

**Table S1.** List of abbreviations.

<b>Abbreviation</b>	<b>Item</b>
BLUEs	Best linear unbiased estimates
BLUP	Best linear unbiased prediction
CG	Campan Galade
cLe	Combined library exclusive
cLi	Combined library inclusive
DH	Doubled-haploid
DHL	Doubled-haploid library
EF	Elite flint
GB	Gelber Badischer
GBLUP	Genomic best linear unbiased prediction
GP	Genomic prediction
$h^2$	Heritability
LD	Linkage disequilibrium
LOOCV	Leave-one-out cross-validation
LPS	Linkage phase similarity
LwL	Library with Library
PS	Prediction set
QTL	Quantitative trait loci
RT	Rheintaler
SF	Strenzfelder
sL	Single library
SM	Satu Mare
SV	Simple validation
TS	Training set
WA	Walliser
$\rho$	Prediction accuracy
$\theta_{ii^*}$	Proportion of polymorphic markers between populations $i$ and $i^*$ .