

Additional file 1. Markers located in candidate genes along with references.

Markers	Reference	PU number *	Protein ID **	Genbank ID ***
I_DT_11_sa	Street <i>et al.</i> 2006	PU07050		CK092601
I_DT_25_sa_pI+III	Street <i>et al.</i> 2006	PU11545		CK095408
I_DT_27_sa	Street <i>et al.</i> 2006	PU09275		CK089980
V_DT_5_sa	Street <i>et al.</i> 2006	PU04104		BU820207
VI_DT_12_sa	Street <i>et al.</i> 2006	PU12091		CK101003
VI_DT_20_sa_pI+III	Street <i>et al.</i> 2006	PU07550		CK103196
X_DT_23_sa	Street <i>et al.</i> 2006	PU10422		BI123582
X_DT_28_sa	Street <i>et al.</i> 2006	PU10560		BI123331
XVI_DT_4_sa	Street <i>et al.</i> 2006	PU10578		CK094405
DT_6_sa	Street <i>et al.</i> 2006	PU12988		CK091511
Ro_1_sa	Kohler <i>et al.</i> 2008		582100	
Ro_3_sa_pI+III	Kohler <i>et al.</i>		249428	

	2008	
Ro_9_sa	Kohler <i>et al.</i>	594667
	2008	
Ro_4b_sa	Kohler <i>et al.</i>	764595
	2008	
Ro_11_sa	Yin <i>et al.</i>	800364
	2004	
Ro_16_sa_pI	Rinaldi <i>et al.</i>	417599
	2007	
Ro_18_sa_pI	Rinaldi <i>et al.</i>	669475
	2007	
Ro_27_sa	Rinaldi <i>et al.</i>	828962
	2007	
Ro_28_sa_pI+III	Rinaldi <i>et al.</i>	659435
	2007	
R_4_sa	Ralph <i>et al.</i>	EF146918
	2008	
R_9_sa	Ralph <i>et al.</i>	EF144899
	2008	
R_23_sa	Ralph <i>et al.</i>	EF147658
	2008	
R_24_sa	Ralph <i>et al.</i>	EF144759
	2008	
R_28_sa	Ralph <i>et al.</i>	EF147174
	2008	

R_29_sa	Ralph <i>et al.</i>	EF148579
	2008	
R_32_sa_pI	Ralph <i>et al.</i>	EF147184
	2008	
R_33_sa_pI+III	Ralph <i>et al.</i>	EF147117
	2008	
R_36_sa	Ralph <i>et al.</i>	EF148121
	2008	
R_41_sa_pI	Ralph <i>et al.</i>	EF148393
	2008	
R_48_sa	Ralph <i>et al.</i>	EF147179
	2008	
R_51_sa	Ralph <i>et al.</i>	EF144570
	2008	
R_52_sa	Ralph <i>et al.</i>	EF148589
	2008	
R_54_sa	Ralph <i>et al.</i>	EF145764
	2008	
R_56_sa	Ralph <i>et al.</i>	EF144919
	2008	
R_59_sa	Ralph <i>et al.</i>	EF145551
	2008	
R_60_sa_pI	Ralph <i>et al.</i>	EF145493
	2008	
R_61_sa	Ralph <i>et al.</i>	EF145102

	2008	
R_62_sa	Ralph <i>et al.</i>	EF147330
	2008	
R_66_sa	Ralph <i>et al.</i>	EF146705
	2008	
R_67_sa_pI+III	Ralph <i>et al.</i>	EF146405
	2008	
R_69_sa	Ralph <i>et al.</i>	EF144380
	2008	
R_71_sa	Ralph <i>et al.</i>	EF148294
	2008	
R_73_sa	Ralph <i>et al.</i>	EF145159
	2008	
R_74_sa	Ralph <i>et al.</i>	EF144553
	2008	
R_76_sa	Ralph <i>et al.</i>	EF148737
	2008	
R_79_sa	Ralph <i>et al.</i>	EF147535
	2008	
R_80_sa	Ralph <i>et al.</i>	EF146002
	2008	
R_84_sa	Ralph <i>et al.</i>	EF148221
	2008	
Ph2		566667
Ph5		826816

Ph14_III	833761
Ph17	773175
Ph18	1083038
Ph21	876150
Ph27	560536
Ph30	556324
Ph32	706232

* PU number found at PopulusDB <http://www.populus.db.umu.se/>

** Protein ID found at http://genome.jgi-psf.org/Poptr1_1/Poptr1_1.home.html

*** Genbank ID found at <http://www.ncbi.nlm.nih.gov/>

References

Kohler A, Rinaldi C, Duplessis S, Baucher M, Geelen D, Duchaussoy F, Meyers BC, Boerjan W, Martin F: Genome-wide identification of NBS resistance genes in *Populus trichocarpa*. *Plant Mol Biol* 2008, 66(6):619-636.

Ralph SG, Chun HJ, Cooper D, Kirkpatrick R, Kolosova N, Gunter L, Tuskan GA, Douglas CJ, Holt RA, Jones SJ et al: Analysis of 4,664 high-quality sequence-finished poplar full-length cDNA clones and their utility for the discovery of genes responding to insect feeding. *BMC Genomics* 2008, 9:57.

Rinaldi C, Kohler A, Frey P, Duchaussoy F, Ningre N, Couloux A, Wincker P, Le Thiec D, Fluch S, Martin F et al: Transcript profiling of poplar leaves upon infection with compatible and incompatible strains of the foliar rust *Melampsora larici-populina*. *Plant Physiol* 2007, 144(1):347-366.

Street NR, Skogstrom O, Sjodin A, Tucker J, Rodriguez-Acosta M, Nilsson P, Jansson S, Taylor G: The genetics and genomics of the drought response in *Populus*. *Plant J* 2006, 48(3):321-341.

Yin TM, DiFazio SP, Gunter LE, Jawdy SS, Boerjan W, Tuskan GA: Genetic and physical mapping of *Melampsora* rust resistance genes in *Populus* and characterization of linkage disequilibrium and flanking genomic sequence. *New Phytol* 2004, 164(1):95-105.