Supplementary dataset S1: BioImprove *Populus* lines used in the study.

ID used in main text	Reference (for already published lines)	Construct type	Target gene model	Alternative gene name (if any) in the *Populus* genus
BI-1		RNAi	POPTR_0017s01510, Potri.T059900	-
BI-2		RNAi	POPTR_0008s00710, Potri.008G006500	-
BI-3		RNAi	POPTR_0003s07230, Potri.003G074700	-
BI-4		RNAi	POPTR_0006s13900, Potri.006G136700	PtrSuSY2
BI-5		RNAi	POPTR_0013s15380, Potri.013G157900	C4H2, Pt-CYP73A42
BI-6		RNAi	POPTR_0017s00520, Potri.017G000300	Pt-MTHFR1.1, MTHFR2
BI-7		RNAi	POPTR_0016s12100, Potri.016G113600	Pt-AUX1.1, PtrAUX2
BI-8		RNAi	POPTR_0008s02650, Potri.008G026400	Pt-MANS.1
BI-9		RNAi	POPTR_0017s05770, Potri.017G029000	-
BI-10		RNAi	POPTR_0014s07670, Potri.014G080900	-
BI-11		RNAi	POPTR_0001s10120, Potri.001G096900	Pt-DRR206.6
BI-12		RNAi	POPTR_0002s19000, Potri.002G189000	Pt-SAM1.2, AdoMet5
BI-13		Overexpressor	POPTR_0002s19000, Potri.002G189000	Pt-SAM1.2, AdoMet5
BI-14		RNAi	POPTR_0017s05770, Potri.017G029000	-
BI-15		RNAi	POPTR_0001s09090, Potri.001G107000	-
BI-16		RNAi	POPTR_0015s09930, Potri.015G087800	-
BI-17		RNAi	Potri.010G117500, Potri.010G117500	-
BI-18		RNAi	POPTR_0003s04860, Potri.003G050100	Pt-ATHB.11
BI-19	41	Tentative overexpressor resulting in down-regulation	POPTR_0214s00200, Potri.001G162400, grail3.0029000401	PttPME1
BI-20		Antisense	POPTR_0015s05130, Potri.015G033600	PttMYB21a, MYB090, Pt-MYB.38
BI-21	16	Overexpressor	POPTR_0003s17450, Potri.003G175900	PtxtPL1-27
BI-22		Antisense	POPTR_0214s00200, Potri.001G162400, grail3.0029000401	PttPME1
BI-23	36	Antisense	POPTR_0002s11370, Potri.002G113100	PtxtXyn10A
BI-24		RNAi	POPTR_0002s02450, Potri.002G022900	-
BI-25		RNAi	POPTR_0015s07110, Potri.015G060100	-
BI-26		Overexpressor	POPTR_0007s12460, Potri.007G029400	-
BI-27		Overexpressor	POPTR_0016s05410, Potri.016G053700	
BI-28	42	Overexpressor	POPTR_0003s15800, Potri.003G159700	Pt-EXGT.2
BI-29		multi-target-RNAi driven by a wood-specific promoter		
BI-30		RNAi	POPTR_0002s20570, Potri.002G204400	Pt-UXS2.1
BI-31		RNAi	POPTR_0001s13960, Potri.001G055100	-
BI-32		RNAi	POPTR_0014s15710, Potri.014G159000	Pt-ACO1.4, ACO3
BI-33		Overexpressor	POPTR_0004s07700, Potri.004G078800	-
BI-34		RNAi	POPTR_0019s13500, Potri.019G104000	-
BI-35		RNAi	POPTR_0006s08780, Potri.006G087500	-
BI-36		Overexpressor		
BI-37		RNAi	POPTR_0019s01600, Potri.019G002100	-
BI-38		RNAi	POPTR_0014s03980, Potri.014G040300	-
BI-39		RNAi	POPTR_0003s07130, Potri.003G073700	-
BI-40		RNAi	POPTR_0003s17980, Potri.003G181400	Pt-CCR.10, CCR7
WT		No construct	Wild-type	

Information not available