

Table S3A. The Basic information of *CYP76AD* in pitaya.

Gene Name	Chr.	Gene Length (bp)	Amino Acids	pI	MW (kDa)	GRAVY ¹	Instability Index
<i>HU01G02117.1</i>	1	24714	733	6.21	82.72	0.032	38.49
<i>HU03G00480.1</i>	3	3338	506	8.91	57.67	-0.117	44.73
<i>HU03G00481.1</i>	3	2837	442	9.39	49.89	-0.111	38.84
<i>HU03G00482.1</i>	3	1684	498	6.51	56.55	-0.095	35.02
<i>HU04G00093.1</i>	4	11846	1025	6.88	114.44	0.082	30.31
<i>HU05G00563.1</i>	5	1978	496	6.82	55.36	-0.093	45.22
<i>HU07G00498.1</i>	7	2814	511	7.00	58.14	-0.135	47.24
<i>HU07G00499.1</i>	7	2403	504	7.73	57.37	-0.145	47.05
<i>HU07G00500.1</i>	7	27114	711	5.99	80.85	-0.110	45.57
<i>HU07G00504.1</i>	7	2282	511	6.58	58.15	-0.123	48.29
<i>HU07G00510.1</i>	7	2515	491	8.95	55.86	-0.178	39.52
<i>HU07G00784.1</i>	7	18290	438	5.98	49.88	0.082	39.83
<i>HU09G01023.1</i>	9	1796	446	6.68	50.46	-0.080	40.71
<i>HU11G01017.1</i>	11	71367	1835	9.22	208.48	-0.275	37.36
<i>HU11G01870.1</i>	11	2639	489	6.90	54.92	-0.076	33.14

¹: If GRAVY score of a protein was less than zero, it was considered to be hydrophilic.

Table S3B. Basic information of *DODA* genes in pitaya.

Gene Name	Chr.	Gene Length (bp)	Amino Acids	pI	MW (kDa)	GRAVY ¹	Instability Index
<i>HU03G01342.1</i>	3	9485	271	5.66	29.94	-0.163	27.31

<i>HU08G01571.1</i>	8	3921	375	9.25	42.17	-0.421	35.57
<i>HU08G01572.1</i>	8	3882	318	6.22	35.50	-0.207	37.48

¹: If GRAVY score of a protein was less than zero, it was considered to be hydrophilic.

Table S3C. Basic information of *GT* genes in pitaya.

Gene Name	Chr.	Gene Length (bp)	Amino Acids	pI	MW (kDa)	GRAVY ¹	Instability Index
<i>HU01G00156.1</i>	1	1686	484	5.35	55.40	-0.133	48.52
<i>HU01G00157.1</i>	1	1449	482	5.60	54.91	-0.278	50.02
<i>HU01G00158.1</i>	1	2127	486	6.01	54.69	-0.256	44.93
<i>HU01G00159.1</i>	1	1623	486	6.01	54.70	-0.273	45.83
<i>HU01G00761.1</i>	1	4727	444	5.63	49.89	-0.121	48.64
<i>HU02G01765.1</i>	2	1823	475	5.81	53.33	-0.271	50.74
<i>HU03G00258.1</i>	3	1999	481	5.97	54.31	-0.182	41.87
<i>HU03G00266.1</i>	3	1598	477	5.36	54.01	-0.173	46.80
<i>HU03G00267.1</i>	3	1708	472	5.66	52.84	-0.047	41.00
<i>HU03G01671.1</i>	3	11126	466	5.44	52.27	-0.264	48.56
<i>HU03G02206.1</i>	3	1392	463	6.32	51.33	0.086	35.69
<i>HU04G00198.1</i>	4	21223	869	6.01	96.81	-0.129	43.65
<i>HU04G01617.1</i>	4	2715	464	6.18	51.01	0.103	35.87
<i>HU05G01235.1</i>	5	1805	446	5.70	50.26	-0.209	48.71
<i>HU05G01532.1</i>	5	1445	381	5.33	42.56	-0.036	42.66

<i>HU06G00241.1</i>	6	1490	489	5.47	54.74	-0.116	43.34
<i>HU06G00242.1</i>	6	1470	489	5.34	54.72	-0.108	40.86
<i>HU06G00243.1</i>	6	1628	486	5.30	54.45	-0.236	48.12
<i>HU06G00244.1</i>	6	12389	493	5.63	54.77	-0.151	42.40
<i>HU07G00076.1</i>	7	2061	468	6.00	51.37	-0.082	42.73
<i>HU07G00240.1</i>	7	1520	493	5.73	55.13	-0.211	49.79
<i>HU07G01550.1</i>	7	1392	463	5.73	51.36	0.079	37.37
<i>HU07G01678.1</i>	7	1917	475	5.68	53.40	-0.111	36.95
<i>HU08G02083.1</i>	8	3292	484	5.91	54.19	-0.180	38.07
<i>HU09G01034.1</i>	9	1612	458	5.95	51.02	-0.049	47.49
<i>HU09G01039.1</i>	9	1733	458	5.87	50.79	-0.005	47.44
<i>HU09G01874.1</i>	9	1969	475	5.77	53.74	-0.300	52.89
<i>HU09G01875.1</i>	9	1702	475	5.67	53.52	-0.297	50.08
<i>HU10G00514.1</i>	10	1624	484	5.74	54.75	-0.191	46.15
<i>HU10G01599.1</i>	10	1922	459	5.67	50.94	0.029	44.48
<i>HU11G01695.1</i>	11	2049	474	6.21	52.15	-0.141	44.13
<i>HU11G01696.1</i>	11	1859	480	5.71	52.91	-0.033	42.62
<i>HU11G01697.1</i>	11	1904	479	6.35	52.84	0.032	39.97
<i>HU11G01698.1</i>	11	1413	470	5.93	51.66	-0.028	37.82
<i>HU11G01699.1</i>	11	1716	470	5.65	51.96	-0.090	42.50

¹: If GRAVY score of a protein was less than zero, it was considered to be hydrophilic.