S3 Table Haplotypes of the accessions identified in this study

PI	CommonName	Species	MATGROUP	Country	Origin_State_Province	latitude	longitude	Haplotype
FC33243	Anderson	G. max	IV	Unknown	Iowa	41.56	-93.5	H1
PI123440	No. 2	G. max	VI	Myanmar		19.71	95.37	H1
PI153262	Roumanie	G. max	0	Belgium	Belgium	40.38	116.39	H1
PI180501	Strain No. 18	G. max	0	Germany		52.51	13.41	H1
PI196166	No. 2296	G. max	V	Korea, South	Korea	35.87	128.68	H1
PI200508	Natsu Daizu	G. max	I	Japan	Shikoku	33.74	133.66	H1
PI209332	No. 4	G. max	IV	Japan	Hokkaido	43.46	142.61	H1
PI243541	Shakujo	G. max	IV	Japan	Akita	39.57	140.42	H1
PI248515	White Hilum Iwata	G. max	IV	Japan	Northern part of H	36.12	138.12	H1
PI253658B	No. 9	G. max	I	China	China	40.38	116.39	H1
PI317336	Shinsei	G. max	0	Japan	Hokkaido	43.46	142.61	H1
PI398881	KLS 126-1	G. max	III	Korea, South	Kyonggi	37	127	H1
PI399043	KLS 903	G. max	III	Korea, South	Cheju	33.4	126.55	H1
PI404188A	Huaj an si er dian	G. max	II	China	N/A	40.38	116.39	H1
PI407716	Jin nung No. 3	G. max	I	China	Jilin	44.23	126	H1
PI407849	KAS 510-1	G. max	III	Korea, South	Cholla Puk	35.95	126.96	H1
PI408105A	KAS 633-19	G. max	IV	Korea, South	Kyongsang Puk	36.08	129.36	H1
PI416937	Houjaku Kuwazu	G. max	VI	Japan	Kanto and Tosan re	36	139	H1
PI416971	Kaifuu gyuumou ou	G. max	IV	Japan	Kinki	34.7	135.5	H1
PI437169B	(VNIISC-4)	G. max	II	Russian Federation	Krasnodar	45.1	39.27	H1
PI437655	Er-huan-jan	G. max	III	China		40.38	116.39	H1
PI437725	Te-zu-gan	G. max	IV	China		40.38	116.39	H1
PI437863A	DV-2841	G. max	II	China	Northeast	40.38	116.39	H1
PI438471	Fiskeby III	G. max	0	Sweden	Ostergotland	58.4	15.66	H1
PI467343	Yan-nong No. 2	G. max	I	China	Jilin	44.23	126	H1
PI471938	197	G. max	V	Nepal	Jumia	28.13	84.14	H1
PI475783B	(Tsing 2)	G. max	III	China	Shanxi	37.33	111.83	H1
PI483252	Doko	G. max	IX	Brazil		-14	-50	H1
PI495017C	(Beijing da qing dor	G. max	IV	China	Beijing	40.38	116.39	H1
PI507354	Tokei 421	G. max	I	Japan	Hokkaido	43.46	142.61	H1
PI507355	Tokei 423	G. max	I	Japan	Hokkaido	43.46	142.61	H1
PI507681B	(Jangiabad)	G. max	II	Uzbekistan	N/A	41.31	69.25	H1
PI508083	Dassel	G. max	0	United States	Minnesota	45.18	-93.36	H1
PI508266	Young	G. max	VI	United States	North Carolina	35.22	-80.76	H1
PI513382	Glenwood	G. max	0	United States	Minnesota	45.18	-93.36	H1
PI515961	Pennyrile	G. max	IV	United States	Kentucky	38.2	-85.76	H1
PI518703	He feng 25	G. max	I	China	Heilongjiang	46.83	130.35	H1
PI518711	Jilin 21	G. max	II	China	Jilin	43.51	124.81	H1
PI518751	NS-20	G. max	II	Former Serbia and	N/A	44.02	21.15	H1
PI533655	Burlison	G. max	II	United States	Illinois	39.76	-89.57	H1
PI540556	Jack	G. max	II	United States	Illinois	39.76	-89.57	H1
PI542044	Kunitz	G. max	III	United States	Illinois	39.76	-89.57	H1

PI542403	Dawson	G. max	0	United States	Minnesota	45.18	-93.36	H1
PI547460	L64-1083	G. max	IV	United States	Illinois	39.76	-89.57	H1
PI547690	L63-1212	G. max	II	United States	Illinois	39.76	-89.57	H1
PI547716	L62-667	G. max	II	United States	Illinois	39.76	-89.57	H1
PI548298	A.K. (Harrow)	G. max	III	China	China	40.38	116.39	H1
PI548311	Capital	G. max	0	Canada	Ontario	43.69	-79.4	H1
PI548316	Cloud	G. max	III	China	Zhejiang	30.27	120.08	H1
PI548342	Higan	G. max	IV	Japan	Tokyo	35.73	139.57	H1
PI548348	Illini	G. max	III	China	Northeast	40.38	116.39	H1
PI548349	Ilsoy	G. max	III	Korea, North	Pyongyang	39.04	125.75	H1
PI548356	Kanro	G. max	II	Korea, North	Pyongyang	39.04	125.75	H1
PI548360	Korean	G. max	II	Korea, North		39.04	125.75	H1
PI548379	Mandarin (Ottawa)	G. max	0	China	Heilongjiang	46.86	126.85	H1
PI548382	Manitoba Brown	G. max	0	China	Liaoning	41.2	122.34	H1
PI548391	Mukden	G. max	II	China	Liaoning	41.2	122.34	H1
PI548406	Richland	G. max	II	China	Jilin	44.23	126	H1
PI548417	Soysota	G. max	I	Italy	Naples	40.85	14.26	H1
PI548456	Haberlandt	G. max	VI	Korea, North	Pyongyang	39.04	125.75	H1
PI548477	Ogden	G. max	VI	United States	Tennessee	36.18	-86.81	H1
PI548488	S-100	G. max	V	China	Heilongjiang	46.86	126.85	H1
PI548510	Beeson	G. max	II	USA	Indiana	39.78	-86.31	H1
PI548511	Beeson 80	G. max	II	United States	Indiana	39.78	-86.31	H1
PI548512	Century	G. max	II	United States	Indiana	39.78	-86.31	H1
PI548520	Preston	G. max	II	United States	Iowa	41.56	-93.5	H1
PI548533	Clark	G. max	IV	United States	Illinois	39.76	-89.57	H1
PI548540	Corsoy	G. max	II	United States	Iowa	41.56	-93.5	H1
PI548565	Gnome	G. max	II	United States	Ohio	39.94	-83.09	H1
PI548573	Harosoy	G. max	II	Canada	Ontario	43.69	-79.4	H1
PI548582	McCall	G. max	0	United States	Minnesota	45.18	-93.36	H1
PI548593	Maple Arrow	G. max	0	Canada	Ontario	43.69	-79.4	H1
PI548603	Perry	G. max	IV	United States	Indiana	39.78	-86.31	H1
PI548604	Pershing	G. max	IV	United States	Missouri	38.67	-90.4	H1
PI548631	Williams	G. max	III	United States	Illinois	39.76	-89.57	H1
PI548634	Zane	G. max	III	United States	Ohio	39.94	-83.09	H1
PI548643	Maple Glen	G. max	0	Canada	Ontario	43.69	-79.4	H1
PI548656	Lee	G. max	VI	United States	Mississippi	32.24	-90.21	H1
PI548657	Jackson	G. max	VII	United States	North Carolina	35.22	-80.76	H1
PI548667	Essex	G. max	V	United States	Virginia	37.52	-77.54	H1
PI553047	Gordon	G. max	VII	United States	Georgia	33.74	-84.42	H1
PI561271	Pei xian da quing d	G. max	V	China	Zhejiang	30.27	120.08	H1
PI561370	Fen dou 14	G. max	III	China	Shanxi	37.33	111.83	H1
PI567071A	MARIF 2669	G. max	Unknov	Indonesia	Indonesia	-3.25	121.77	H1
PI567298	Chan yao dou	G. max	V	China	Gansu	36.03	103.84	H1
PI567354	You huang dou	G. max	IV	China	Gansu	36.03	103.84	H1
PI567357	Du jia qiao huang d	G. max	III	China	Ningxia	37.33	106.04	H1
PI567383	Da ke huang dou	G. max	V	China	Shaanxi	37.53	107.4	H1
PI567395	Lai wa dou	G. max	IV	China	Shaanxi	37.53	107.4	H1

PI567525	Cao qing huang dou	G. max	II	China	Shandong	36.6	118.97	H1
PI567690	Fu yang (7)	G. max	III	China	Anhui	31.82	117.15	H1
PI567719	Fu yang (43)	G. max	IV	China	Anhui	31.82	117.15	H1
PI567731	Fu yang (56)	G. max	III	China	Anhui	31.82	117.15	H1
PI567782	OAC Dorado	G. max	I	Canada	Ontario	43.69	-79.4	H1
PI574486	Jin dou 13	G. max	III	China	Shanxi	37.33	111.83	H1
PI587666	Er dao zao	G. max	VI	China	Anhui	31.82	117.15	H1
PI587752	Xian ning dong hua	G. max	V	China	Hubei	30.59	114.16	H1
PI588053A	Xiao li huang	G. max	V	China	Guangdong	23.12	113.25	H1
PI591431	OT94-49	G. max	0	Canada	Ontario	43.69	-79.4	H1
PI591435	OT94-41	G. max	I	Canada	Ontario	43.69	-79.4	H1
PI591495	L93-2740	G. max	IV	United States	Illinois	39.76	-89.57	H1
PI591541	L74-102	G. max	II	United States	Illinois	39.76	-89.57	H1
PI594301	Toyomusume	G. max	I	Japan	Japan	35.94	139.4	H1
PI594512A	Bian zi jiang se dou	G. max	VII	China	Sichuan	30.59	104.1	H1
PI594579	Zhong he tian chen	G. max	V	China	Hunan	28.24	112.81	H1
PI594599	Chang de chun hei	G. max	IV	China	Hunan	28.24	112.81	H1
PI598124	Maverick	G. max	III	United States	Missouri	38.67	-90.4	H1
PI602991	Niu jiao qi da hei do	G. max	IV	China	Shandong	36.6	118.97	H1
PI603154	GL 2622 /96	G. max	V	Korea, North		39.04	125.75	H1
PI603318	Xiao zhu yao	G. max	I	China	Heilongjiang	46.86	126.85	H1
PI603336	Qing pi si li huang	G. max	II	China	Heilongjiang	46.86	126.85	H1
PI603357	Du Lu Dou	G. max	I	China	Jilin	44.23	126	H1
PI603384	Ping ding xiang	G. max	III	China	Jilin	44.23	126	H1
PI603675	Huai yin gua dou jia	G. max	III	China	Jiangsu	32.06	118.85	H1
PI612719	Harbin 91-6065	G. max	I	China	Heilongjiang	46.86	126.85	H1
PI80822	Shiheigai Shirobana	G. max	III	China	Liaoning	41.2	122.34	H1
PI80837	Mejiro	G. max	IV	Japan	Akita	39.57	140.42	H1
PI84631	S-56	G. max	III	Korea, South	Kyonggi	37.28	127.12	H1
PI84987	Oni Hadaka	G. max	III	Japan	Saitama	35.85	139.65	H1
PI87617	Miyongaikon	G. max	III	Korea, North	Hamgyong Puk	41.67	129.66	H1
PI88479	Kungchuling Improv	G. max	II	China	Jilin	44.23	126	H1
PI88788	5913	G. max	III	China	Liaoning	42.72	124.33	H1
PI89138	Zontanorukon	G. max	II	Korea, North	Hamgyong Puk	41.67	129.66	H1
PI90763	7570	G. max	IV	China	Beijing	39.91	116.6	H1
PI548364	Macoupin	G. max	IV	Japan	Tokyo	35.73	139.57	H1
PI548400	Patoka	G. max	IV	China	Heilongjiang	46.86	126.85	H1
PI548619	Sparks	G. max	IV	United States	Kansas	39.11	-94.7	H1
PI559932	Manokin	G. max	IV	United States	Maryland	39.29	-76.7	H1
FC29333	Laredo	G. max	III					H1
FC31697		G. max	IV	Costa Rica		9.91	-84.2	H1
PI54591	No. 31	G. max	III	China	Liaoning	41.2	122.34	H1
PI54615-1	No. 55	G. max	Unknow	China	Heilongjiang	45.75	126.65	H1
PI58955	Common Yellow Va	G. max	IV	China	Shandong	36.71	119.1	H1
PI62203	937	G. max	V	China	Hebei	39.94	119.59	H1
PI68732-1	204	G. max	Unknow	China	Heilongjiang	46.64	125.43	H1
PI70080	6908	G. max	III	China	Jilin	43.71	128.24	H1

PI70466-3	7336	G. max	Unknov	China	Jilin	41.94	126.43	H1
PI71465	No. 33	G. max	V	China	Jiangsu	32.06	118.85	H1
PI81041	Kuro Daizu	G. max	III	Japan	Hokkaido	43.07	141.35	H1
PI83881	Orukon	G. max	IV	Korea, North	Kangwon	39.15	127.44	H1
PI83942	Kuro churyu	G. max	V	Korea, South	Kyonggi	37.28	127.12	H1
PI84637	S-62	G. max	II	Korea, South	Kyonggi	37.28	127.12	H1
PI84656	S-81	G. max	III	Korea, South	Kyonggi	37.28	127.12	H1
PI84946-2	(Kandokon)	G. max	Unknov	Korea, South	Pusan	35.15	129.05	H1
PI84973	Takiya	G. max	III	Japan	Saitama	35.85	139.65	H1
PI86904	Fukota	G. max	IV	Korea, South	Chungchong Puk	37	128.17	H1
PI86972-2	(Pakute)	G. max	Unknov	Korea, South	Cholla Puk	35.95	126.96	H1
PI87620	Kuromeshoryu	G. max	IV	Korea, North	Hamgyong Puk	41.67	129.66	H1
PI88313	5702	G. max	II	China	Chirin, Manchuria	49.59	117.38	H1
PI88468	Iganzu	G. max	II	China	Liaoning	40.18	122.12	H1
PI90479P	7413	G. max	IV	China	Nanchuangying	40.38	116.39	H1
PI91100-3	6554	G. max	Unknov	China	Jilin	43.51	124.81	H1
PI91159-4	6614	G. max	Unknov	China	Liaoning	42.72	124.33	H1
PI91160	6615	G. max	III	China	Liaoning	42.72	124.33	H1
PI92651	7846	G. max	IV	China	Jilin	43.51	124.81	H1
PI94159-3	(Kiizaya)	G. max	Unknov	Japan	Kagoshima	31.33	130.93	H1
PI153231	B-63	G. max	III					H1
PI154189	No. 57	G. max	0	Netherlands		52.32	4.89	H1
PI159925	Glycine H	G. max	VIII	Peru	Lima	-12.05	-77.04	H1
PI165675	Nanking 332	G. max	VII	China	Jiangsu	32.06	118.85	H1
PI179935	Bhart	G. max	VII	India	Himachal Pradesh	31.88	77.39	H1
PI189873	Miko Saumon	G. max	0	France		48.83	2.22	H1
PI209333	No. 3	G. max	VI	Japan	Hokkaido	43.46	142.61	H1
PI240664	Bilomi No. 3	G. max	X	Philippines	Luzon	15	121.27	H1
PI253661B	No. 12	G. max	III	China		40.38	116.39	H1
PI266806C	No. 4	G. max	II	China	Hebei	39.94	119.59	H1
PI291294		G. max	I	China	Heilongjiang	46.86	126.85	H1
PI291310C		G. max	II	China	Heilongjiang	45.75	126.65	H1
PI297505	Czi ti No. 5	G. max	I	China		40.38	116.39	H1
PI297520	Iregi Universal	G. max	0	Hungary		47.49	19.09	H1
PI324924	Rhosa	G. max	V	South Africa		-29.3	26.12	H1
PI361070	Faur	G. max	0	Romania		44.42	26.11	H1
PI361087	Medias 23	G. max	I	Romania		44.42	26.11	H1
PI372403B	(Caloria)	G. max	0	Austria		48.2	16.38	H1
PI372418	Novosadska Br. 4	G. max	I	Serbia		44.02	21.15	H1
PI378680E	(VNIIMK 9186)	G. max	I	Russian Federation		52.98	127.36	H1
PI379618	TC 1	G. max	V	Taiwan	Taiwan	24.73	121.08	H1
PI391583	Jilin No. 10	G. max	II	China	Jilin	44.23	126	H1
PI398965	KLS 628-1	G. max	IV	Korea, South	Cholla Nam	34.5	126.38	H1
PI404187	Suj nii hun mao ju	G. max	II	China		40.38	116.39	H1
PI407701	Hei long No. 3	G. max	I	China		40.38	116.39	H1
PI407742	16	G. max	V	China	Shaanxi	34.26	108.93	H1
PI416751	A-B(D)	G. max	I	Japan	Tohoku region	39	141	H1

PI416838	Choutan	G. max	V	Japan	Tohoku region	39	141	H1
PI417215	Ooita Aki Daizu 2	G. max	VIII	Japan	Kyushu and Okinav	26.54	128.02	H1
PI417242	Pekin dai seitou	G. max	II	China		40.38	116.39	H1
PI417345B	(Shou outou)	G. max	IV	China		40.38	116.39	H1
PI417479	Yougetsu	G. max	IV	Japan	Tohoku region	39	141	H1
PI417500	Escura A	G. max	VIII	Brazil		-14	-46.6	H1
PI424195A	ISZ-3	G. max	0	Hungary		47.49	19.09	H1
PI430595	58-161	G. max	IV	China		40.38	116.39	H1
PI436684	Tie-feng 8	G. max	III	China	Liaoning	41.2	122.34	H1
PI437112A	VIR 249	G. max	II	Russian Federation	Jewish Region, Far	48.6	132.3	H1
PI437127A	Imeretinscaja	G. max	IV	Georgia		42.31	43.37	H1
PI437240	CSchi 1069	G. max	0	Moldova		47	29	H1
PI437376A	Ussurijscaja 308	G. max	I	Russian Federation	Primorye	45	135	H1
PI437485	VIR 1048	G. max	II	Russian Federation	Primorye	45	135	H1
PI437500A	VIR 3810	G. max	I	Russian Federation	Primorye	45	135	H1
PI437685D	(Phun-zhun)	G. max	III	China		40.38	116.39	H1
PI437776	VIR 1302	G. max	III	China		40.38	116.39	H1
PI437788A	VIR 3018	G. max	II	China		40.38	116.39	H1
PI437793	VIR 3024	G. max	II	China		40.38	116.39	H1
PI437814A	An'da	G. max	II	China	Northeast	40.38	116.39	H1
PI437991B	VIR 1657	G. max	0	China	Northeast	40.38	116.39	H1
PI438019B	VIR 1883	G. max	II	China	Northeast	40.38	116.39	H1
PI438083	VIR 2506	G. max	II	China	Northeast	40.38	116.39	H1
PI438112B	VIR 2623	G. max	III	China	Northeast	40.38	116.39	H1
PI438239B	VIR 4536	G. max	I	China	Northeast	40.38	116.39	H1
PI438323	Grignon 53-F-3	G. max	I	France		48.83	2.22	H1
PI438335	SAO 196-C	G. max	III	Algeria		26.66	2.14	H1
PI438336	Sao 208	G. max	0	Algeria		27.68	1.79	H1
PI438500	Virginia	G. max	III	United States		38.67	-90.4	H1
PI445824A	Wolfsthaler	G. max	0	Germany		52.51	13.41	H1
PI458510	Ji Ti No. 1	G. max	III	China	Liaoning	41.2	122.34	H1
PI464912	Dan Dou 1	G. max	IV	China	Liaoning	40.14	124.39	H1
PI464923	Tie Fen 16	G. max	I	China	Liaoning	42.46	124.04	H1
PI467347	Zi-hua-cuo-zi	G. max	II	China	Jilin	44.23	126	H1
PI468408B	(Qi Huang No. 1)	G. max	III	China		40.38	116.39	H1
PI468908		G. max	0	China	Jilin	44.23	126	H1
PI475820		G. max	II	China	Xinjiang	46.86	83.23	H1
PI476352B	(Colnon)	G. max	II	Kyrgyzstan	Kirghiz SSR	41.21	74.78	H1
PI479735	Silihuang	G. max	III	China	Jilin	43.63	126.5	H1
PI490766	Dawudou	G. max	III	China	Hebei	39.94	119.59	H1
PI495020	Xu dou 2	G. max	IV	China	Beijing	40.38	116.39	H1
PI506933	Kouiku 1	G. max	IV	Japan	Kyushu and Okinav	26.54	128.02	H1
PI506942	Koushurei 235	G. max	II	Japan	Tohoku	39	141	H1
PI507293B	(Shoukin ou)	G. max	III	Japan	Hokuriku	37	137.5	H1
PI507458	Tousan kei BL 521	G. max	IV	Japan	Kanto and Tosan	36	139	H1
PI507467	Tousan kei F 764	G. max	IV	Japan	Kanto and Tosan	36	139	H1
PI507471	Tousan kei na 16	G. max	III	Japan	Kanto and Tosan	36	139	H1

PI507480	Tousan kei YL 24	G. max	IV	Japan	Kanto and Tosan	36	139	H1
PI518668	TN 4-86	G. max	IV	United States	Tennessee	36.18	-86.81	H1
PI518727	Ju huang	G. max	VI	China	Guangdong	23.12	113.25	H1
PI532463B	(He bei No. 1)	G. max	III	China	Hebei	39.94	119.59	H1
PI538386A	1886	G. max	III	China	Hebei	39.94	119.59	H1
PI548193	T201	G. max	IV	United States	Iowa	41.56	-93.5	H1
PI548336	Habaro	G. max	I	Russian Federation	Khabarovsk	48.5	135.13	H1
PI548383	Mansoy	G. max	III	China	Heilongjiang	46.86	126.85	H1
PI548411	Seneca	G. max	II	China	Northeast China	40.38	116.39	H1
PI548447	Cherokee	G. max	VIII	China	Zhejiang	30.27	120.08	H1
PI548452	Dixie	G. max	V	Korea, North	Pyongyang	39.04	125.75	H1
PI548473	Monetta	G. max	VII	China	Jiangsu	32.06	118.85	H1
PI548474	Nanda	G. max	VIII	Korea, North	Hwanghae Puk	38.51	125.76	H1
PI548479	Otootan	G. max	VIII	Taiwan	Taiwan	24.73	121.08	H1
PI548490	Tanner	G. max	VII	Taiwan	Taiwan	24.73	121.08	H1
PI548521	BSR 201	G. max	II	United States	Iowa	41.56	-93.5	H1
PI548561	Hodgson	G. max	I	United States	Minnesota	45.18	-93.36	H1
PI548571	Harlon	G. max	I	Canada	Ontario	43.69	-79.4	H1
PI548633	Wye	G. max	IV	United States	Maryland	39.29	-76.7	H1
PI548978	Gail	G. max	VI	United States	Texas	29.73	-95.58	H1
PI549017	ZYD 3938	G. max	IV	China	Ningxia	37.33	106.04	H1
PI549028	Feng da li	G. max	V	China	Liaoning	41.2	122.34	H1
PI561371	Fen dou 15	G. max	IV	China	Shanxi	37.33	111.83	H1
PI561387	Kosuzu	G. max	V	Japan	Tokyo	35.73	139.57	H1
PI567225	Kisinevskaja 90	G. max	0	Moldova		47	29	H1
PI567226	Har'kovskaja Zerno	G. max	0	Russian Federation		52.98	127.36	H1
PI567231	WJK-PRC-46	G. max	VIII	China	Sichuan	30.59	104.1	H1
PI567307	Hei huang dou	G. max	IV	China	Gansu	36.03	103.84	H1
PI567346	Niu mao huang dou	G. max	V	China	Gansu	36.03	103.84	H1
PI567352A	Yang yan qing dou	G. max	IV	China	Gansu	36.03	103.84	H1
PI567353	Yang yan ren dou	G. max	IV	China	Gansu	36.03	103.84	H1
PI567410B	(Yang huang dou)	G. max	VII	China	Shaanxi	37.53	107.4	H1
PI567415A	Bai da huang dou	G. max	IV	China	Shanxi	37.33	111.83	H1
PI567416	Bai dou	G. max	IV	China	Shanxi	37.33	111.83	H1
PI567418A	Bai hei dou	G. max	II	China	Shanxi	37.33	111.83	H1
PI567426	Bai huang dou	G. max	IV	China	Shanxi	37.33	111.83	H1
PI567428	Bai ji yao	G. max	IV	China	Shanxi	37.33	111.83	H1
PI567435B	(Hei hei dou)	G. max	III	China	Shanxi	37.33	111.83	H1
PI567439	Hong jia huang dou	G. max	V	China	Shanxi	37.33	111.83	H1
PI567489A	Er da li huang dou	G. max	IV	China	Hebei	39.94	119.59	H1
PI567532	Dai ye xiao huang d	G. max	IV	China	Shandong	36.6	118.97	H1
PI567576	Ping ding huang	G. max	III	China	Shandong	36.6	118.97	H1
PI567604A	Xin huang dou	G. max	IV	China	Shandong	36.6	118.97	H1
PI567675	Yu cheng xiao tie jia	G. max	IV	China	Henan	34.74	113.66	H1
PI567698A	Fu yang (17)	G. max	IV	China	Anhui	31.82	117.15	H1
PI567746	Pei xian da bai jiao	G. max	IV	China	Jiangsu	32.06	118.85	H1
PI567788	Bienville	G. max	VIII	United States	Louisiana	30.4	-91.24	H1

PI574477	Fen dou 31	G. max	IV	China	Shanxi	37.33	111.83	H1
PI578375B	(Aan tu dang di hei	G. max	I	China		40.38	116.39	H1
PI578412	Gong jiao 6308-1	G. max	II	China		40.38	116.39	H1
PI578495	Jin dou No. 4	G. max	IV	China	Beijing	40.38	116.39	H1
PI578503	Tie jia si li huang	G. max	I	China		40.38	116.39	H1
PI587588B	(Tai xing niu mao h	G. max	V	China	Jiangsu	32.06	118.85	H1
PI587712B	(E dou No. 1)	G. max	V	China	Hubei	30.59	114.16	H1
PI587804	Jing 789	G. max	IV	China	Hubei	30.59	114.16	H1
PI587811A	ZDD005777	G. max	VIII	China	Hubei	30.59	114.16	H1
PI592523	Glacier	G. max	0	United States	Minnesota	45.18	-93.36	H1
PI592937	Jin dou 14	G. max	IV	China		40.38	116.39	H1
PI592940	Jin dou 17	G. max	IV	China		40.38	116.39	H1
PI592952	Zheng 77249	G. max	III	China		40.38	116.39	H1
PI592954	Nin zhen No. 1	G. max	II	China		40.38	116.39	H1
PI592960	Dong nong 38	G. max	I	China	Heilongjiang	46.86	126.85	H1
PI593953	Sui nong No. 10	G. max	I	China		40.38	116.39	H1
PI594170B	(Geden shirazu)	G. max	I	Japan	Akita	39.57	140.42	H1
PI594456A	Xiao jin huang	G. max	III	China	Sichuan	30.59	104.1	H1
PI594880	Song zi dou	G. max	V	China	Yunnan	24.9	102.96	H1
PI594922	Graham	G. max	V	United States	North Carolina	35.22	-80.76	H1
PI597476	Deogyukong	G. max	V	Korea, South	Korea	35.87	128.68	H1
PI597478B	(Paldalkong)	G. max	III	Korea, South	Korea	35.87	128.68	H1
PI598358	TN 5-95	G. max	V	United States	Tennessee	36.18	-86.81	H1
PI602993	Pi xian ruan tiao zh	G. max	IV	China	Jiangsu	32.06	118.85	H1
PI603290	Zao shu 18	G. max	I	China		40.38	116.39	H1
PI603345	ZDD00403	G. max	II	China		40.38	116.39	H1
PI603389	Huang ke	G. max	II	China		40.38	116.39	H1
PI603397	Hei qi huang da dou	G. max	IV	China		40.38	116.39	H1
PI603442	Ke qi xiao hei dou	G. max	III	China		40.38	116.39	H1
PI603458A	Shui dou	G. max	IV	China		40.38	116.39	H1
PI603463	Dong jie No. 1	G. max	II	China		40.38	116.39	H1
PI603488	ZDD19294	G. max	III	China		40.38	116.39	H1
PI603492	Qi hei dou	G. max	IV	China		40.38	116.39	H1
PI603494	Hai dou zi	G. max	IV	China		40.38	116.39	H1
PI603495B	(Hong mi lan dou zi	G. max	V	China		40.38	116.39	H1
PI603549	Mei dou	G. max	III	China		40.38	116.39	H1
PI603555	Hua da hei dou	G. max	IV	China		40.38	116.39	H1
PI603556	ZDD08563	G. max	III	China		40.38	116.39	H1
PI603559	ZDD08590	G. max	IV	China		40.38	116.39	H1
PI612730	Zhong huong No. 1	G. max	II	China		40.38	116.39	H1
PI612754	ZY 645	G. max	I	China		40.38	116.39	H1
PI59845	Sohgetsu	G. max	VI	Japan	Akita	39.45	140.48	H1
PI458828	Qun Xuan No.1	G. max	II	China	Jilin	44.23	126	H1
PI556949	Ke Feng No.1	G. max	IV	China	Beijing	40.38	116.39	H1
PI547403	L60-246	G. max	IV	United States	Illinois	39.76	-89.57	H1
PI490768	Rao Shan Gun	G. max	III	China	Hebei	39.94	119.59	H1
PI603294	Jin Yuan No.2	G. max	0	China	Heilongjiang	46.86	126.85	H1

PI578360	Guan Nan Chun He	G. max	II	China	Jiangsu	32.06	118.85	H1
PI283327	Pingtung Pearl	G. max	V	Taiwan	Taiwan	24.73	121.08	H1
PI578494A	Jin Dou No.1	G. max	IV	China	Shanxi	37.33	111.83	H1
PI297543	Peking	G. max	II	China	North	46.86	126.85	H1
PI567756	Pei Xian Si Li Cao	G. max	IV	China	Jiangsu	32.06	118.85	H1
PI603469	Pa Man Qing	G. max	IV	China	Shandong	36.6	118.97	H1
PI567164	He Long You Tai	G. max	0	China	Jilin	44.23	126	H1
PI317334B	(Kitamishiro)	G. max	II	Japan	Hokkaido	43.46	142.61	H1
PI423766	KAS 230-4	G. max	IV	Korea, South	Kangwon	37.17	128.5	H1
PI547612	L74-826	G. max	IV	United States	Illinois	39.76	-89.57	H1
PI567414	Zhu Ye Qing	G. max	V	China	Shaanxi	37.53	107.4	H1
PI507088	Nattou Kotsubu	G. max	VI	Japan	Kanto and Tosan	36	139	H2
PI602502B	(Xiong yue xiao hua	G. max	IV	China		40.38	116.39	H2
PI196175	Yu tae	G. max	V	Korea, South	Korea	35.87	128.68	H3
PI323576	H 67-27	G. max	IX	India	Uttar Pradesh	29.77	79.77	H3
PI398610	KAS 390-8	G. max	V	Korea, South	Chungchong Puk	37	128.17	H3
PI407788A	ORD 8113	G. max	IV	Korea, South	Kyonggi	37.83	127.51	H3
PI407965	KAERI 504-4	G. max	V	Korea, South	Cholla Nam	35.23	126.31	H3
PI603175	GL 2688 /96	G. max	IV	Korea, North		39.04	125.75	H3
PI81785	Chusei Hadaka	G. max	III	Japan	Hokkaido	43.07	141.3	H3
PI166105	Bhart	G. max	VII	India	Uttar Pradesh	30.25	79.33	H3
PI391577	Ch'a ye sheng tou	G. max	II	China	Jilin	44.23	126	H3
PI437165A	Toncostebel'naja 2	G. max	I	Russian Federation	Krasnodar	45.1	39.27	H3
PI497953	I.C. 192	G. max	IX	India	Bihar	25.98	85.68	H3
PI603722	Nan chong ba yue h	G. max	VIII	China		40.38	116.39	H3
PI398296	KAS 173-3	G. max	II	Korea, South	Kyonggi	37.14	127.07	H3
PI404166	Krasnoarmejskaja	G. max	III	China		40.38	116.39	H3
PI404182	Sin i tu li rau	G. max	III	China	China	40.38	116.39	H3
PI404198B	(Sun huan do)	G. max	IV	China		40.38	116.39	H3
PI407729		G. max	IV	China	Beijing	40.38	116.39	H3
PI417091	Kuro mame	G. max	II	Japan	Kanto and Tosan re	36	139	H3
PI424298	KAS 300-10	G. max	IV	Korea, South	Chungchong Nam	36.33	127.42	H3
PI424391	KAS 521-15	G. max	VI	Korea, South	Cholla Puk	35.63	127.25	H3
PI437654	Er-hej-jan	G. max	III	China	China	40.38	116.39	H3
PI467312	Cha-mo-shi-dou	G. max	II	China	Jilin	44.23	126	H3
PI548415	Sooty	G. max	IV	China	Zhejiang	30.27	120.08	H3
PI549031		G. max	III	China	Beijing	40.19	116.2	H3
PI567171	Hei he No. 1	G. max	0	China	Heilongjiang	46.86	126.85	H3
PI567258	He pi dou	G. max	II	China	Jiangxi	28.68	115.96	H3
PI567305	Hei dou zi	G. max	IV	China	Gansu	36.03	103.84	H3
PI567336B	(Lao hei dou)	G. max	IV	China	Gansu	36.03	103.84	H3
PI567343	Ma huang dou	G. max	V	China	Gansu	36.03	103.84	H3
PI567516C	(Ba yue zha)	G. max	IV	China	Shandong	36.6	118.97	H3
PI594012	Heuksatangdu	G. max	V	Korea, South	Korea	35.87	128.68	H3
PI594451	Liu yue bao	G. max	III	China	Sichuan	30.59	104.1	H3

PI603176A		G. max	IV	Korea, North		39.04	125.75	H3
PI603420	ZDD01501	G. max	II	China	Innermongolia	40.8	111.87	H3
PI603424A	ZDD007871	G. max	0	China	China	40.38	116.39	H3
PI603497	Hua dou	G. max	III	China		40.38	116.39	H3
PI605869A	Sample 140	G. max	V	Vietnam	Lao Cai	21	103.5	H3
PI612611	Browngilgun	G. max	III	Korea, North		39.04	125.75	H3
PI86006	Kiio Shokuzu	G. max	III	Japan	Hokkaido	42.92	143.2	H3
PI87631-1	Kindaizu	G. max	III	Japan	Saitama	36.13	139.38	H3
PI89772	7193	G. max	IV	China		40.38	116.39	H3
PI68604-1	285	G. max	Unknov	China	Yaomyn, Manchur	46.2	126.07	H3
PI89005-5	5950	G. max	Unknov	China	Manchuria	46.2	126.07	H3
PI89775	7221	G. max	VI	China	Near Fa Hua Ssu te	24.65	113.64	H3
PI103088	Ming Chuan	G. max	III	China	Henan	34.74	113.66	H3
PI171428	Large Yellow Soybe	G. max	IV	China	Beijing	39.76	116.54	H3
PI171451	Kosamame	G. max	VII	Japan	Kanagawa	35.59	139.35	H3
PI342619A		G. max	0	Russian Federation	Primorye	45	135	H3
PI361093	Novosadska Br. 1	G. max	I	Serbia		44.02	21.15	H3
PI398633	KAS 390-17-2	G. max	V	Korea, South	Chungchong Puk	37	128.17	H3
PI407708A	Feng shou No. 10	G. max	0	China	Heilongjiang	46.86	126.85	H3
PI417381	Tenpoku shirome	G. max	0	Japan	Hokkaido	43.46	142.61	H3
PI417581	H-060072	G. max	V	United States		38.67	-90.4	H3
PI437110A	VIR 244	G. max	III	Russian Federation	Jewish Region, Far	48.6	132.3	H3
PI437838	DV-254	G. max	II	Russian Federation		52.98	127.36	H3
PI438230A	VIR 4521	G. max	I	China	Northeast	40.38	116.39	H3
PI438309	VIR 3017	G. max	I	China		40.38	116.39	H3
PI438496C	(Peking)	G. max	IV	United States		38.67	-90.4	H3
PI464896	Jou Nong No. 5	G. max	I	China	Jilin	44.23	126	H3
PI497964A	I.C. 9461	G. max	Unknov	India	Sikkim	27.33	88.54	H3
PI497967	PLSO 96	G. max	VII	India	Jammu and Kashm	33.89	76.66	H3
PI514671	Feng shou No. 7	G. max	0	China	Heilongjiang	46.86	126.85	H3
PI561318A	Hui nan bai hua xia	G. max	I	China	Beijing	40.38	116.39	H3
PI567262A	Similar to: Gu tian t	G. max	II	China	Fujian	26.06	119.39	H3
PI567407	Xiao dou	G. max	V	China	Shaanxi	37.53	107.4	H3
PI567408	Xiao jin huang	G. max	V	China	Shaanxi	37.53	107.4	H3
PI567488A	Di liu huang dou No	G. max	IV	China	Hebei	39.94	119.59	H3
PI567548	Hua li hu zi	G. max	IV	China	Shandong	36.6	118.97	H3
PI567780B	(Tong shan zheng ji	G. max	IV	China	Jiangsu	32.06	118.85	H3
PI603162	GL 2631 /96	G. max	IV	Korea, North		39.04	125.75	H3
PI603426G	(Ben di yuan huang	G. max	II	China		40.38	116.39	H3
PI603526	Hei you dou	G. max	IV	China		40.38	116.39	H3
PI385942	Enrei	G. max	IV	Japan	Nagano	36.7	137.86	H3
PI594629	Xiao hua lian	G. max	VI	China	Guizhou	26.65	106.69	H4
PI79691-4		G. max	III	China	Heilongjiang	45.75	126.65	H4
PI361066B	(F. 56-17)	G. max	I	Romania		44.42	26.11	H4
PI366123		G. soja	IV	China	Ningxia	37.33	106.04	H5

PI378692		G. soja	V	China	Shaanxi	34.88	110.01	H5
PI407038	RB 1072	G. soja	VII	Japan	Fukuoka	33.2	130.37	H5
PI407096	RB 1072	G. soja	V	Japan	Akita	39.7	140.73	H6
PI407162	K1-D	G. soja	V	China	Jiangsu	32.06	118.85	H6
PI407300		G. soja	0	China	Heilongjiang	48.48	127.97	H6
PI424025B	74023	G. soja	0	Russian Federation	Primorye	45	135	H6
PI424088	74088	G. soja	VI	China	Jiangsu	32.06	118.85	H6
PI468400A		G. soja	0	Russian Federation	Amur	64.41	144.03	H6
PI479769	Long 79-5801	G. soja	0	Russian Federation	Amur	52.98	127.36	H6
PI483465		G. soja	IV	Japan	Fukushima	37.46	139.84	H6
PI507618	NIAR 040015	G. soja	VII	Japan	Hyogo	34.92	135.23	H6
PI507641	NIAR 060014	G. soja	IV	Korea, South	Kyonggi	37.28	127.11	H6
PI522226	VIR 8511	G. soja	V	Korea, South	Kyonggi	37.9	127.2	H6
PI407157	RB 1072	G. soja	IV	Japan	Iwate	39.7	141.25	H7
PI407243	K36-B	G. soja	IV	Japan	Iwate	39.7	141.2	H7
PI407303		G. soja	V	Japan	Iwate	39.72	141.14	H7
PI507630	NIAR 060002	G. soja	V	Japan	Hyogo	35.4	134.77	H7
PI507757	VIR 8451	G. soja	VI	Japan	Saitama	36.03	139.53	H7
PI378699A		G. soja	VI	Japan	Chiba	35.6	140.12	H7
PI507609	NIAR 040023	G. soja	VII	Japan	Nara	34.53	135.95	H7
PI507615	NIAR 040012	G. soja	VII	Japan	Tokyo	35.73	139.57	H7
PI507638	NIAR 060010	G. soja	VI	Japan	Tochigi	36.55	139.73	H7
PI507830B	VIR 9044	G. soja	VI	Japan	Hyogo	34.79	134.85	H7
PI378690		G. soja	V	Japan	Nagano	36.7	137.86	H7
PI366120		G. soja	IV	Japan	Akita	39.53	140.38	H8
PI378697A		G. soja	V	Japan	Aomori	40.6	140.47	H8
PI407042	RB 1072	G. soja	V	Korea, South	Kyonggi	37.21	126.82	H9
PI593983	Hidaka-6	G. soja	V	Korea, South	Kyonggi	37.9	126.98	H9
PI407220	K25-B	G. soja	V	Korea, South	Kyongsang Puk	36.5	128.15	H9
PI562551	KC26	G. soja	Unknow	Korea, South	Cholla Puk	35.82	127.12	H9
PI407202	K15	G. soja	V	Korea, South	Chungchong Nam	36.57	126.68	H10
PI507619B	NIAR 040016	G. soja	VI	Japan	Shimane	35.12	132.49	H10
PI562534	KA5	G. soja	V	Korea, South	Kangwon	37.5	127.98	H10
PI562557	KE10	G. soja	VI	Japan	Nagano	36.7	137.86	H10
PI562559	KE16	G. soja	Unknow	Korea, South	Kyonggi	37.23	126.93	H10
PI562565	KF13	G. soja	Unknow	Korea, South	Cholla Puk	35.82	127.12	H10
PI549032	ZYD 2632	G. soja	V	Korea, South	Kangwon	37.26	128.42	H11
PI407083	RB 1072	G. soja	V	Korea, South	Kyongsang Puk	35.6	128.75	H11
PI464890B	(Gong di No. 2019)	G. soja	V	Korea, South	Kyongsang Puk	35.68	128.75	H12
PI424107A	74106	G. soja	VII	Japan	Nagasaki	33	129.5	H12

PI532450	GD50344	G. soja	III	Japan	Hokkaido	42.87	142.44	H13
PI407288		G. soja	V	Korea, South	Chungchong Puk	36.95	127.74	H13
PI407315		G. soja	III	China	Liaoning	40.55	124.07	H14
PI407077	RB 1072	G. soja	II	China	Jilin	43.51	124.81	H14
PI407248	K37-D	G. soja	VI	Japan	Aichi	34.94	137.24	H15
PI507656	NIAR 090011	G. soja	VII	Japan	Aichi	34.94	137.24	H15
PI468916		G. soja	III	China	Liaoning	41.2	122.34	H16
PI468918		G. soja	III	China	Liaoning	41.2	122.34	H16
PI101404A		G. soja	III	Russian Federation	Primorye	45	135	H17
PI424097	74096	G. soja	II	China	Heilongjiang	46.2	126.07	H17
PI479751	GD 50351-1	G. soja	III	China	Jilin	44.23	126	H18
PI479752	GD 50388-2	G. soja	0	China	Heilongjiang	46.86	126.85	H18
PI479768	Long 79-3313-1	G. soja	I	Russian Federation	Amur	52.98	127.36	H18
PI507761	VIR 8455	G. soja	I	Russian Federation	Primorye	45	135	H18
PI522228	VIR 8514	G. soja	Unknow	Russian Federation	Khabarovsk	48.5	135.13	H18
PI578341	L 521	G. soja	I	Russian Federation	Primorye	45	135	H18
PI342622A		G. soja	V	Korea, South	Kyonggi	37.21	126.99	H18
PI407190	K56-C	G. soja	II	China	Jilin	44.23	126	H18
PI479746B	GD 50062	G. soja	I	China	Jilin	44.23	126	H19
PI407275	K101-A	G. soja	0	China	Nei Monggol	42.82	113.29	H19