

Supplementary Table 1 Sequences of the used primers

Gene	Primer	Sequence (5' to 3')	Purpose
<i>PpSWEET9a</i>	Forward	TTCATGTCCTTCCCTTTG	RT-qPCR analysis
	Reverse	ATGTTTGGTGCCGCTAT	
<i>PpSWEET9b</i>	Forward	TGGTGGCGGTCACATTC	
	Reverse	GAGCAGCAAAGACAGCAAT	
<i>PpSWEET9c</i>	Forward	ATGAGTTTGATACTGCTGGTG	
	Reverse	ACACGCTTGGCTTCTCC	
<i>PpSWEET10</i>	Forward	ATTGTGGGATGGATTTG	
	Reverse	GGTCCGTATTACTCGTCT	
<i>PpSWEET14</i>	Forward	ACCCTCAGTGCTGTTATG	
	Reverse	GTTCCGTAGATTGCGTAG	
<i>PpSWEET15</i>	Forward	ATTGTGGGATGGATTTG	
	Reverse	GGTCCGTATTACTCGTCT	
<i>PpActin</i>	Forward	CAGATCATGTTTGAGACCTTCAATGT	Gene isolation
	Reverse	CATCACCAGAGTCCAGCACAAAT	
<i>AtActin</i>	Forward	AGTGTCTGGATCGGTGGTTC	
	Reverse	CCCAGCTTTTAAAGCCTTT	
<i>PpSWEET9a</i>	Forward	ATGGCAGCCCCTGATGCT	Plasmid construction of PHB-X-YFP
	Reverse	TCACACAATTGATTCATTTGGCTCA	
<i>PpSWEET14</i>	Forward	ATGACTTCATCAAGTGCTCACAGT	Plasmid construction of pDR196
	Reverse	TCAAACCTTCGCATGTAACCATTGGCTT	
<i>PpSWEET9a</i>	Forward	GCCGGATCCATGGCAGCCCCTGATGCT	Plasmid construction of pBT-SUC
	Reverse	GGACTAGTCACAATTGATTCATTTGGCTCA	
<i>PpSWEET14</i>	Forward	GCCGGATCCATGACTTCATCAAGTGCTCACAGT	Plasmid construction of pPR3-N
	Reverse	GGACTAGTAACTTCGCATGTAACCATTGGCTT	
<i>PpSWEET9a</i>	Forward	CGGAATTCATGGCAGCCCCTGATGCTTTCCT	Plasmid construction of pPR3-N
	Reverse	CCCCTCGAGTCACACAATTGATTCATTTGGCTCA	
<i>PpSWEET14</i>	Forward	CGG AATTCATGACTTCATCAAGTGCTCACAGTC	Plasmid construction of pPR3-N
	Reverse	CCCCTCGAGTCAAACCTTCGCATGTAACCATT	
<i>PpSWEET9a</i>	Forward	gcagccaaaatatctgcaatggccattacggccATGGCAGCCCCTGATGCTTTC	Plasmid construction of pPR3-N
	Reverse	gatatcgaattcctgcagatggccgagcgcccttCACAATTGATTCATTTGGCTC	
<i>PpSWEET14</i>	Forward	gcagccaaaatatctgcaatggccattacggccATGACTTCATCAAGTGCTCAC	Plasmid construction of pPR3-N
	Reverse	gatatcgaattcctgcagatggccgagcgcccttAACTTCGCATGTAACCATTG	
<i>PpSWEET9a</i>	Forward	gcagccaaaatatctgcaatggccattacggccATGGCAGCCCCTGATGCTTTC	Plasmid construction of pPR3-N
	Reverse	gatatcgaattcctgcagatggccgagcgcccttCACAATTGATTCATTTGGCTC	
<i>PpSWEET14</i>	Forward	gcagccaaaatatctgcaatggccattacggccATGACTTCATCAAGTGCTCAC	Plasmid construction of pPR3-N
	Reverse	gatatcgaattcctgcagatggccgagcgcccttAACTTCGCATGTAACCATTG	
<i>PpSWEET9a</i>	Forward	GGGGACAAGTTTGTACAAAAAAGCAGGCTATGGCAGCCCCTGATGC	Plasmid

	Reverse	GGGGACCACTTTGTACAAGAAAGCTGGGTCCACAATTGATTCATTTGGCTCAGC	construction of pCAMBIA-nLUC
<i>PpSWEET14</i>	Forward	GGGGACAAGTTTGTACAAAAAAGCAGGCTATGACTTCATCAAGTGCTCACAGTCC	
	Reverse	GGGGACCACTTTGTACAAGAAAGCTGGGTCAACTTCGCATGTAACCATTGGC	
<i>PpSWEET9a</i>	Forward	GGGGACAAGTTTGTACAAAAAAGCAGGCTTCATGGCAGCCCCTGATGC	Plasmid construction of pCAMBIA-eLUC
	Reverse	GGGGACCACTTTGTACAAGAAAGCTGGGTCAACAATTGATTCATTTGGCTCAGC	
<i>PpSWEET14</i>	Forward	GGGGACAAGTTTGTACAAAAAAGCAGGCTTCATGACTTCATCAAGTGCTCACAGTCC	
	Reverse	GGGGACCACTTTGTACAAGAAAGCTGGGTAACTTCGCATGTAACCATTGGC	
<i>PpSWEET9a</i>	Forward	gtgagtaagggtaccgaattcGTTGTTGGGTGGATTAGTGTT	Plasmid construction of pTRV2
	Reverse	cgtgagctcggtaccgatccCTGCAACCACATTTGGTATCTG	
<i>PpSWEET14</i>	Forward	gtgagtaagggtaccgaattcCTTGGATGGGTTTGTGTAGC	
	Reverse	cgtgagctcggtaccgatccGCTTCACAACATCACCCCTGTG	