

Table S6: PCR-based genotyping markers used for recombination mapping in the backcross for R79 (*pme31-1*) and R363 (*pme31-2*)

Mutated gene	Primer name (5' to 3' sequence)	Enzyme	Amplicon size (bp)	
			Wt	Mutant
R79 (<i>pme31-1</i>)				
<i>At3g01085</i>	R79-M1-F (TCCGGAGAAAAGATTATG) R79-M1-R (GAAGAACAACAACAAACCACAGAG)	<i>ApoI</i>	274, 61, 42	193, 81, 61, 42
<i>At3g07750</i>	R79-M3-F (GGTGTATTCCGCAGGTAGTG) R79-M3-R (ATAGAACGATAGAACGGGTGTGAC)	<i>BsaXI</i>	285, 131	416
<i>At3g17750</i>	R79-M5-F (TTGGGAAGAAAAACACGAG) R79-M5-R (CGCCAAAGCCAAAAATCAAG)	<i>MnlI</i>	280, 75	355
<i>At3g22100</i>	R79-M13-F (CCAACGGAGTGAAGCAATCTGAG) R79-M13-R (GACACCACCACCACCACAC)	<i>BclI</i>	242, 41, 59	283, 59
<i>At3g23110</i>	R79-M12-F (CAGTCCAGTTGGCAAAATAGTCTT) R79-M12-R (TGCGAAACAACAGTCTAAGTGA)	<i>Avall</i>	240, 111	341
<i>At3g24550</i>	R79-PERK1-F (GGCCGGTGTTCAAAGATTAC) R79-PERK1-R (ACCTCAGTGACAAACAAGACAG)	<i>BsmAI</i>	318	162, 156
<i>At3g27480</i>	R79-M11-F (AAAGCTGCACCTATCAAAATATGAAG) R79-M11-R (ATCTGCCCCATTCCATCTG)	<i>Avall</i>	56, 26	83
<i>At3g52550</i>	R79-M7-F (TGGGTCCGCATCAATCAT) R79-M7-R (ATCCACCATCGACACCATAGAA)	<i>AccI</i>	213, 155, 6	368, 6
<i>At3g58790</i>	R79-M8-F (GGCTTCATCACTCAGTTTTCTCTT) R79-M8-R (AGGGGCTTACCACCGACATT)	<i>ApoI</i>	204, 146	146, 113, 91
R363 (<i>pme31-2</i>)				
<i>At3g06810</i>	R363-IBR3-1 (TAAAGGAAATGGCAAAGAGAGAAGGCCCAT) R363-IBR3-2 (CGGTAGCCGCCAGTTCTTCTTAGC)	<i>NcoI</i>	140, 30	170
<i>At3g24780</i>	At3g24780-1 (ACCCCTGCCTCGACTTCTTCTTTC) At3g24780-2 (GACCCCTACTACGACCACCACCAA)	<i>NcoI</i>	223, 185	408
<i>At3g29070</i>	At3g29070-1 (AGAGGTGGAGGTGAGGAAACTACT) At3g29070-2 (AACGGTCCAAAATACAGAGAACAA)	<i>DdeI</i>	278, 108, 89	386, 89
<i>At3g46530</i>	At3g46530-1 (ATGGTATAGGAGGCTTGAA) At3g46530-2 (TTAATACGCGTAGTGATGA)	<i>XmnI</i>	199, 198, 142	341, 189