

Appendix 2: Best linear unbiased estimates (BLUES) for starch digestibility

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_004	AGRIA	74.077589	85.349342	92.789936
POTAP_005	AILSA	63.137302	86.147197	93.925183
POTAP_008	ALMERA	58.028142	77.20361	84.038808
POTAP_009	ALPHA	68.671398	88.31017	94.410008
POTAP_010	ALWARA	71.260208	92.893806	97.218683
POTAP_011	AMADRA	67.863269	84.622794	87.381729
POTAP_013	AMOUR	71.73982	87.109706	91.001785
POTAP_014	ANNA	68.422758	89.660892	95.455937
POTAP_015	ANNABELLE	58.843815	82.74149	87.537373
POTAP_016	ANYA	63.923353	89.92991	98.354949
POTAP_017	ARGOS	72.750357	90.702675	98.963175
POTAP_018	ARIELLE	66.341745	84.861437	90.926231
POTAP_019	ARKULA	67.366239	89.333466	92.377485
POTAP_020	ARMADA	65.842359	89.406775	95.082302
POTAP_029	AVALANCHE	68.038683	81.953088	91.848666
POTAP_031	BAILLIE	65.297551	80.976885	87.636228
POTAP_032	BALMORAL	62.228443	78.502863	83.567259
POTAP_033	BAMBINO	71.038251	87.518602	88.375869
POTAP_034	BELLE DE FONTENAY	70.492098	90.744399	93.04301
POTAP_035	BENOL	63.617717	84.898645	86.105301
POTAP_036	BF 15	66.893209	85.908057	93.4925
POTAP_037	BINTJE	69.532268	87.636023	94.952961
POTAP_038	BIONICA EX SASA	69.630179	89.676473	98.449329
POTAP_040	BLUE DANUBE	71.730754	89.36174	96.121599
POTAP_041	BLUSH	64.03457	87.411882	93.846979
POTAP_042	BONNIE	69.258826	88.296975	95.359672
POTAP_043	BOUNTY	68.78771	86.568594	95.651311
POTAP_044	BRODICK	68.961964	87.478367	94.04128
POTAP_045	BRODIE	65.831021	86.983678	95.301287
POTAP_046	BUCHAN	60.789597	80.738964	87.254596
POTAP_047	BURREN	78.326367	98.942043	100.96208
POTAP_048	CABARET 1	71.105431	81.940009	91.756073
POTAP_049	CAESAR	69.047708	84.35027	90.036342
POTAP_050	CARA	78.900812	87.880222	89.715569
POTAP_051	CARLINGFORD	70.722997	92.072214	95.446286
POTAP_055	CASABLANCA	71.703027	88.046575	92.776965
POTAP_056	CELINE	71.74059	89.251626	93.19894
POTAP_057	CHALLENGER	65.896342	87.567685	93.832116
POTAP_058	CHARLOTTE	66.028038	81.729893	84.690752
POTAP_059	CHICAGO	64.957366	85.536986	90.195888
POTAP_060	CHIEFTAIN	68.517338	87.199396	89.125846

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_061	CHOPIN	67.224682	89.911706	93.634409
POTAP_062	CLARET	66.08013	88.001897	97.380622
POTAP_064	CORINE	71.128928	91.37153	99.619769
POTAP_065	COSMOS	66.604947	87.493064	94.53938
POTAP_066	COURAGE	68.576404	89.833273	97.893307
POTAP_067	COURLAN	70.388164	84.979136	94.073602
POTAP_068	CRAIGS ROYAL	66.222849	85.61856	92.887337
POTAP_069	CRAIGS SNOW-WHITE	69.957115	87.68775	96.777409
POTAP_070	CRAMOND	66.957249	85.204552	88.706667
POTAP_071	CRISPS FOR ALL	63.877053	80.684716	89.964261
POTAP_072	CROMWELL	63.182636	80.094654	85.099646
POTAP_073	DAISY	68.112484	88.621765	93.633749
POTAP_074	DARK RED NORLAND	74.579385	87.00195	92.540052
POTAP_075	DARWINA	70.768583	86.898811	95.87873
POTAP_077	DESIREE	69.074527	88.074331	95.418152
POTAP_078	DITTA	74.033781	87.945741	91.909649
POTAP_081	DR. MCINTOSH	66.573549	80.893216	87.535732
POTAP_082	DRAGA	61.092803	81.212585	86.86695
POTAP_083	DUKE OF YORK	68.616902	84.088294	92.938144
POTAP_084	DUNBAR STANDARD	67.324331	91.088495	96.430608
POTAP_085	DUNDROD	64.903691	86.059894	91.942838
POTAP_086	ECLIPSE	71.765848	89.917411	95.375884
POTAP_087	EDEN	70.864212	85.691137	97.462656
POTAP_088	EDZELL BLUE	69.282935	83.703139	95.009331
POTAP_089	EGINHIEMER	68.1735	91.855158	95.214016
POTAP_090	EMPEROR	68.970747	89.097974	87.974892
POTAP_091	EOS	70.901481	87.683617	94.66466
POTAP_092	EPICURE	66.241872	82.39586	82.980834
POTAP_094	ERNTESTOLZ	66.435978	85.375221	92.127597
POTAP_095	ESCORT	66.992145	88.767116	91.942765
POTAP_096	ESTIMA	71.405614	88.828655	94.003176
POTAP_098	EVE BALFOUR	62.36055	87.992454	98.74989
POTAP_099	EXCALIBUR	61.355507	81.931701	88.54662
POTAP_100	EXQUISA	63.796837	87.39957	90.394948
POTAP_101	FIANNA	66.060629	89.764728	94.631405
POTAP_102	FIFTYFOLD	71.198225	89.721431	93.750819
POTAP_103	FONTANE	69.411293	85.885348	94.407852
POTAP_104	FORTYFOLD	69.050387	87.543456	93.420002
POTAP_105	FRONTIER RUSSET	65.202351	87.327724	89.610859
POTAP_106	GEMSON	70.891586	89.048552	94.454341
POTAP_107	GLADIATOR	65.058194	84.711796	87.761693
POTAP_108	GLAMIS	63.562032	84.740751	91.59471

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_109	GLORIA	68.114989	88.515186	96.262586
POTAP_110	GOLDEN MILLENNIUM	64.065486	84.687778	88.87767
POTAP_111	GOLDEN NUGGET	71.485765	86.708746	94.362401
POTAP_112	GOLDEN WONDER	62.514166	82.61412	88.823282
POTAP_114	GRANOLA	66.835822	88.903925	90.88953
POTAP_115	HARBOROUGH HARVEST	73.609251	86.57962	93.110975
POTAP_116	HARLEQUIN	65.751688	87.162562	89.53066
POTAP_118	HERMES 1	66.430988	81.736928	86.568934
POTAP_119	HIGHLAND BUR. RED	72.396289	82.715516	95.234433
POTAP_120	HOME GUARD	68.449297	84.847967	97.587788
POTAP_121	HORIZON	67.154035	83.624338	94.728235
POTAP_123	INNOVATOR	66.08917	83.640658	89.11611
POTAP_124	INTERNATIONAL KIDNEY	70.818412	85.059801	89.336706
POTAP_125	ISLE OF JURA	67.835782	91.726801	98.057642
POTAP_129	JULIETTE	67.975549	85.322374	92.310429
POTAP_130	KARLENA	69.188243	93.685758	98.42754
POTAP_132	KERR'S PINK	64.92795	88.212118	95.040971
POTAP_133	KESTREL	67.844052	85.318116	91.108794
POTAP_134	KIFLI	64.506934	84.760236	89.924388
POTAP_135	KING EDWARD	61.47289	85.204087	91.852557
POTAP_136	KINGSTON	68.762105	88.767672	99.092454
POTAP_137	KIRRIE	67.708041	85.83445	90.616
POTAP_138	KUFRI CHANDRAMUKHI	74.914802	90.968625	92.612341
POTAP_139	KUFRI JYOTI	69.798862	85.834976	91.178877
POTAP_140	KURODA	68.767137	89.464786	94.147805
POTAP_141	LADY BALFOUR	69.476738	88.554458	94.708595
POTAP_142	LADY CHRISTL	70.155626	91.224454	94.786798
POTAP_143	LADY CLAIRE	62.756782	84.26463	97.48448
POTAP_144	LADY JO	67.775197	86.13832	94.361487
POTAP_145	LADY ROSETTA	69.564781	93.400391	97.999786
POTAP_147	LIBERTAS	70.94266	88.296975	95.27548
POTAP_148	LINDA	67.649337	91.234283	95.9883
POTAP_149	LINTON	71.223261	90.359652	95.115319
POTAP_150	LINZER DELIKATESS	68.819238	81.193089	92.683825
POTAP_151	LIONHEART	68.001715	82.547953	93.449521
POTAP_152	MADELEINE	68.239667	87.375107	92.949288
POTAP_153	MADINGLEY	66.457034	84.711579	90.123728
POTAP_154	MAJESTIC	59.81631	80.662249	85.830695
POTAP_155	MARABEL	68.218561	88.328795	95.388833
POTAP_157	MARFONA 1	68.677369	90.654408	96.989262
POTAP_159	MARILYN	66.870763	81.498898	87.239282
POTAP_160	MARIS ANCHOR	67.874049	89.21844	94.774862

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_161	MARIS BARD	72.851715	87.519173	97.162522
POTAP_162	MARIS PAGE	64.593471	87.709241	94.956466
POTAP_163	MARIS PEER	66.003311	87.328292	93.585789
POTAP_164	MARIS PIPER	64.062365	88.144553	92.123487
POTAP_165	MARKIES	69.915877	88.426408	95.324941
POTAP_166	MAXINE	61.632231	80.89584	87.63294
POTAP_167	MELODY	66.288713	87.616481	91.053412
POTAP_168	MIDAS	72.428689	90.230684	95.976575
POTAP_169	MILVA	72.439436	79.472812	81.38905
POTAP_170	MIMI	65.454533	90.335022	92.994641
POTAP_172	MIRA	67.083788	85.763527	89.463593
POTAP_173	MOIRA	70.626822	91.118681	90.771868
POTAP_175	MONTROSE	67.939475	84.618488	89.254822
POTAP_176	MORAG	70.34489	89.607393	93.487272
POTAP_177	MORENE	65.428294	84.242779	93.350995
POTAP_178	MOZART	67.768131	84.320084	88.442434
POTAP_180	MYATT'S ASHLEAF	66.647811	89.851092	95.396931
POTAP_181	NADINE	63.996656	83.491837	88.744491
POTAP_182	NAVAN	73.535695	90.235053	95.962219
POTAP_183	NICOLA	61.130737	84.100521	92.524415
POTAP_184	NOVELLA	69.257826	86.370922	93.852699
POTAP_185	OLYMPUS	71.656082	84.943856	89.547972
POTAP_186	OPERA	68.865629	87.682505	92.838481
POTAP_187	ORCHESTRA	64.170072	85.120026	89.821066
POTAP_188	ORIANA	70.063003	90.200926	95.695249
POTAP_190	OTHELLO	71.805401	95.920775	96.556347
POTAP_191	PALADIN	69.461562	84.71772	92.735072
POTAP_192	PANDA	60.394532	84.344561	91.136395
POTAP_193	PARAMOUNT	70.444857	90.708596	95.827864
POTAP_194	PATRONES	68.520103	90.903127	97.805911
POTAP_195	PENTLAND ACE	70.224859	82.062007	90.870061
POTAP_196	PENTLAND BEAUTY	62.810082	85.965249	88.340667
POTAP_197	PENTLAND CROWN	65.07607	92.327073	94.595996
POTAP_198	PENTLAND DELL 1	61.374669	84.627441	93.387745
POTAP_199	PENTLAND HAWK	72.721402	85.860617	93.541993
POTAP_200	PENTLAND IVORY	65.594129	83.379974	86.732746
POTAP_201	PENTLAND JAVELIN	69.57519	87.553454	92.815579
POTAP_202	PENTLAND MARBLE	61.285263	83.239568	87.586748
POTAP_203	PENTLAND SQUIRE	63.507156	87.364936	93.254017
POTAP_204	PEPO (1978)	67.397983	87.029785	90.202283
POTAP_206	PICASSO	66.171112	83.465803	92.621317
POTAP_207	PIMPERNEL	74.416211	92.394474	98.582708

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_208	PIONEER	63.509582	82.615597	83.454969
POTAP_209	PIXIE	63.129954	83.034796	85.955493
POTAP_210	PREMIERE	66.577097	84.461445	88.571494
POTAP_211	PRODUCENT	78.088358	91.712414	94.31025
POTAP_212	PROVOST	64.656244	87.875538	95.648485
POTAP_213	R.P.LUSTRE	68.285704	86.57663	94.762588
POTAP_214	RANGER RUSSET	71.522153	93.465362	96.535546
POTAP_215	RATTE	69.075274	87.906216	95.506952
POTAP_216	RECORD	63.408108	82.291956	91.138292
POTAP_219	REMBRANDT	70.892482	87.901658	94.612946
POTAP_220	RIO ROJO	66.586287	85.361725	91.340845
POTAP_222	ROBIJN	65.627393	85.619774	93.108711
POTAP_223	ROCKET	67.111859	85.938045	93.862858
POTAP_224	RODE STAR	68.810326	84.306445	94.794809
POTAP_225	ROMANO	63.112835	88.212783	95.27548
POTAP_226	ROOSTER	66.369672	88.080565	99.18953
POTAP_227	ROYAL	68.927982	87.552102	96.115036
POTAP_228	RUBESSE	66.720046	86.359189	91.078643
POTAP_230	RUSSET BURBANK	64.203733	91.846155	96.691902
POTAP_231	RUSSET NORKOTAH	61.552902	83.801658	87.778537
POTAP_232	ROYAL KIDNEY	65.841076	81.15651	83.665048
POTAP_233	SAFARI	63.704069	84.760118	84.531519
POTAP_234	SANTANA	69.160512	87.071129	88.96575
POTAP_235	SANTE	71.068041	85.456195	95.431321
POTAP_236	SAPPHIRE	70.596138	87.990328	93.717941
POTAP_237	SARPO MIRA	70.682867	88.403388	96.552438
POTAP_238	SARPO SHONA	65.418977	84.292139	84.521658
POTAP_239	SASSY	65.754597	92.621079	92.340887
POTAP_240	SATURNA	65.505079	85.919734	89.522434
POTAP_241	SAVA	69.879126	88.800225	94.185563
POTAP_242	SAXON	66.663133	79.345219	84.6827
POTAP_243	SCARBOROUGH	65.055165	84.394914	89.211319
POTAP_245	SEFTON WONDER	68.295464	83.099426	84.895854
POTAP_246	SERAFINA	66.027926	86.876527	94.387785
POTAP_247	SETANTA	73.545269	87.820448	94.607609
POTAP_248	SHARPE'S EXPRESS	65.470851	85.67445	91.472089
POTAP_249	SHELAGH	65.139346	86.58846	92.283264
POTAP_250	SHELFORD	60.747783	67.856736	69.274259
POTAP_251	SHEPODY 1	71.938837	82.608971	86.608384
POTAP_252	SHERIFF	62.775989	80.591874	85.780458
POTAP_253	SHET. BLACK SASA08	67.216527	88.149145	96.025155
POTAP_254	SHULA	63.408121	86.401243	93.672818

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_256	SLANEY	64.880592	83.383195	89.683447
POTAP_257	SMITHS COMET	63.651191	89.45441	95.030791
POTAP_258	SOFIA	64.538942	85.785364	90.142823
POTAP_259	SPEY	69.640775	88.185227	94.09942
POTAP_260	SPUNTA	70.529915	86.506917	94.4374
POTAP_261	STAMINA	69.429852	89.225258	95.302715
POTAP_262	STEMSTER	61.278544	81.650427	86.590045
POTAP_263	STIRLING	65.711639	84.253875	86.987175
POTAP_264	STORMONT ENTERPRISE	72.597184	85.836187	95.123565
POTAP_266	SYLVANA	66.620922	85.792283	90.273025
POTAP_267	TAY	69.14149	78.825179	92.771097
POTAP_268	TEENA	64.242157	80.642928	86.915462
POTAP_269	TIMATE	68.840983	90.186771	94.968048
POTAP_270	TOLUCA	71.814274	88.360196	96.254947
POTAP_272	TORRIDON	67.704629	87.694562	93.652301
POTAP_274	ULSTER SCEPTRE	67.639967	86.158473	92.630237
POTAP_275	UMATILLA RUSSET	67.351097	85.93256	87.933886
POTAP_276	VALES EMERALD	69.676786	86.968424	94.248644
POTAP_277	VALES EVEREST	68.816597	88.890771	96.851018
POTAP_278	VALES RUSSET	67.05564	85.056974	88.216039
POTAP_279	VALES SOVEREIGN	68.849999	86.139812	92.568412
POTAP_280	VALOR	70.724045	88.174829	92.19595
POTAP_281	VAN GOGH	72.36884	88.481077	95.749854
POTAP_282	VANTAGE	68.672596	85.922611	88.906819
POTAP_283	VERDI	65.363938	83.348393	88.522675
POTAP_284	VICTORIA	72.660161	85.90296	93.150506
POTAP_285	VIVALDI	71.468153	90.130966	96.550206
POTAP_286	WILJA 1	69.948597	86.315384	94.051058
POTAP_287	WINSTON	65.293871	83.194525	88.50344
POTAP_288	YUKON GOLD	71.361664	90.612257	94.036957
POTAP_289	ZORBA	73.509608	88.575212	94.283738
POTAP_290	00C133-020	68.246139	90.200225	93.166804
POTAP_292	02M 012-001	62.512228	79.662404	83.572098
POTAP_294	2182EF(7)	72.292322	88.326419	91.01191
POTAP_297	3681AD(1)	72.104787	92.324861	95.578782
POTAP_298	5008AB(6)	70.934738	86.308547	94.046268
POTAP_299	8204 A 4	63.293893	86.905113	88.104654
POTAP_300	12288 AF 23	69.941043	87.164787	96.355955
POTAP_301	12601AB1	62.972157	80.178846	84.847071
POTAP_302	1236A2	67.166527	86.450624	92.874627
POTAP_303	15119 AC 5	72.354819	92.140137	96.001519
POTAP_304	1512C(16)	68.033165	89.20701	96.265609

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_305	15144 A 3	73.482018	90.402283	99.985086
POTAP_306	1563C(14)	68.925695	89.291706	95.11419
POTAP_307	D22/1	67.669902	87.207683	95.478401
POTAP_308	D23/3	67.913973	83.653803	89.56256
POTAP_309	D47-11	74.132616	89.980891	98.252749
POTAP_310	D49/1	63.737022	84.979136	87.675036
POTAP_311	G.8107(1)	66.3573	86.753969	91.910436
POTAP_312	G.8866(1)	67.664179	87.959543	96.219655
POTAP_313	G.8866(11)	74.082581	83.748127	89.470737
POTAP_314	G.8867(15)	67.392773	86.225706	93.294422
POTAP_315	G.8867Y%12	70.729405	91.409883	96.886781
POTAP_316	G.8883(9)	67.534815	92.547745	95.655834
POTAP_317	G.8884(2)	65.480825	78.605749	82.071284
POTAP_318	GL.76B/102	65.245586	84.71835	88.82896
POTAP_319	GL.76B/94	71.474636	85.928506	94.932763
POTAP_320	GL.77/58	66.461638	88.400032	90.589809
POTAP_321	GL.77M/106	71.270652	88.942858	93.776336
POTAP_322	GL.78/166	69.723605	82.682325	90.946227
POTAP_323	GL.78/53	65.57886	86.652347	93.335841
POTAP_324	GL.78/97	69.3509	87.429147	93.21909
POTAP_325	GL.79/42	63.806712	82.301141	91.246131
POTAP_326	GL.79/45	56.068009	80.650011	80.464917
POTAP_327	GL.81 NT 25	67.894309	86.733522	90.070402
POTAP_328	H1H3 (101)	73.61639	94.246691	98.961571
POTAP_330	H1H3 (3)	71.102183	86.785765	95.559229
POTAP_332	XD2-21	69.824748	87.294251	97.529624
POTAP_333	NDTX 4271 5-R	61.728609	81.897719	87.903788
POTAP_336	04C 126-005	64.406307	82.816612	86.431401
POTAP_337	BARNA	61.921235	86.393404	91.460356
POTAP_338	BRITISH QUEEN	66.0518	84.423049	89.325309
POTAP_339	ELISABETH	62.74573	80.167764	87.317691
POTAP_340	ESMERALDA	70.470675	93.651824	97.482271
POTAP_341	FESTIVAL	75.396756	86.400211	88.705498
POTAP_343	GALACTICA	71.753156	84.822179	89.746815
POTAP_345	MEGARA	66.709557	85.896955	91.25547
POTAP_346	ROMEO	71.441742	86.231515	91.000899
POTAP_348	01C 071-002	66.018263	87.199592	93.101329
POTAP_349	06C 127-002	59.672027	89.157267	93.253733
POTAP_350	03M 016-002	66.826904	85.22743	91.231484
POTAP_351	03M 034-002	66.423584	90.205765	94.945884
POTAP_352	04M 034-013	71.29005	87.193299	90.237876
POTAP_353	05M 002-001	63.71035	84.160443	92.365089

2013 (Year1)		Percentage starch digested		
clone_ID	genotype	time_10	time_20	time_60
POTAP_354	05M 004-003	64.676124	82.660237	87.443848
POTAP_355	05M 004-008	69.188768	88.612704	95.408717
POTAP_356	05M 012-004	65.751455	85.006451	92.94329
POTAP_357	04C 055-004	69.843635	88.951707	97.516279

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_004	AGRIA	45.86735908	61.8416251	65.44338965
POTAP_005	AILSA	47.29992727	63.06790761	71.58781026
POTAP_008	ALMERA	51.79363486	72.63470104	76.32030958
POTAP_009	ALPHA	44.72715561	62.9826032	72.77507317
POTAP_010	ALWARA	46.54622214	63.05933048	70.97940958
POTAP_011	AMADRA	45.29140882	61.62018426	67.27503288
POTAP_013	AMOUR	46.93483147	63.90984994	69.03680158
POTAP_014	ANNA	47.30305685	62.578778	68.19357754
POTAP_015	ANNABELLE	46.99823978	60.90844972	68.88096089
POTAP_016	ANYA	43.83844667	59.97957438	70.54519639
POTAP_017	ARGOS	45.90756415	62.60230511	69.00177261
POTAP_018	ARIELLE	45.87323745	65.46704201	70.5595703
POTAP_019	ARKULA	49.00822428	65.59311526	71.73366941
POTAP_020	ARMADA	48.94299833	68.8915821	75.92729104
POTAP_029	AVALANCHE	46.13913646	58.69768271	65.11062793
POTAP_031	BAILLIE	46.99242001	64.79457205	68.34626755
POTAP_032	BALMORAL	47.28948194	65.66395193	70.23438992
POTAP_033	BAMBINO	45.73925785	60.91061298	68.85868275
POTAP_034	BELLE DE FONTENAY	44.8678588	63.12866659	71.31219629
POTAP_035	BENOL	46.88143544	62.30210585	68.67555502
POTAP_036	BF 15	48.05922998	63.66974386	70.36490251
POTAP_037	BINTJE	40.37617026	54.83639646	62.77755763
POTAP_038	BIONICA EX SASA	46.87879395	62.05876007	67.7386552
POTAP_040	BLUE DANUBE	47.00215561	63.2776032	67.60007317
POTAP_041	BLUSH	41.36363486	58.35470104	63.12030958
POTAP_042	BONNIE	48.4625931	63.79321995	69.63229554
POTAP_043	BOUNTY	49.17807534	63.85116901	69.40614406
POTAP_044	BRODICK	43.90873068	63.4040237	69.47077056
POTAP_045	BRODIE	48.69750474	63.00426852	70.2989567
POTAP_046	BUCHAN	51.45731896	65.62294642	71.13280319
POTAP_047	BURREN	47.01357802	64.30693339	68.81851345
POTAP_048	CABARET 1	46.55029087	62.58081677	69.05900466
POTAP_049	CAESAR	48.7382376	65.82779374	69.01735623
POTAP_050	CARA	49.74974431	62.56289099	69.94490751
POTAP_051	CARLINGFORD	46.79273727	64.47778853	68.65477798
POTAP_055	CASABLANCA	48.62460486	61.18428135	68.94967133

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_056	CELINE	36.14869124	55.02442922	64.54779451
POTAP_057	CHALLENGER	46.83750474	62.04426852	66.8739567
POTAP_058	CHARLOTTE	44.69424921	61.34757654	65.63522956
POTAP_059	CHICAGO	48.57428948	62.56109722	70.56678381
POTAP_060	CHIEFTAIN	48.27622214	65.03933048	71.07940958
POTAP_061	CHOPIN	47.92502437	64.05214336	69.09593076
POTAP_062	CLARET	42.04982764	58.34171914	62.81704773
POTAP_064	CORINE	48.76454808	66.29878361	72.11958259
POTAP_065	COSMOS	50.54667835	64.82334094	67.02573787
POTAP_066	COURAGE	42.28395326	62.80541691	70.63538483
POTAP_067	COURLAN	44.32129207	58.35799108	62.50955479
POTAP_068	CRAIGS ROYAL	45.96107144	60.01034978	66.74164808
POTAP_069	CRAIGS SNOW-WHITE	45.75288356	62.51149034	66.37445722
POTAP_070	CRAMOND	46.28231896	61.96294642	68.26280319
POTAP_071	CRISPS FOR ALL	44.13399772	62.91214103	68.48700193
POTAP_072	CROMWELL	42.16310478	59.39895239	64.99115964
POTAP_073	DAISY	48.09998431	64.52815378	71.41497728
POTAP_074	DARK RED NORLAND	47.00423269	60.9621768	71.18093273
POTAP_075	DARWINA	45.34395326	61.98541691	69.33038483
POTAP_077	DESIREE	48.00444232	65.56563281	68.85053062
POTAP_078	DITTA	47.68059143	61.95042435	64.27122085
POTAP_081	DR. MCINTOSH	47.59112175	65.56026959	69.81471584
POTAP_082	DRAGA	36.98617026	51.08639646	58.77755763
POTAP_083	DUKE OF YORK	48.03476271	64.47407823	72.50913762
POTAP_084	DUNBAR STANDARD	46.31576114	61.72685751	70.50113874
POTAP_085	DUNDROD	47.14340239	61.45019589	67.23080833
POTAP_086	ECLIPSE	44.43450323	62.16646434	67.66628197
POTAP_087	EDEN	46.25379395	61.83876007	66.6586552
POTAP_088	EDZELL BLUE	45.82277517	63.5436342	68.49108994
POTAP_089	EGINHIEMER	45.6750301	61.62811601	67.74729217
POTAP_090	EMPEROR	43.14516276	59.76169385	66.5722029
POTAP_091	EOS	47.30867051	63.72792756	68.39024495
POTAP_092	EPICURE	48.18986786	61.42987102	67.25999435
POTAP_094	ERNTSTOLZ	46.18083586	65.3373033	71.37126804
POTAP_095	ESCORT	46.09630018	62.75901537	70.31732758
POTAP_096	ESTIMA	39.73288438	60.767734	67.06656682
POTAP_098	EVE BALFOUR	42.03935247	60.4303824	63.37355883
POTAP_099	EXCALIBUR	47.50425026	64.80546541	69.40590761
POTAP_100	EXQUISA	45.68359952	62.91659878	67.51054079
POTAP_101	FIANNA	45.71269592	61.44299707	66.51906893
POTAP_102	FIFTYFOLD	46.9971401	63.79322963	68.20723974
POTAP_103	FONTANE	46.46455631	61.57689173	66.54127968
POTAP_104	FORTYFOLD	47.03220284	63.42676711	70.0406546
POTAP_105	FRONTIER RUSSET	48.36179615	68.27326343	78.85439524

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_106	GEMSON	48.95020267	65.39445126	73.2122111
POTAP_107	GLADIATOR	46.87674852	59.80863186	66.46216111
POTAP_108	GLAMIS	46.1454633	62.31740208	70.13123679
POTAP_109	GLORIA	46.68607144	63.09034978	67.32164808
POTAP_110	GOLDEN MILLENNIUM	40.864543	62.6730194	68.264894
POTAP_111	GOLDEN NUGGET	47.59444232	63.13563281	68.10053062
POTAP_114	GRANOLA	45.12269592	60.28799707	66.74906893
POTAP_115	HARBOROUGH HARVEST	46.54788356	60.72649034	68.10945722
POTAP_116	HARLEQUIN	44.60098795	62.08669619	66.90944909
POTAP_118	HERMES 1	44.2949354	61.34686278	67.19394496
POTAP_119	HIGHLAND BUR. RED	45.9179653	63.38045042	69.19415962
POTAP_120	HOME GUARD	48.7678588	64.96366659	71.79719629
POTAP_121	HORIZON	45.67787283	62.48070292	67.81764346
POTAP_123	INNOVATOR	44.02797866	62.2527074	67.85693393
POTAP_124	INTERNATIONAL KIDNEY	44.43691942	62.40749423	68.08231733
POTAP_125	ISLE OF JURA	49.09005486	64.69093976	68.8695531
POTAP_129	JULIETTE	47.80299046	63.35388661	69.08690964
POTAP_130	KARLENA	49.79847667	64.33842816	68.77301822
POTAP_132	KERR'S PINK	49.38823745	64.04704201	69.3345703
POTAP_133	KESTREL	47.756449	66.44434037	69.89690904
POTAP_134	KIFLI	49.15679615	63.99326343	70.20439524
POTAP_135	KING EDWARD	48.72193792	66.60177199	74.0518592
POTAP_136	KINGSTON	42.86926043	59.92685466	66.50784482
POTAP_137	KIRRIE	42.47774235	60.04038383	67.22221336
POTAP_138	KUFRI CHANDRAMUKHI	47.16077311	63.56876582	68.32285318
POTAP_139	KUFRI JYOTI	44.0929653	61.06045042	65.87415962
POTAP_140	KURODA	40.13273505	54.99999043	62.90802844
POTAP_141	LADY BALFOUR	44.43774235	63.37538383	68.50221336
POTAP_142	LADY CHRISTL	43.52923652	61.4603076	66.81068658
POTAP_143	LADY CLAIRE	47.15135032	63.40308961	68.70569997
POTAP_144	LADY JO	46.35171126	64.77098103	72.11016082
POTAP_145	LADY ROSETTA	47.17858046	64.42314778	69.56046314
POTAP_147	LIBERTAS	41.07882906	58.02955841	61.66434845
POTAP_148	LINDA	43.77923269	62.1171768	65.32593273
POTAP_149	LINTON	44.08800343	62.00544716	66.95066441
POTAP_150	LINZER DELIKATESS	50.00944232	64.65063281	68.78053062
POTAP_151	LIONHEART	46.11830077	61.43237888	68.63741898
POTAP_152	MADELEINE	45.29369404	55.93356617	65.10554137
POTAP_153	MADINGLEY	46.99145832	61.06943946	65.61716542
POTAP_154	MAJESTIC	48.13751672	62.71617684	68.04567115
POTAP_155	MARABEL	46.83250821	63.76093755	68.25306111
POTAP_157	MARFONA 1	45.48604476	64.78932151	70.69072791
POTAP_159	MARILYN	44.86300343	63.15044716	68.45066441
POTAP_160	MARIS ANCHOR	49.3410235	68.42079657	73.93165633

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_161	MARIS BARD	49.86487534	67.18789334	71.365104
POTAP_162	MARIS PAGE	44.21869124	62.29942922	66.61779451
POTAP_163	MARIS PEER	43.08987458	54.29796954	57.47858495
POTAP_164	MARIS PIPER	47.08542446	63.80710585	69.08680809
POTAP_165	MARKIES	50.45171719	65.09780064	70.97595828
POTAP_166	MAXINE	44.60737555	60.33784793	68.57465046
POTAP_167	MELODY	48.28482764	65.82171914	69.32204773
POTAP_168	MIDAS	49.52867363	62.52877753	71.67360354
POTAP_169	MILVA	44.71964913	62.55865984	67.18405938
POTAP_170	MIMI	47.1882376	64.51779374	67.42235623
POTAP_172	MIRA	48.81797866	66.1827074	71.28693393
POTAP_173	MOIRA	45.27505686	61.51422192	65.58009877
POTAP_175	MONTROSE	43.79725535	60.15842256	65.6862222
POTAP_176	MORAG	42.85130018	65.69401537	70.69232758
POTAP_177	MORENE	46.76088607	63.21097869	67.25291463
POTAP_178	MOZART	47.73809995	63.09439912	68.75568039
POTAP_180	MYATT'S ASHLEAF	46.05864678	62.49770511	69.04617742
POTAP_181	NADINE	43.40602081	58.52550489	60.10729903
POTAP_182	NAVAN	48.60659329	64.64690273	70.43502131
POTAP_183	NICOLA	45.51823978	62.32844972	67.71096089
POTAP_184	NOVELLA	49.05133381	64.45928884	69.44716567
POTAP_185	OLYMPUS	47.50939309	60.76494428	64.55625548
POTAP_186	OPERA	46.61347667	64.23342816	68.16801822
POTAP_187	ORCHESTRA	50.64364513	63.97227517	66.00450905
POTAP_188	ORIANA	47.79912197	62.03339402	66.67343706
POTAP_190	OTHELLO	50.001449	66.85934037	69.30190904
POTAP_191	PALADIN	48.12181206	66.54825759	71.74200946
POTAP_192	PANDA	46.85343456	64.46095228	68.60268573
POTAP_193	PARAMOUNT	49.19054126	62.89284752	69.1978078
POTAP_194	PATRONES	46.3178588	63.98366659	70.88219629
POTAP_195	PENTLAND ACE	43.25098795	60.60669619	67.36944909
POTAP_196	PENTLAND BEAUTY	48.97528727	66.48420262	71.08900269
POTAP_197	PENTLAND CROWN	45.16153865	59.01562212	66.97181596
POTAP_198	PENTLAND DELL 1	52.07424921	67.44757654	71.31522956
POTAP_199	PENTLAND HAWK	50.16530725	63.17625267	67.39390192
POTAP_200	PENTLAND IVORY	47.14298249	67.27583821	70.99168778
POTAP_201	PENTLAND JAVELIN	47.85751672	63.89617684	67.40067115
POTAP_202	PENTLAND MARBLE	43.30617026	60.14639646	64.16755763
POTAP_203	PENTLAND SQUIRE	47.73213409	68.09815317	74.9930584
POTAP_204	PEPO (1978)	44.59216526	59.92888427	67.82466345
POTAP_206	PICASSO	46.69981895	63.28358002	65.99896203
POTAP_207	PIMPERNEL	48.90371969	67.18999106	72.26841883
POTAP_208	PIONEER	45.19767608	59.54690589	63.49307617
POTAP_209	PIXIE	53.33220284	65.16176711	71.8456546

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_210	PREMIERE	40.89262147	58.06457205	63.0229502
POTAP_211	PRODUCENT	51.04671937	65.56823303	66.81467847
POTAP_212	PROVOST	46.85406257	65.11535744	69.34562116
POTAP_213	R.P.LUSTRE	47.95441314	64.45113492	69.95403497
POTAP_214	RANGER RUSSET	45.47797866	64.4927074	67.75693393
POTAP_215	RATTE	51.82590198	70.70847312	72.64086644
POTAP_216	RECORD	46.87603977	64.50504084	69.56605437
POTAP_219	REMBRANDT	43.37760732	58.19613417	66.17041221
POTAP_220	RIO ROJO	49.53530725	66.13625267	69.63890192
POTAP_222	ROBIJN	55.25596043	70.06891849	72.5248044
POTAP_223	ROCKET	51.41361423	64.55574094	71.52078763
POTAP_224	RODE STAR	41.23971406	62.23630076	68.4269695
POTAP_225	ROMANO	50.51810478	65.88395239	73.94615964
POTAP_226	ROOSTER	47.14073597	65.02842133	69.92338872
POTAP_227	ROYAL	47.07519069	63.68754295	69.04549665
POTAP_228	RUBESSE	45.75250821	61.06593755	65.72306111
POTAP_230	RUSSET BURBANK	41.47047945	55.42956308	64.59884083
POTAP_231	RUSSET NORKOTAH	50.21363486	68.26470104	73.83030958
POTAP_232	ROYAL KIDNEY	46.05737555	65.41284793	69.25965046
POTAP_233	SAFARI	46.82615437	63.14378603	69.51021526
POTAP_234	SANTANA	46.16287283	61.17570292	65.22264346
POTAP_235	SANTE	47.76941314	66.18613492	73.20903497
POTAP_236	SAPHIRE	44.12576114	61.75185751	66.08613874
POTAP_237	SARPO MIRA	44.43528502	58.72649204	63.08760924
POTAP_238	SARPO SHONA	44.53862248	58.85365751	65.91013055
POTAP_239	SASSY	45.529021	61.39860615	65.95419578
POTAP_240	SATURNA	47.96027889	62.26890846	67.20229022
POTAP_241	SAVA	47.54987458	63.50796954	67.68858495
POTAP_242	SAXON	47.1699801	62.41276487	66.98654271
POTAP_243	SCARBOROUGH	47.30963103	61.82733752	66.79640898
POTAP_245	SEFTON WONDER	45.78943163	60.89050085	68.42459966
POTAP_246	SERAFINA	47.33780176	63.15842042	69.31002926
POTAP_247	SETANTA	47.54635032	63.85808961	66.33569997
POTAP_248	SHARPE'S EXPRESS	51.21408592	63.71850653	69.32879549
POTAP_249	SHELAGH	49.8260647	64.27419138	67.48907047
POTAP_250	SHELFORD	48.84980447	64.82890901	69.35074996
POTAP_251	SHEPODY 1	44.62956816	60.30410525	64.05419209
POTAP_252	SHERIFF	51.45016276	67.57169385	72.6422029
POTAP_253	SHET. BLACK SASA08	47.89310478	65.91395239	74.47615964
POTAP_254	SHULA	42.67574795	58.84532964	63.02010317
POTAP_256	SLANEY	49.38035362	61.17435424	66.99741951
POTAP_257	SMITHS COMET	49.58485017	63.85445715	71.72235399
POTAP_258	SOFIA	48.62648974	64.04933111	69.01078363
POTAP_259	SPEY	47.67361423	62.21074094	68.36078763

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_260	SPUNTA	45.37944232	59.57563281	67.27053062
POTAP_261	STAMINA	48.9950301	64.80811601	70.64729217
POTAP_262	STEMSTER	46.44618504	62.3800751	67.61175187
POTAP_263	STIRLING	46.36707311	61.58705116	65.40952252
POTAP_264	STORMONT ENTERPRISE	48.16950323	64.75146434	70.32128197
POTAP_266	SYLVANA	49.74528502	65.12649204	69.42260924
POTAP_267	TAY	51.68757719	67.17019355	70.07856214
POTAP_268	TEENA	47.26836333	63.8564898	69.20278496
POTAP_269	TIMATE	48.84305685	64.728778	69.98857754
POTAP_270	TOLUCA	46.82399624	61.1557824	65.03693485
POTAP_272	TORRIDON	45.22873068	56.6890237	63.33077056
POTAP_274	ULSTER SCEPTRE	43.99656853	61.36407898	67.55276038
POTAP_275	UMATILLA RUSSET	50.87122932	65.5194536	69.37613993
POTAP_276	VALES EMERALD	46.56899624	62.5257824	68.39193485
POTAP_277	VALES EVEREST	46.33773089	64.0342557	69.30670188
POTAP_278	VALES RUSSET	48.07255381	65.91814545	70.1215343
POTAP_279	VALES SOVEREIGN	47.74390669	65.13303653	70.34300078
POTAP_280	VALOR	42.83967362	59.92005307	67.56733529
POTAP_281	VAN GOGH	45.47211757	60.12877528	67.14613961
POTAP_282	VANTAGE	47.52756566	61.28926517	68.09018347
POTAP_283	VERDI	48.37005686	63.18922192	67.80009877
POTAP_284	VICTORIA	44.88055991	60.49243588	68.69015919
POTAP_285	VIVALDI	49.00159481	66.14456971	70.20902137
POTAP_286	WILJA 1	46.22408592	62.61350653	68.12379549
POTAP_287	WINSTON	48.8458107	64.65386712	71.44851802
POTAP_288	YUKON GOLD	47.40773089	66.5092557	71.11170188
POTAP_289	ZORBA	48.13712812	62.36132132	74.1055253
POTAP_290	00C133-020	48.46603977	66.77504084	74.71105437
POTAP_292	02M 012-001	48.82093515	63.25591939	65.95703058
POTAP_294	2182EF(7)	43.39369453	64.48155488	70.55066881
POTAP_297	3681AD(1)	46.43799833	59.9315821	65.12229104
POTAP_298	5008AB(6)	47.50869124	65.43442922	72.95279451
POTAP_299	8204 A 4	46.46742697	63.51429627	69.36426864
POTAP_300	12288 AF 23	46.04174852	61.36863186	67.22716111
POTAP_301	12601AB1	45.06364295	62.1795743	68.01142357
POTAP_302	12636 A 2	46.10668302	62.10593522	70.62581493
POTAP_303	15119 AC 5	51.41083586	72.4073033	81.06126804
POTAP_304	1512C(16)	48.70917057	63.40170728	70.18208661
POTAP_305	15144 A 3	46.4079653	62.96545042	67.03415962
POTAP_306	1563C(14)	50.22277517	64.6786342	69.46108994
POTAP_307	D22/1	45.68814423	63.85877761	66.71506845
POTAP_308	D23/3	48.6774018	66.74586008	72.93651862
POTAP_309	D47-11	45.60105298	62.85866584	68.46357353
POTAP_310	D49/1	48.55390669	64.95803653	69.74800078

2014 (Year2)		Percentage starch digested		
clone_ID	genotype	time_10_yr2	time_20_yr2	time_60_yr2
POTAP_311	G.8107(1)	45.53155035	64.14784559	72.00740427
POTAP_312	G.8866(1)	47.29648319	63.76312405	66.92192264
POTAP_313	G.8866(11)	46.40782652	60.55624417	65.9522902
POTAP_314	G.8867(15)	47.72492727	61.94790761	67.02781026
POTAP_315	G.8867Y%12	48.96596043	66.19391849	70.2248044
POTAP_316	G.8883(9)	48.23944232	66.86063281	70.90553062
POTAP_317	G.8884(2)	46.55466978	63.71192226	70.44758144
POTAP_318	GL.76B/102	46.19606087	63.10106058	66.98431662
POTAP_319	GL.76B/94	47.57419292	66.80297207	71.74077263
POTAP_320	GL.77/58	46.50487847	61.60494785	64.66315336
POTAP_321	GL.77M/106	45.62140882	63.26018426	66.17503288
POTAP_322	GL.78/166	46.66805685	59.173778	65.49857754
POTAP_323	GL.78/53	45.48064922	66.57412788	69.58730967
POTAP_324	GL.78/97	47.83185652	64.28498171	68.59862656
POTAP_325	GL.79/42	49.89622214	62.85933048	70.16440958
POTAP_326	GL.79/45	42.25828921	60.39075617	65.14657952
POTAP_327	GL.81 NT 25	47.79257613	61.08921342	68.11848705
POTAP_328	H1H3 (101)	47.55133092	62.23796367	66.74950372
POTAP_330	H1H3 (3)	45.4478588	61.08866659	70.05219629
POTAP_332	XD2-21	44.68015821	61.74772714	67.890594
POTAP_333	NDTX 4271 5-R	48.86505686	64.74922192	68.18509877
POTAP_336	04C 126-005	51.47533155	64.58358112	69.00839075
POTAP_337	BARNA	45.49805685	63.358778	69.23857754
POTAP_338	BRITISH QUEEN	47.46225918	63.24655337	70.34097605
POTAP_339	ELISABETH	45.30554126	62.49784752	68.4278078
POTAP_340	ESMERALDA	44.28044512	57.8839995	64.33346899
POTAP_341	FESTIVAL	45.56624232	61.24235715	68.37449056
POTAP_343	GALACTICA	50.14593653	65.77038308	70.4185906
POTAP_345	MEGARA	49.91966978	65.79692226	70.84258144
POTAP_346	ROMEO	47.1558107	61.77386712	68.31851802
POTAP_348	01C 071-002	49.19262927	66.61643869	72.44831253
POTAP_349	06C 127-002	43.40057966	61.30704638	67.25930303
POTAP_350	03M 016-002	45.63671071	64.71975236	70.49151423
POTAP_351	03M 034-002	47.33153865	65.51562212	71.44681596
POTAP_352	04M 034-013	46.12483147	63.85984994	77.13180158
POTAP_353	05M 002-001	47.34869453	62.54155488	66.65066881
POTAP_354	05M 004-003	48.21763887	64.3527509	72.02190191
POTAP_355	05M 004-008	45.15288356	61.19649034	65.64445722
POTAP_356	05M 012-004	47.10220578	63.50014078	69.81793317
POTAP_357	04C 055-004	46.02949103	59.23853743	61.67741557