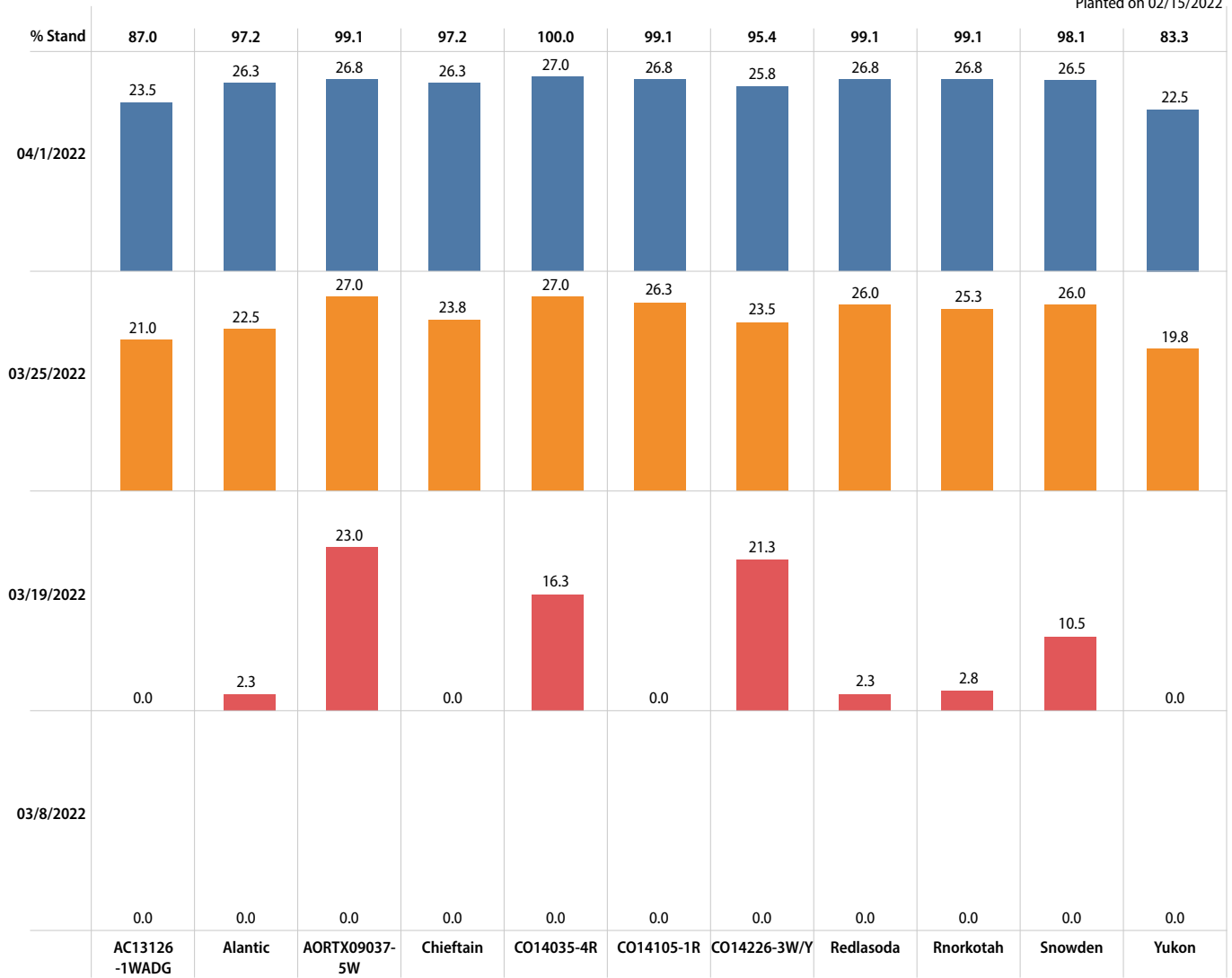
160. CO13232-25W

138.03 cwt

Plant Emergence Data

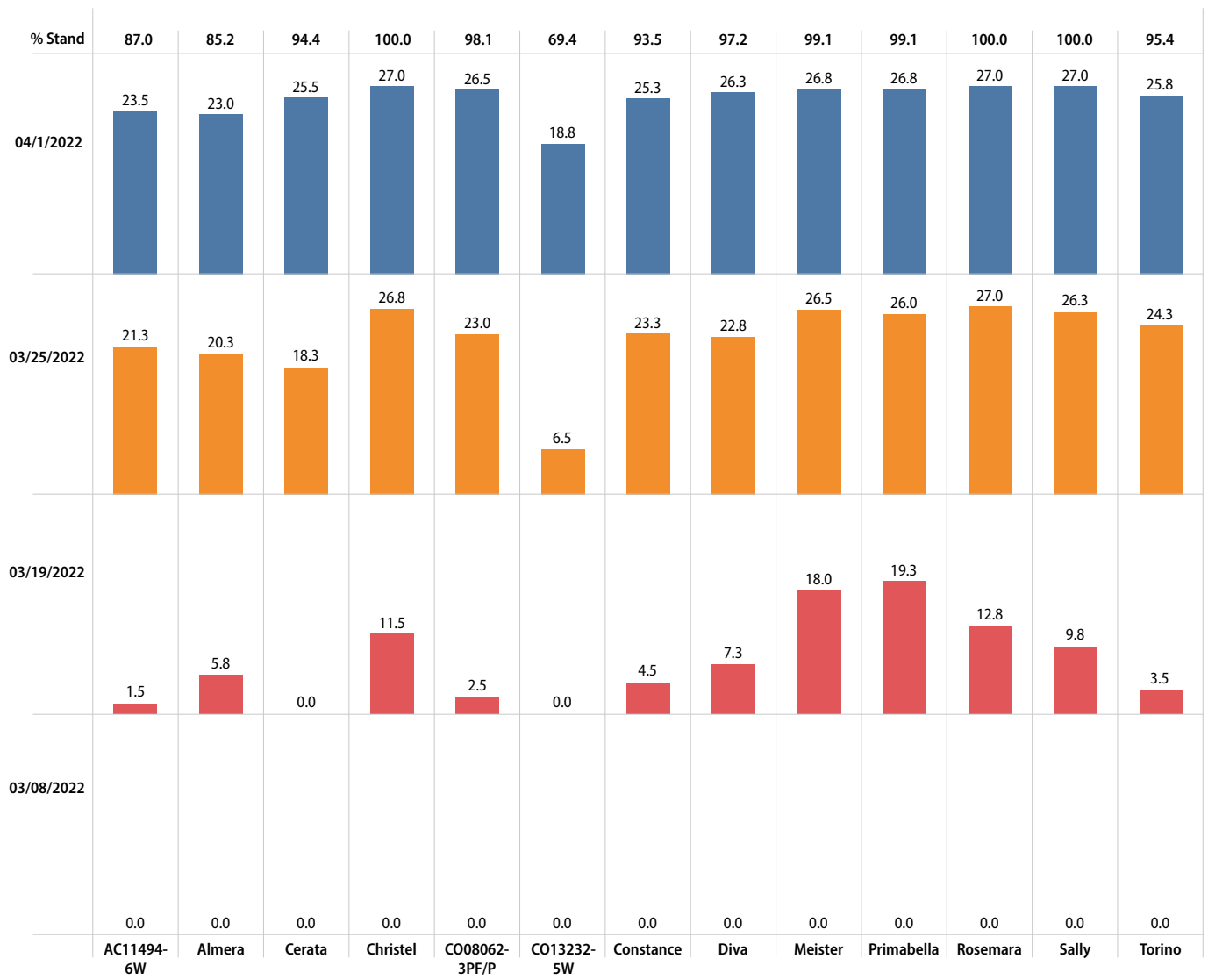
Southwest Regional Trial

Planted on 02/15/2022



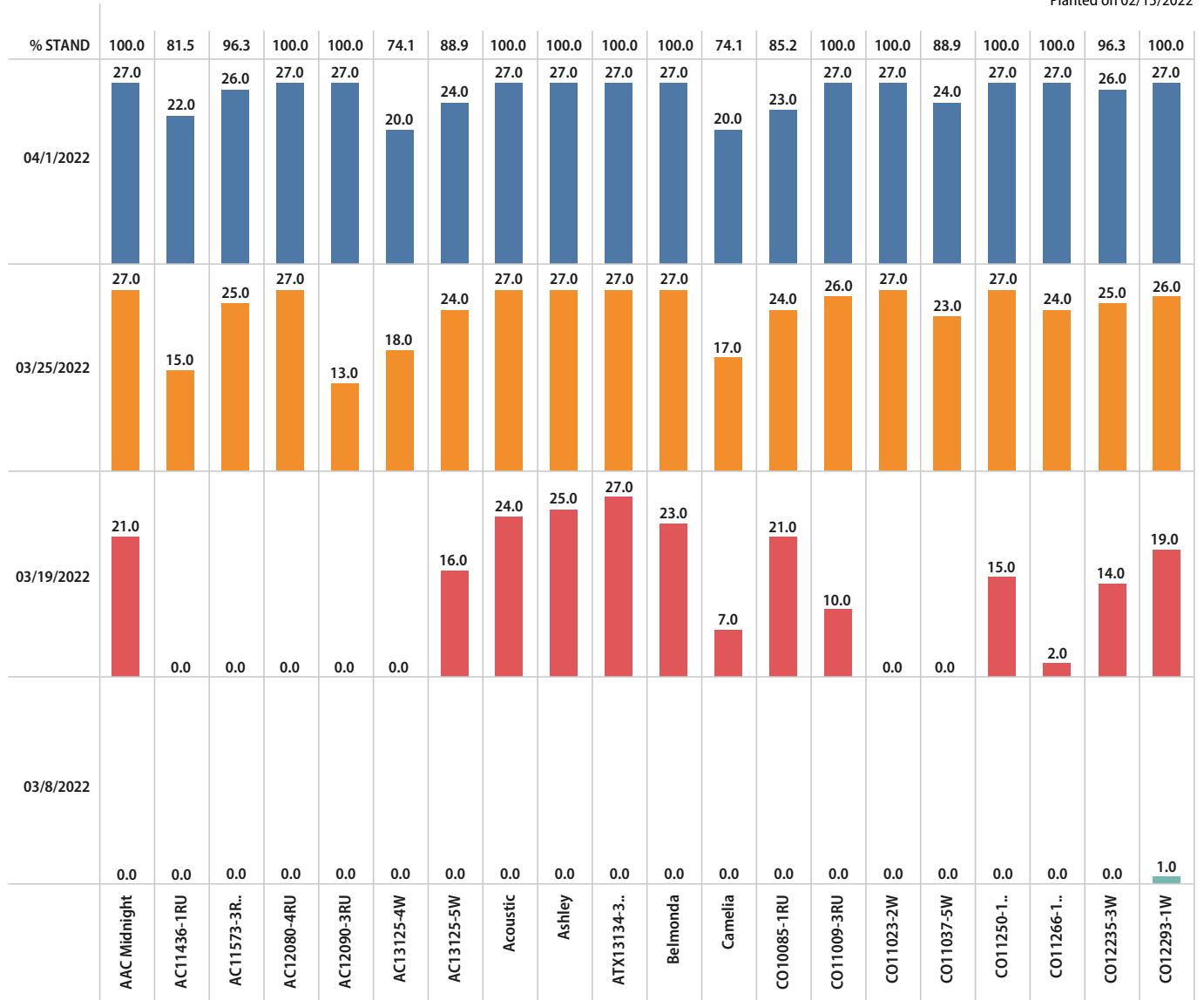
Kern County Replicated Trial

Planted on 02/15/2022



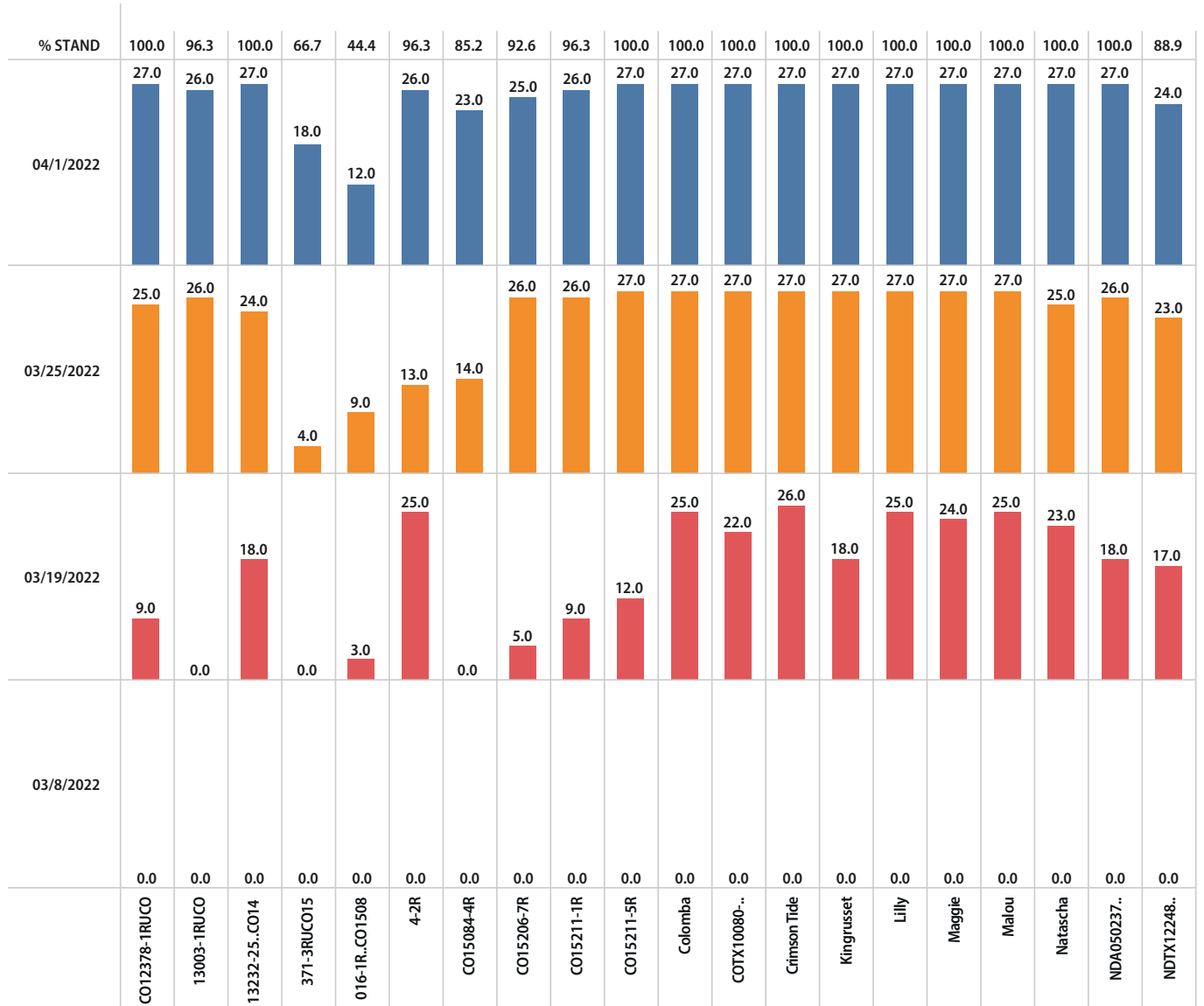
Observational Trial

Planted on 02/15/2022



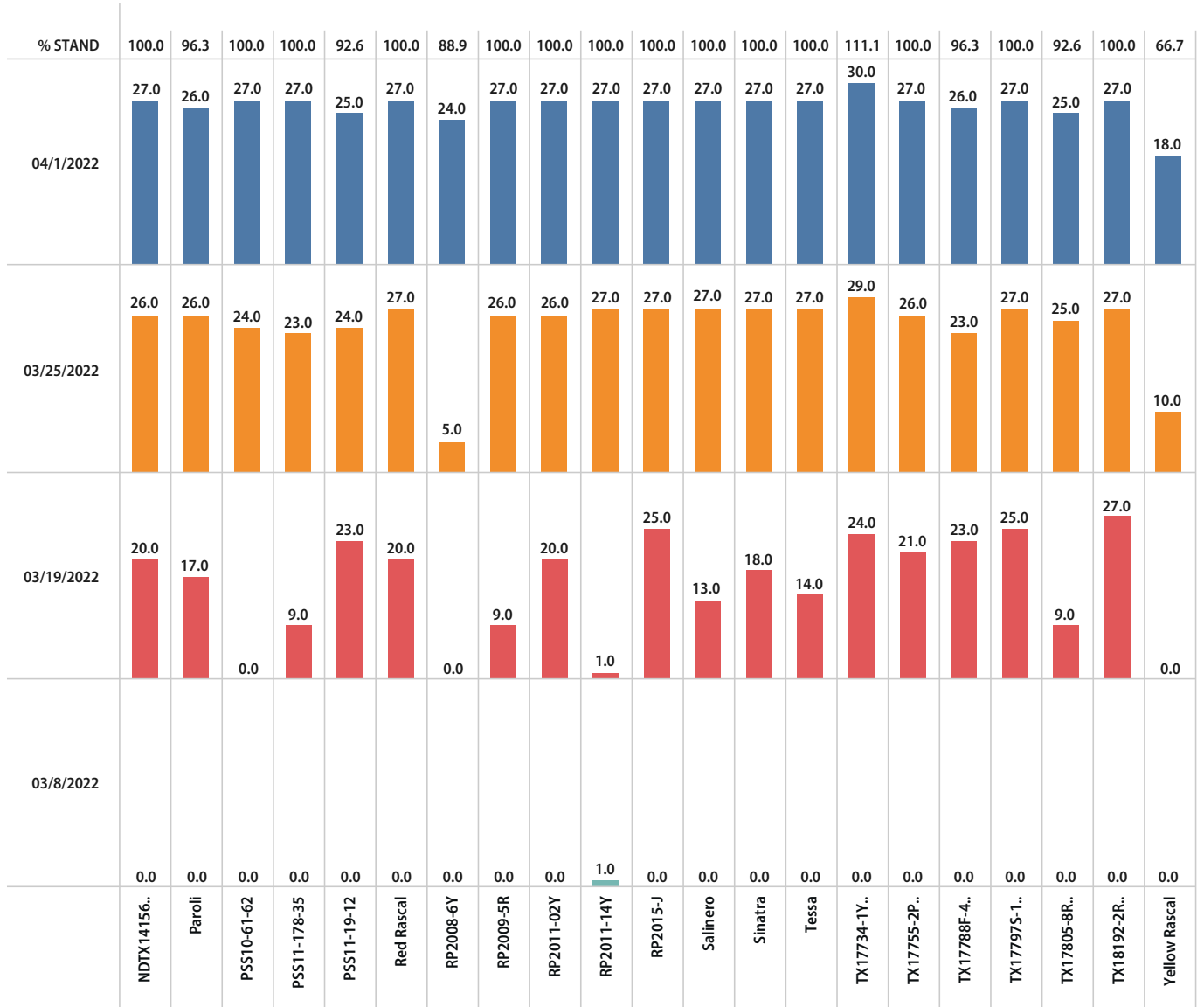
Observational Trial

Planted on 02/15/2022



Observational Trial

Planted on 02/15/2022



Yield Data

Table 1: Tuber Yield and Size of Southwest Regional Trial Potato Entries 2022

Graded Tuber yield CWT/ A									
ID#	Clone	Type	0-4 oz	4-6 oz	6-10 oz	11 oz >	Culls	Marketable Yield	Total Yield
Speciality									
1	AC13126-1Wadg	White	53.29	122.51	0.00	0.00	5.51	175.80 abc	181.32 abc
2	CO14035-4R	Red	103.52	43.18	0.00	0.00	0.00	146.71 bc	146.71 bc
3	CO14226-3W/Y	Yellow	157.64	94.75	0.00	0.00	2.25	252.38 a	254.63 a
5	Yukon Gold	Yellow	37.67	108.83	0.00	2.45	6.23	148.96 bc	155.19 bc
6	Chieftain	Red	67.18	110.46	2.86	0.00	4.29	180.50 abc	184.79 abc
9	Red Lasoda	Red	58.81	160.80	5.21	0.00	8.37	224.81 ab	233.18 ab
11	CO14105-1R	Red	124.147	4.39	0.00	0.00	3.37	128.54 c	131.91 c
Russet									
8	Russet Norkotah	Russet	57.78	35.32	18.37	0.00	3.78	111.49 c	115.27 c
Chipper									
4	AOR-TX09037-5W	Chipper	97.39	127.61	0.00	0.00	3.37	225.01 ab	228.38 ab
7	Atlantic	Chipper	35.52	106.69	9.19	0.00	5.10	151.40 bc	156.51 bc
10	Snowden	Chipper	64.12	117.41	1.23	0.00	2.66	182.75 abc	185.40 abc

*Mean comparisons were performed using Tukey's-Kramer HSD; means with the same letter within columns are not significantly different

Table 2: Tuber Yield and Size of Kern County Variety Trial Potato Entries 2022

Graded Tuber yield CWT/ A									
ID#	Clone	Type	0-4 oz	4-6 oz	6-10 oz	11 oz >	Culls	Marketable Yield	Total Yield
21	CO13232-5W	Chipper	74.94	99.03	0.00	0.00	2.76	173.97 dc	176.73 bc
22	AC11494-6W	Chipper	103.73	110.87	8.17	0.00	2.05	222.76 abcd	224.81 abc
23	CO08062-3PF/P	Fingerling	119.86	11.03	0.00	0.00	0.82	130.88 d	131.70 c
24	Diva	White	53.37	142.73	3.88	0.00	5.10	203.98 abcd	209.09 abc
25	Primabella	Yellow	76.26	177.85	23.28	9.19	5.92	286.57 abc	292.50 ab
26	Rosemara	Red	37.97	206.03	15.51	3.88	1.84	263.40 abc	265.24 ab
27	Meister	White	45.73	181.93	32.36	14.29	5.82	274.33 abc	280.15 ab
28	Almera		37.88	221.55	48.39	8.99	6.12	316.80 ab	322.92 a
29	Cerata	Red	46.23	168.45	13.48	2.55	4.39	230.71 abcd	235.10 abc
30	Constance	Yellow	112.71	198.77	13.48	0.00	3.57	324.97 a	328.54 a
31	Sally	Red	65.54	110.26	7.96	6.74	4.08	190.51 bdc	194.59 bc
32	Christel	White	55.54	228.08	34.51	8.99	2.35	327.11 a	329.46 a
33	Torino	Red	61.06	153.55	0.00	0.00	2.96	214.60 abcd	217.56 abc

*Mean comparisons were performed using Tukey's-Kramer HSD; means with the same letter within columns are not significantly different

Table 3: Tuber yield and size of Observational Trial potato entries 2022

Graded Tuber yield CWT/ A									
ID#	Clone	Type	0-4 oz	4-6 oz	6-10 oz	11 oz >	Culls	Marketable Yield	Total Yield
100	RP2008-6Y	Yellow	33.49	194.39	0.00	0.00	0.00	227.87	227.87
101	AC11436-1RU	Russet	70.24	187.04	0.00	0.00	8.58	257.28	265.85
102	AC11573-3R/Y	R/Y	53.09	115.98	0.00	0.00	3.68	169.07	172.74
103	AC13125-4W	White	22.87	162.53	0.00	15.52	6.53	200.92	207.46
104	RP2011-14Y	Yellow	80.86	180.09	0.00	0.00	0.00	260.95	260.95
105	CO15084-2R	Red	115.16	41.65	0.00	0.00	0.00	156.82	156.82
106	AC13125-5W	White	32.67	204.19	0.00	0.00	4.08	236.86	240.94
107	CO15084-4R	Red	107.81	49.41	0.00	0.00	0.00	157.22	157.22
108	Yellow Rascal	Yellow	117.61	87.39	0.00	0.00	6.13	205.01	211.13
109	CO14371-3RU	Russet	67.79	59.21	0.00	0.00	0.00	127.01	127.01
110	CO15206-7R	Red	176.42	47.37	0.00	0.00	0.00	223.79	223.79
111	PSS11-19-12	Yellow	102.91	203.37	0.00	0.00	5.72	306.28	312.00
112	CO15016-1RUsto	Russet	35.94	80.04	5.31	0.00	0.00	121.29	121.29
113	CO15211-1R	Red	60.44	320.98	0.00	0.00	4.90	381.42	386.32
114	CO15211-5R	Red	48.19	115.98	17.15	0.00	4.90	181.32	186.22
115	COTX10080-2RU	Russet	55.54	236.86	0.00	0.00	2.04	292.40	294.44
116	Ashley	Yellow	29.40	439.82	28.59	0.00	0.00	497.81	497.81
117	CO12235-3W	Chipper	31.85	161.72	0.00	0.00	41.25	193.57	234.82
118	AC12080-4RU	Russet	50.64	212.36	0.00	0.00	2.86	262.99	265.85
119	CO11037-5W	Chipper	14.70	110.26	0.00	0.00	3.27	124.96	128.23
120	AC12090-3RU	Russet	37.57	285.46	81.68	0.00	0.00	404.70	404.70
121	CO11266-1W/Y	Yellow	81.68	239.31	0.00	0.00	0.00	320.98	320.98
122	CO13003-1RU	Russet	57.99	236.04	91.88	7.35	7.76	393.27	401.03
123	TX17797S-11Y/Y	Yellow	105.36	289.13	10.21	0.00	1.23	404.70	405.93
124	CO12293-1W	Chipper	26.95	264.63	62.89	0.00	0.82	354.47	355.29
125	CO12378-1RU	Russet	108.63	212.36	0.00	0.00	9.80	320.98	330.79
126	TX17788F-4R/R	Red	170.29	93.93	0.00	0.00	0.41	264.22	264.63
127	PSS 10-61-62	Yellow	242.58	53.91	0.00	0.00	4.08	296.48	300.57
128	CO10085-1RU	Russet	51.46	278.51	40.84	0.00	12.25	370.81	383.06
129	PSS 11-178-35	Yellow	172.33	231.96	9.80	0.00	1.23	414.09	415.32
130	TX17805-8R/R	Red	121.70	271.57	0.00	0.00	0.00	393.27	393.27
131	CO11009-3RU	Russet	70.24	271.98	0.00	0.00	7.35	342.22	349.57
132	CO11023-2W	Chipper	22.87	195.20	0.00	0.00	33.08	218.07	251.15
133	CO11250-1W/Y	Yellow	95.56	233.59	0.00	0.00	6.13	329.15	335.28
134	NDTX14156-3P/WP	Purple	80.04	428.80	48.19	0.00	3.68	557.03	560.70
135	ATX13134-3W/Y	W/Y	83.31	334.46	35.94	0.00	2.86	453.71	456.57
136	TX18192-2R/Y	Red	84.94	343.04	13.88	0.00	0.00	441.86	441.86
137	TX17755-2PSPASH	P/Y	84.13	302.61	69.02	22.05	6.94	477.80	484.74
138	NDTX12248Y-1R	Red	47.37	287.50	0.00	0.00	0.00	334.87	334.87

Continued on next page

Table 3: Tuber yield and size of observational trial potato entries 2022, continued

Graded Tuber yield CWT/ A									
ID#	Clone	Type	0-4 oz	4-6 oz	6-10 oz	11 oz >	Culls	Marketable Yield	Total Yield
139	TX17734-1Y/Y	Yellow	260.54	49.82	0.00	0.00	6.13	310.37	316.49
140	Colomba	Y/Y	111.08	304.65	0.00	0.00	6.13	415.73	421.85
141	Salinero	Yellow	40.02	338.14	0.00	22.05	2.86	400.21	403.07
142	Crimson Tide	Red	66.97	360.60	11.43	0.00	5.72	439.00	444.72
143	Maggie	Yellow	84.94	301.79	25.32	0.00	4.49	412.05	416.54
144	AAC Midnight	Purple	67.79	276.06	0.00	0.00	0.00	343.85	343.85
145	Camellia	Yellow	58.81	359.37	25.32	0.00	7.35	443.50	450.85
146	Red Rascal	Red	49.01	401.03	46.55	74.32	6.13	570.91	577.04
147	Tessa	Y/Y	58.81	359.37	24.09	0.00	5.31	442.27	447.58
148	Acoustic	White	59.62	496.59	53.91	0.00	0.00	610.11	610.11
149	Paroli	Y/Y	109.44	363.46	0.00	0.00	3.68	472.90	476.58
150	NDA050237B-1R	Red	76.77	343.04	0.00	0.00	6.13	419.81	425.94
151	RP2015-J	Yellow	251.56	92.29	0.00	0.00	2.45	343.85	346.30
152	RP2009-5R	Red	84.94	334.87	0.00	0.00	0.82	419.81	420.63
153	RP2011-02Y	Yellow	99.64	338.95	12.25	0.00	3.27	450.85	454.11
154	Malou	y/w	58.81	398.98	14.70	0.00	0.41	472.49	472.90
155	King Russet	Russet	83.31	270.35	5.72	0.00	8.17	359.37	367.54
156	Sinatra	Yellow	107.81	170.70	0.00	0.00	3.27	278.51	281.78
157	Lilly	Yellow	64.52	323.03	66.16	0.00	27.77	453.71	481.48
158	Natascha	White	13.07	80.86	0.00	0.00	4.49	93.93	98.42
159	Belmonda	Yellow	71.87	200.92	0.00	0.00	0.00	272.80	272.80
160	CO13232-25W	Chipper	33.49	104.54	0.00	0.00	0.00	138.03	138.03



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For more information

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