

Table S1. The accession number, Chinese name and geographic origin of barley used in this study.

NO.	Name	Origination	NO.	Name	Origination
D06	Xianjuzao 18	China	Q143	Kenpimai 3	China
D08	Mou 103	China	Q145	Qinghesiyuehuang	China
D09	Nan 76-31	China	Q146	Huangyanyangdamai	China
D10	Mikamogold	Japan	Q149	Xinpi 1	China
D13	Xindengmogumai	China	Q151	Xiaoshanlixiahuang	China
D15	Shengnong E1	China	Q222	Huadamai 5	China
D22	Fuxuan 48	China	Q223	Huadamai 6	China
D24	Buzhimeiyu	China	Q224	Huadamai 7	China
D25	Riben 133	Japan	TL43	TL43	Europe
D27	Meilihuangjin	China	Triumph	Triumph	Europe
D28	Shang 1154	China	X001	XZ1	Tibet
D31	Clippey	Australia	X03	XZ3	Tibet
D33	Wujinhuangjin	China	X005	XZ5	Tibet
D36	Humai 4	China	X011	XZ11	Tibet
D39	Xiu 79-2	China	X016	XZ16	Tibet
D40	Xiu 87-22	China	X017	XZ17	Tibet
D41	Yangzhou 711	China	X019	XZ19	Tibet
D44	Sabaylis		X025	XZ25	Tibet
D55	Wumangliuleng	China	X026	XZ26	Tibet
D56	Chunfengpidamai	China	X034	XZ34	Tibet
D57	Dulihuang	China	X035	XZ35	Tibet
D59	Haha	China	X036	XZ36	Tibet
D64	Belae		X037	XZ37	Tibet
D65	Allaweinuw		X040	XZ40	Tibet
D67	Tich		X050	XZ50	Tibet
D68	Situoputexinying 10	China	X051	XZ51	Tibet
D69	Rudong 3	China	X064	XZ64	Tibet
D71	qingying 2916	China	X073	XZ73	Tibet
D72	qingying 3506	China	X078	XZ78	Tibet
D73	Mianyang 81-18	China	X080	XZ80	Tibet
D76	Hongmangerleng	China	X094	XZ94	Tibet
D78	Zhongshu 1	China	X099	XZ99	Tibet
D83	CM72	USA	X102	XZ102	Tibet
D84	Gairdner	Australia	X103	XZ103	Tibet
D87	Zhenongda 3	China	X108	XZ108	Tibet
D90	Yuyaohuanghumimai	China	X114	XZ114	Tibet
D94	Igri	Grmany	X117	XZ117	Tibet
Q001	Edamai 9	China	X118	XZ118	Tibet
Q008	Baodamai 13	China	X122	XZ122	Tibet
Q009	Baodamai 10	China	X124	XZ124	Tibet
Q011	Amagi-nijyo	Japan	X125	XZ125	Tibet
Q013	Chuangdamai 43	China	X126	XZ126	Tibet
Q016	Kenpimai 8	China	X127	XZ127	Tibet
Q017	Niangzaoertiao	China	X130	XZ130	Tibet
Q018	yanmai 3	China	X131	XZ131	Tibet
Q019	Yangsimai 3	China	X134	XZ134	Tibet
Q023	Yangnongpi 4	China	X136	XZ136	Tibet
Q024	Pudamai 7	China	X137	XZ137	Tibet
Q026	Yunpi 4	China	X140	XZ140	Tibet

Q033	Yangnongpi 5	China	X142	XZ142	Tibet
Q036	Yangnongpi 9	China	X144	XZ144	Tibet
Q064	ganpi 4	China	X145	XZ145	Tibet
Q065	ganpi 5	China	X147	XZ147	Tibet
Q066	Edamai 7	China	X150	XZ150	Tibet
Q073	Zhepi 33	China	X152	XZ152	Tibet
Q077	Ningdamai 2	China	X161	XZ161	Tibet
Q079	Pudamai 9	China	X165	XZ165	Tibet
Q080	Supi 4	China	X166	XZ166	Tibet
Q081	Xiying 2	China	X171	XZ171	Tibet
Q107	Zhepi 8	China	X172	XZ172	Tibet
Q113	Lixin 1	China	X176	XZ176	Tibet
Q119	Qingyuanwumangluodamai	China	X178	XZ178	Tibet
Q138	Gangpi 1	China			

The numbers in the first and forth columns are in accordance with Figure 1.