

**Table S6 Predictive abilities of RR-BLUP B when a reduced subset of markers was used compared to the predictive abilities of RR-BLUP**

Trait	RR-BLUP	RR-BLUP B	Subset length
HT	0.38	0.38	4630
HTLC	0.45	0.45	3910
BHLC	0.49	0.50	1380
DBH	0.46	0.46	3800
CWAL	0.38	0.39	820
CWAC	0.48	0.47	590
BD	0.27	0.28	1110
BA	0.51	0.52	1040
Rootnum_bin	0.28	0.28	2550
Rootnum	0.23	0.24	3350
Rust_bin	0.29	0.33	310
Rust_gall_vol	0.23	0.37	100
StiffnessTree	0.43	0.44	1300
Lignin	0.17	0.17	4240
Latewood%4	0.24	0.24	3820
Density	0.20	0.24	240
C5C6	0.25	0.25	4790