

Table S1. PHT2 family's genes of 49 plant species.

Number	Organism	Gene ID	Protein Length	Number of exons
1	<i>Ricinus communis</i>	27504.m000647	476	3
2	<i>Triticum aestivum</i> L.	AF156696	537	3
3	<i>Capsicum annuum</i> L.	AF533081	574	3
4	<i>Arabidopsis lyrata</i>	AL5G15360.t1	586	3
5	<i>Aquilegia coerulea</i>	Aqcoe3G144600.1	579	3
6	<i>Arabidopsis thaliana</i> columbia	AT3G26570.1	613	4
7	<i>Solanum melongena</i> L.	AY293827	568	3
8	<i>Boechera stricta</i>	Bostr.0556s0327.1	586	3
9	<i>Brachypodium</i> distachyon	Bradi3g47550.1	569	3
10	<i>Brachypodium stacei</i>	Brast04G151800.1	569	3
11	<i>Capsella grandiflora</i>	Cagra.3598s0004.1	586	3
12	<i>Capsella rubella</i>	Carubv10016883m	601	4
13	<i>Citrus clementina</i>	Ciclev10031076m	575	3
14	<i>Daucus carota</i>	DCAR_026513	580	3
15	<i>Medicago</i>	EF094558	550	3
16	<i>Carica papaya</i>	evm.model.supercontig_3 3.20	586	3
17	<i>Gossypium raimondii</i>	Gorai.005G178500.1	585	3
18	<i>Zea mays</i> Ensembl-18	GRMZM2G092780_T01	577	3
19	<i>Vitis vinifera</i> Genoscope.12X	GSVIVT01005753001	388	4
20	<i>Kalanchoe fedtschenkoi</i>	Kaladp0034s0076.1	579	3

21	<i>Kalanchoe laxiflora</i>	Kalax.0023s0132.1	579	3
22	<i>Oryza sativa</i>	LOC_Os02g38020.1	572	3
23	<i>Manihot esculenta</i>	Manes.12G023200.1	579	3
24	<i>Marchantia polymorpha</i>	Mapoly0138s0013.1	613	3
25	<i>Medicago truncatula</i>	Medtr8g069390.1	574	3
26	<i>Mimulus guttatus</i>	Migut.K00598.1	583	3
27	<i>Citrus sinensis</i>	orange1.1g012038m	472	3
28	<i>Panicum hallii</i>	Pahal.A02359.1	571	3
29	<i>Panicum virgatum</i>	Pavir.Aa01470.1	614	3
30	<i>Solanum tuberosum</i>	PGSC0003DMT4000478 69	581	3
31	<i>Phaseolus vulgaris</i>	Phvul.003G064900.1	568	3
32	<i>Physcomitrella patens</i>	Pp3c9_7350V3.1	589	3
33	<i>Prunus persica</i>	Prupe.1G244400.1	589	3
34	<i>Salix purpurea</i>	SapurV1A.0317s0260.1	587	3
35	<i>Setaria italica</i>	Seita.1G216200.1	572	3
36	<i>Setaria viridis</i>	Sevir.1G220000.1	572	3
37	<i>Sphagnum fallax</i>	Sphfalx0052s0101.1	604	3
38	<i>Theobroma cacao</i>	Thecc1EG010516t1	585	3
39	<i>Eutrema salsugineum</i>	Thhalv10003891m	586	3
40	<i>Trifolium pratense</i>	Tp57577_TGAC_v2_mR NA18371	583	3
41	<i>Zea mays</i> PH207	Zm00008a022208	577	3
42	<i>Brassica oleracea</i> capitata	Bol032193	573	3
43	<i>Brassica oleracea</i> capitata	Bol042818	581	3

44	Brassica rapa FPsc	Brara.F03266.1	586	3
45	Brassica rapa FPsc	Brara.I00256.1	573	3
46	Eucalyptus grandis	Eucgr.B03285.1	475	3
47	Eucalyptus grandis	Eucgr.H02499.1	572	3
48	Glycine max	Glyma.08G282100	575	3
49	Glycine max	Glyma.18G144100	576	3
50	Sorghum bicolor	Sobic.004G199900.1	572	3
51	Sorghum bicolor	Sobic.004G199900.1	577	3
52	Populus trichocarpa	Potri.008G186600.1	420	3
53	Populus trichocarpa	Potri.010G046300.1	590	3
