

Table S8. The genes related to the synthesis of 2AP and their homologs in plants

Gene	Species	Homologous gene				
GAPDH	<i>Oryza sativa</i> L.	LOC_Os04g40950.1				
		LOC_Os02g38920.1(94.7%)	LOC_Os08g03290.1(94.4%)			
		LOC_Os06g45590.1(82.8%)	LOC_Os02g07490.1(82.5%)			
		LOC_Os04g38600.1(65.6%)	LOC_Os03g03720.1(67.4%)			
		Aco003511.1(81.3%)	Aco018596.1(81.0%)	Aco004676.1(78.9%)		
	<i>Ananas comosus</i> (Linn.) Merr.	Aco007469.1(64.7%)	Aco011924.1(62.0%)	Aco016173.1(24.6%)		
		Bol010398(93.5%)	Bol031435(93.5%)	Bol029171(93.2%)		
	<i>Brassica oleracea</i> L.	Bol038208(82.5%)	Bol021505(82.2%)	Bol033485(68.2%)		
		Bol042826(65.3%)	Bol031102(65.3%)	Bol031393(65.6%)		
		Glyma.06G172700.1(93.8%)	Glyma.04G193400.1(93.8%)			
	<i>Glycine max</i> (Linn.) Merr.	Glyma.06G172600.1(93.8%)	Glyma.04G193500.1(93.5%)			
		Glyma.18G009700.1(91.7%)	Glyma.11G247600.1(91.7%)			
		Glyma.19G078300.1(92.6%)	Glyma.05G073100.1(93.2%)			
		Glyma.03G092700.1(74.8%)	Glyma.16G081400.1(75.1%)			
		Glyma.19G106800.1(56.4%)	Glyma.16G044900.1(56.4%)			
		Glyma.06G015900.1(58.5%)	Glyma.04G015900.1(58.5%)			
		Glyma.16G150200.1(35.0%)				
		<i>Oryza sativa</i> L.	LOC_Os01g62420.1			
	LOC_Os01g05490.1(89.4%)		LOC_Os09g36450.1(70.6%)			
	Aco015453.1(89.4%)		Aco024987.1(84.3%)	Aco013124.1(69.8%)		
	Aco020079.1(63.1%)					
	<i>Brassica oleracea</i> L.		Bol044218(90.6%)	Bol044217(89.0%)	Bol045882(71.4%)	
			Bol006738(71.4%)	Bol045407(54.5%)	Bol045406(38.0%)	
	<i>Glycine max</i> (Linn.) Merr.		Glyma.15G038100.1(85.5%)	Glyma.13G146200.1(71.8%)		
			Glyma.13G336200.1(68.2%)	Glyma.03G185800.1(67.5%)		
			Glyma.19G186000.1(66.7%)	Glyma.10G059500.1(67.1%)		
TPI	<i>Lycopersicon esculentum</i> Miller		Solyc09g009260			
		Solyc10g083570.1.1(96.4%)	Solyc07g065900.2.1(87.7%)			
		Solyc05g008600.2.1(71.2%)	Solyc02g062340.2.1(70.9%)			
		Solyc01g110360.2.1(69.8%)	Solyc02g084440.2.1(70.4%)			
		Solyc10g054380.1.1(27.4%)	Solyc10g054390.1.1(22.3%)			
	Solyc10g054340.1.1(9.8%)					
	<i>Oryza sativa</i> L.	LOC_Os01g67860.1(91.3%)	LOC_Os05g33380.1(90.8%)			
		LOC_Os10g08022.1(90.2%)	LOC_Os08g02700.1(86.9%)			
		LOC_Os06g40640.1(86.3%)	LOC_Os11g07020.1(70.7%)			
		LOC_Os01g02880.1(70.4%)				
	<i>Ananas comosus</i> (Linn.) Merr.	Aco025753.1(91.9%)	Aco024201.1(91.9%)	Aco007775.1(88.5%)		
		Aco003226.1(71.8%)	Aco021826.1(71.5%)	Aco007583.1(13.4%)		
	<i>Brassica oleracea</i> L.	Bol010037(92.2%)	Bol037713(91.6%)	Bol004435(90.8%)		
		Bol025079(90.2%)	Bol039645(87.7%)	Bol037714(84.9%)		
		Bol045872(70.1%)	Bol014852(71.2%)	Bol018526(68.7%)		
		Bol028791(69.3%)	Bol016047(68.2%)	Bol006726(67.9%)		

	<i>Glycine max</i> (Linn.) Merr.	Glyma.14G189400.1(92.2%)	Glyma.13G151800.1(91.9%)
		Glyma.02G222400.1(91.6%)	Glyma.03G191500.1(91.6%)
		Glyma.10G066700.1(91.6%)	Glyma.14G010900.1(88.5%)
		Glyma.02G303000.1(88.0%)	Glyma.12G037400.1(71.2%)
		Glyma.11G111400.1(71.5%)	Glyma.11G111100.1(71.5%)
		Glyma.04G008300.1(70.7%)	Glyma.20G122500.1(70.7%)
		Glyma.10G268500.1(70.7%)	Glyma.12G153000.1(68.4%)
TAL	<i>Arabidopsis thaliana</i> (L.) Heynh.	At5g13420	
	<i>Oryza sativa</i> L.	LOC_Os01g70170.1(75.8%)	
	<i>Ananas comosus</i> (Linn.) Merr.	Aco015068.1(79.7%)	
	<i>Brassica oleracea</i> L.	Bol043436(95.0%)	Bol034232(55.0%)
	<i>Glycine max</i> (Linn.) Merr.	Glyma.18G299100.1(86.8%)	Glyma.08G362900.1(86.5%)
		Glyma.05G199800.1(66.9%)	Glyma.08G277700.1(53.7%)
		Glyma.15G205300.1(53.7%)	Glyma.02G189100.1(52.3%)
		Glyma.13G043400.1(52.7%)	Glyma.03G072600.1(52.5%)
		Glyma.08G007300.1(35.6%)	Glyma.18G139200.1(21.5%)
PRODH	<i>Oryza sativa</i> L.	LOC_Os10g40360.1	
	<i>Ananas comosus</i> (Linn.) Merr.	Aco012041.1(58.2%)	
	<i>Brassica oleracea</i> L.	Bol040145(62.0%)	Bol033129(60.6%) Bol032297(61.2%)
	<i>Glycine max</i> (Linn.) Merr.	Bol043056(60.0%)	
		Glyma.19G043000.1(56.9%)	Glyma.13G049700.1(56.5%)
		Glyma.18G278900.1(56.3%)	Glyma.19G042900.1(56.3%)
		Glyma.08G255900.1(51.0%)	
P5CS	<i>Oryza sativa</i> L.	LOC_Os05g38150(P5CS1)	LOC_Os01g62900(P5CS2) LOC_Os01g73450.1(7.7%)
	<i>Ananas comosus</i> (Linn.) Merr.	Aco015423.1(80.0%)	Aco014596.1 1(8.3%)
	<i>Brassica oleracea</i> L.	Bol016209(87.4%)	Bol044229(86.9%) Bol020440(86.6%)
	<i>Glycine max</i> (Linn.) Merr.	Bol044364(84.9%)	
		Glyma.18G034300.1(88.0%)	Glyma.14G065600.1(87.3%)
		Glyma.02G251100.1(87.2%)	Glyma.01G099800.1(86.2%)
		Glyma.03G069400.1(84.8%)	Glyma.18G188000.1(80.3%)
		Glyma.07G137300.1(80.0%)	
OAT	<i>Oryza sativa</i> L.	LOC_Os03g44150.1	
		LOC_Os05g03830.1(42.3%)	LOC_Os04g52440.1(44.4%)
		LOC_Os08g10510.1(45.0%)	LOC_Os04g52450.1(45.2%)
		LOC_Os02g02210.1(44.6%)	LOC_Os05g39770.1(45.0%)
		LOC_Os03g21960.1(41.6%)	LOC_Os03g07570.4(39.7%)
		LOC_Os07g27780.1(26.8%)	LOC_Os08g41990.1(32.6%)
		LOC_Os08g14770.1(19.7%)	
	<i>Ananas comosus</i> (Linn.) Merr.	Aco005104.1(83.3%)	Aco001566.1(39.7%) Aco007099.1(44.0%)
	<i>Brassica oleracea</i> L.	Aco018682.1(41.9%)	
		Aco004116.1(36.8%)	
		Bol006334(80.8%)	Bol032105(23.7%) Bol023248(46.3%)
	<i>Glycine max</i> (Linn.) Merr.	Glyma.05G141900.1(77.0%)	Glyma.08G097800.1(76.5%)
		Glyma.08G245800.1(22.2%)	Glyma.17G184700.1(22.8%)
		Glyma.19G189900.1(11.8%)	Glyma.02G189300.1(9.1%)
		Glyma.15G181100.1(9.1%)	