

Supplemental table. Acrylamide-forming potential and agronomic properties of elite U.S. potato germplasm from the National Fry Processing Trial

Wang et al.

Supplemental table 1. A complete set of genotype means for the agronomic traits and biochemical properties during storage (1, 4, and 8 months out of storage). Number of years tested in the trial was indicated right after the clone name.

Clone	No. Years Tested	Total Yield	Marketable yield	Marketable yield	Marketable tubers > 170g	Marketable tubers > 283g	Specific gravity	Sucrose (mg g ⁻¹ FW)				Glucose (mg g ⁻¹ FW)				Asparagine (mg g ⁻¹ FW)				Acrylamide (µg g ⁻¹)									
		Mg ha ⁻¹	Mg ha ⁻¹	%	%	%	%	1 mm.	8 mm.	0 mm.	1 mm.	4 mm.	8 mm.	0 mm.	1 mm.	8 mm.	0 mm.	1 mm.	8 mm.	0 mm.	1 mm.	8 mm.	0 mm.	1 mm.	8 mm.	0 mm.	1 mm.	8 mm.	0 mm.
A00125-3	3	55.2	48.2	86.8	56.9	1078	1078	1079	2378	1362	1246	0.930	0.268	0.201	1.087	2.264	3031	288.6	241.5										
A0073-5	3	75.0	48.5	1087.3	58.3	1087.3	1087.3	1087.3	0.843	0.931	0.361	0.307	0.390	0.743	4.130	402.6	348.0	331.7											
A01010-1	2	61.9	50.8	83.5	74.3	1080	1077	1077	1.188	0.636	0.143	0.511	0.679	1.236	5.022	3.869	495.5	70.3	1003.2										
A01025-4	1	70.3	61.5	86.6	87.8	63.6	1077	1074	1077	1.113	0.799	0.870	0.975	0.314	1.052	5.944	4.175	703.2	603.3										
A01124-3	1	86.1	46.6	75.7	85.3	1072	1072	1078	1.416	1.255	0.416	0.612	0.145	1.416	4.410	1.348	105.0	1247.7											
A01325-1	1	67.2	59.9	86.6	87.1	46.8	1083	1087	1.663	1.157	1.070	0.533	0.485	0.435	5.440	4.328	546.4	592.9	544.6										
A02000-1TE	1	57.4	51.2	88.8	82.6	1082	1086	1081	1.507	0.832	0.943	0.776	0.522	0.526	1.865	2.692	751.8	587.9	948.6										
A02063-1TE	2	83.3	49.2	82.2	47.8	1075	1077	1086	1.426	0.984	0.644	0.301	0.715	1.402	4.477	4.120	375.4	148.1	1247.7										
A02138-2	3	53.4	40.9	77.3	73.1	1085	1087	1088	1.027	0.859	0.697	0.138	0.256	1.038	6.009	3.489	113.7	274.4	148.6										
A02144-2	1	42.4	31.5	76.7	68.7	25.3	1068	1072	1.066	0.804	0.875	0.812	0.388	0.504	6.880	5.774	4.380	391.5	494.9	677.2									
A02424-83B-L	2	61.4	49.4	81.3	74.9	13.2	1091	1088	1.084	1.397	1.202	0.811	0.437	0.470	1.010	4.605	3.907	364.3	316.2	689.6									
A02507-2LB	3	56.0	48.0	86.2	80.7	1089	1085	1085	1.567	1.165	0.694	0.174	0.111	0.085	4.966	3.512	306.6	575.5	303.8										
A03082-4	1	59.6	46.3	77.7	75.5	55.0	1089	1075	1.076	0.733	0.522	0.962	1.399	0.584	1.898	4.257	3.911	1391.2	883.1	982.7									
A03141-6	1	60.0	50.9	84.7	75.4	32.4	1089	1090	1.092	1.087	0.968	0.744	0.688	0.861	6.628	.	3.071	408.1	475.4	586.5									
A03159-1TE	1	65.6	57.9	88.1	82.3	45.9	1077	1082	1.082	1.083	0.802	0.897	0.690	0.654	0.564	.	4.378	411.9	49.3	339.1									
A03921-2	3	66.1	56.8	85.8	83.5	53.7	1099	1092	1.095	1.346	1.042	0.811	0.331	0.264	1.166	4.528	3.944	384.4	284.2	220.2									
A05052-3TE	1	45.8	36.1	76.0	76.0	34.1	1087	1087	1.091	1.910	1.239	0.201	0.920	0.567	0.805	.	3.205	419.4	582.9	518.6									
A06003-3TE	2	48.3	40.2	81.3	82.9	59.3	1076	1075	1.078	1.182	0.758	0.362	0.798	1.088	0.477	4.501	.	3.574	405.5	838.7									
A06021-1T	1	44.5	37.5	86.4	80.5	7.9	1087	1083	1.086	1.233	0.732	0.931	0.417	0.524	0.618	.	4.234	530.4	690.3	581.6									
A06084-1TE	1	54.8	43.4	78.9	63.1	25.0	1087	1084	1.082	1.699	1.240	2.252	0.088	0.113	0.223	.	4.210	139.9	203.5	364.4									
A07001-7TE	1	55.0	22.8	64.2	55.8	10.8	1066	1066	1.072	0.738	0.262	0.285	0.426	0.705	1.529	.	2.967	555.3	668.0	1785.7									
AC0006-28U	1	63.1	53.7	88.1	75.1	63.1	1095	1095	1.003	1.416	1.255	1.021	1.198	1.680	1.819	.	3.108	2.544	599.2	709.6	1014.6								
AC06052-18U	2	31.6	40.9	79.2	74.2	21.1	1086	1081	1.080	1.199	0.848	0.842	0.221	0.184	0.213	5.346	4.280	406.9	324.0	416.6									
AC09375-18U	3	68.9	56.6	81.3	74.5	34.5	1090	1089	1.091	0.867	0.571	0.402	0.279	0.206	0.680	2.402	1.386	191.7	185.0	322.3									
AF2550-9	1	50.6	35.7	67.8	55.0	16.5	1087	1087	1.086	0.778	0.498	0.038	0.734	0.766	1.245	4.078	3.489	554.8	651.1	823.0									
AF3001-6	3	68.5	61.3	89.1	86.3	53.5	1081	1082	1.081	0.963	0.561	0.679	0.164	0.075	0.131	3.897	3.080	257.4	254.1	267.7									
AF3008-3	2	41.4	30.6	75.6	56.1	12.0	1088	1090	1.090	1.124	0.747	0.783	0.430	0.530	0.816	4.528	3.558	581.3	567.0	700.8									
AF3012-1	2	75.6	54.5	83.6	79.8	39.8	1089	1089	1.089	1.087	0.862	0.583	0.380	0.652	0.583	.	3.912	312.7	488.7	589.7									
AF3362-1	3	80.8	50.8	89.0	81.6	10.7	1077	1079	1.503	1.370	1.258	0.441	0.823	1.110	0.622	5.052	5.841	855.9	1233.2										
AF4040-2	3	50.0	41.2	82.5	82.9	38.0	1080	1081	1.084	1.036	0.712	0.363	0.433	0.435	1.409	3.877	3.258	340.1	519.6	894.1									
AF4113-2	3	52.3	43.3	82.8	80.9	36.8	1072	1073	1.074	1.204	0.854	1.152	0.508	0.497	0.837	4.316	3.645	604.9	599.2	898.3									
AF4124-4	1	89.3	48.1	80.9	77.3	40.9	1079	1080	1.081	1.091	0.843	0.693	0.523	0.982	1.546	5.764	4.117	495.3	912.9	1250.0									
AF4124-7	3	61.1	55.7	79.1	87.7	4.7	1087	1085	1.087	1.117	1.004	1.125	0.785	0.923	1.508	4.842	3.803	699.1	858.2	1415.8									
AF4172-2	3	52.6	40.5	71.1	61.8	13.8	1080	1079	1.078	0.895	0.889	0.464	0.379	0.654	1.099	4.160	3.477	415.4	548.7	894.1									
AF4198-2	1	61.4	50.6	71.2	61.4	10.7	1074	1074	1.074	1.075	0.701	0.442	0.371	0.806	0.952	1.344	4.683	3.392	767.9	1013.4	1454.8								
AF4222-5	1	45.1	36.0	78.9	76.3	29.6	1070	1072	1.066	0.888	0.542	0.497	1.543	1.329	1.333	4.694	3.656	1212.3	1107.1	1180.9									
AF4260-2	1	43.1	33.3	78.3	80.5	49.1	1082	1079	1.079	1.434	1.522	1.042	0.362	0.606	1.071	3.899	4.053	581.0	750.4	1262.1									
AF4281-3	1	59.5	48.3	78.5	33.3	10.2	1082	1083	1.083	1.165	0.939	0.625	0.361	0.473	0.601	5.955	5.742	133.6	136.2	1184.0									
AF4283-1	1	57.6	47.9	81.9	84.2	45.4	1079	1079	1.081	1.604	1.106	0.931	0.720	0.262	0.490	4.833	3.709	426.5	839.5	1834.8									
AF4296-3	3	62.9	55.0	87.1	84.2	45.0	1080	1080	1.083	0.939	0.741	0.377	0.246	0.339	0.622	4.658	3.713	339.7	376.7	643.9									
AF4320-15	1	53.6	42.7	78.7	87.8	65.7	1082	1080	1.082	1.074	0.696	0.545	0.854	0.821	1.471	4.729	5.192	648.9	593.3	984.2									
AF4320-17	3	50.4	38.7	78.9	68.5	10.7	1083	1079	1.082	1.078	0.682	0.872	0.384	0.312	0.862	5.001	3.880	429.5	390.5	1254.3									
AF4320-7	3	60.3	55.3	91.3	86.6	10.8	1078	1080	1.158	0.847	0.950	0.577	0.841	0.998	4.796	3.440	493.3	471.6	891.5										
AF4329-7	1	59.2	45.5	73.8	64.7	21.6	1071	1071	1.065	1.067	0.731	0.119</																	