

Table S5 Relationship among two structure groups, seed color, and causal SNPs for PHS resistance in *TaPHS1*.

Cultivars	Seed color	Structure group	SNP at +646	SNP at +666
Trego	white	1	G	A
SD07W041	white	1	G	A
NW05M6015-25-4	white	1	G	A
KS07HW25	white	1	G	A
KS07HW81	white	1	G	A
Snowmass	white	1	G	A
OK Rising	white	1	G	A
Rio Blanco	white	1	G	A
Danby	white	1	G	A
Avalanche	white	1	G	A
CO05W101	white	1	G	A
Mesa	white	1	G	A
KS07HW52-5	white	1	G	A
NE08452	red	1	G	A
Jagger	red	1	G	A
Overland	red	1	G	A
Intrada	white	1	G	A
KS05HW136-3	white	1	G	A
CO02W237	white	1	G	A
CO03W139	white	1	G	A
KS05HW121-2	white	1	G	A
CO03W043	white	1	G	A
SD05W030	white	1	G	A
SD05W148-1	white	1	G	A
Tiger	white	1	G	A
Lakin	white	1	G	A
Hartog	white	1	G	A
KS010990M-8	white	1	G	A
Infinity CL	red	1	G	A
Thunder CL	white	1	G	A
Recital	white	1	G	A
NW03Y2016	white	1	G	A
OK Bullet	red	1	G	A
Postrock	red	1	G	A
Santa Fe	red	1	G	A
NX03Y2489	white	1	A	T
NX04Y2107	white	1	A	T
Antelope	white	1	A	T
KS05HW15-2	white	1	A	T
CO04W210	white	1	A	T
KS07HW117	white	1	A	T
RonL	white	1	A	T
NW97S078	white	1	A	T

Grandin	red	1	A	T
CO03W054	white	2	G	A
NW04Y2188	white	2	G	A
Janz	white	2	G	A
Spica	white	2	G	A
Overlay	red	2	G	A
Jackpot	red	2	G	A
Jagalene	red	2	G	A
AC Taber	red	2	G	A
ZenkojiKomugi	red	2	G	A
Bobwhite	red	2	G	A
Karl92	red	2	G	A
Chinese Spring	red	2	G	A
Aus1408	white	2	G	A
Bungulla	white	2	G	A
NW96S016	white	2	G	A
TutoumaiA	white	2	G	A
Betty	white	2	G	A
Champlain	white	2	G	A
Halberd	white	2	G	A
Jabim	white	2	G	A
Kite	white	2	G	A
Lerma Rojo	white	2	G	A
Siyang936	white	2	G	A
2137	red	2	G	A
Bill Brown	red	2	G	A
Hatcher	red	2	G	A
Losprout	red	2	G	A
Heyne	white	2	G	A
99ID536	white	2	G	A
Protection CL	red	2	G	A
Renan	red	2	G	A
Jing411	white	2	A	T
NW05M6011-6-1	white	2	A	T
NW97S186	white	2	A	T
John	white	2	A	T
Klasic	white	2	A	T
Geneva	white	2	A	T
Xinchun9	white	2	A	T