

Table S1. Wheat relatives used in this study.

Species	Accession	Chromosome numbers	Genome
<i>Triticum monococcum</i>	PI427866	14	A ^m
<i>Triticum speltoides</i>	PI542251	14	S
<i>Triticum tauschii</i>	AS84	14	D
<i>Thinopyrum elongatum</i>	PI531718	14	E
<i>Thinopyrum elongatum</i>	PI531750	28	E
<i>Thinopyrum ponticum</i>	PI531737	70	EEESTt
<i>Thinopyrum bessarabicum</i>	W6-10232	14	E ^b E ^b
<i>Pseudoroegneria libanotica</i>	PI1228391	14	St
<i>Dasypyrum villosum</i>	PI251477	14	V
<i>Hordeum bogdanii</i>	Y1819	14	H
<i>Agropyron cristatum</i>	PI610892	14	P
<i>Secale cereale</i>	QL	14	R
<i>Psathyrostachys huashanica</i>	ZY3156	14	Ns
<i>Trichopyrum caespitosum</i>	PI634264	14	StE
<i>Psammopyrum athericum</i>	PI531744	42	StEP