

**Table S5. MUG loci.**

Species	Label	Locus ID* or Location
<i>A. thaliana</i>	AtMUG1	AT3G04605
	AtMUG2	AT2G30640
	AtMUG3	AT1G06740
	AtMUG4	AT5G16505
	AtMUG5	AT3G06940
	AtMUG6	AT5G48965
	AtMUG7	AT3G05850
	AtMUG8	AT5G34853
<i>C. papaya</i>	Cp1	supercontig_123:394,808..396,589
	Cp3	evm.TU.contig_37041
	Cp4	supercontig_20:790,047..791,450
	Cp5	evm.TU.supercontig_146.19
	Cp6	supercontig_48:1,209,999..1,212,321
	Cp7	supercontig_277:54,949..57,928
	<i>V. vinifera</i>	Vv4
Vv5		chr14:363,591..365,978
Vv6		chr7:480,947..483,202
Vv9		chr4:15,764,692..15,766,497
Vv10		chr3:9,310,218..9,311,966
Vv11		chr5:2,688,167..2,690,716
Vv12		chr11:5,970,313..5,972,772
<i>M. guttatus</i>		Mg1
	Mg2	mgv1a002269m.g
	Mg3	mgv1a023335m.g
	Mg4	mgv1a006200m.g
	Mg5	mgv1a001707m.g
	Mg6	mgv1a002150m.g
	Mg7	mgv1a001676m.g
	Mg8	mgv1a001259m.g
<i>M. truncatula</i>	Mt1	Medtr1g094000
	Mt2	Medtr7g143350
	Mt3	Medtr8g133990
	Mt6	Medtr4g122010
<i>O. sativa</i>	Os1	LOC_Os12g40530
	Os2	LOC_Os02g09900
	Os3	LOC_Os06g42640
	Os5	LOC_Os01g41210
	Os6	LOC_Os10g01550
<i>B. distachyon</i>	Bd1	Bradi2g19940
	Bd2	Bradi1g23870
	Bd3	Bradi2g02790
	Bd4	Bradi1g35585
	Bd5	Bradi3g06710
	Bd6	Bradi2g03540
	Bd7	Bradi2g36990
<i>Z. mays</i>	Zm1	GRMZM2G423238
	Zm2	GRMZM2G320452
	Zm3	GRMZM2G164709
	Zm4	GRMZM2G363704
	Zm5	GRMZM2G034372
	Zm6	GRMZM2G130905
	Zm8	AC234109.1_FG003
	<i>S. bicolor</i>	Sb1
Sb2		Sb03g002010
Sb3		Sb10g024700
Sb4		Sb01g027410
Sb5		Sb04g006220
Sb6		Sb05g027680

\* Locus ID is given wherever a single locus covers most of the MUG sequence (even if the corresponding model does not perfectly match the predicted MUG sequence).