

Supplementary Table 4 Phylogenetic analysis of the FIL/YAB3 subclade of YABBY transcriptional factors

Classification	Order	Family	Species	Gene ID
ANA	Amborellales	Amborellaceae	Amborella trichopoda	AmtrKAL4198622.1, AmtrKAL4195662.1, AmtrKAL4200441.1, AmtrKAL4198755.1, AmtrKAL4184683.1
ANA	Nymphaeales	Nymphaeaceae	Nymphaea colorata	Nycol.N00117.1, Nycol.A00487.1, Nycol.D01480.1, Nycol.B01098.1, Nycol.B00216.1, Nycol.G00354.1, Nycol.L00815.1
ANA	Austrobaileyales	Schisandraceae	Schisandra chinensis	g70287.t1, g59969.t1, g77207.t1, g17306.t1, g20613.t1
Magnoliids	Piperales	Aristolochiaceae	Aristolochia fimbriata	Af01G026600.1, Af02G072800.1, Af03G134500.1, Af05G185300.1, Af07G024800.1
Magnoliids	Magnoliales	Annonaceae	Annona cherimola	Anche102Chr2g0051300.1, Anche102Chr2g0051650.1, Anche102Chr3g0055340.1, Anche102Chr3g0055730.1, Anche102Chr5g0038080.1, Anche102Chr5g0038100.1, Anche102Scf0005g0001760.1, Anche102Scf0009g0001540.1
Monocots	Alismatales	Potamogetonaceae	Zostera marina	Zosma02g02190, Zosma01g01080, Zosma06g30530, Zosma06g02980, Zosma05g33270
Monocots	Dioscoreales	Dioscoreaceae	Dioscorea alata	Dioal.16G035200.1.p, Dioal.15G078500.1.p, Dioal.13G012000.1.p, Dioal.05G148400.1.p, Dioal.02G015400.1.p, Dioal.08G126600.1.p
Monocots	Asparagales	Orchidaceae	Apostasia shenzhenica	ASH_rna10217, ASH_rna17651, ASH_rna18886, ASH_rna3490
Monocots	Arecales	Arecaceae	Phoenix dactylifera	XP_008778120.1, XP_008785629.1, XP_008787013.1, XP_008790360.1, XP_008810626.2, XP_008810627.2, XP_008812180.3, XP_017698332.1, XP_038983486.1, XP_038983487.1
Monocots	Poales	Gramineae	Oryza sativa	LOC_Os10g36420.1, LOC_Os12g42610.1, LOC_Os02g42950.1, LOC_Os03g11600.2, LOC_Os04g45330.1, LOC_Os07g06620.2, LOC_Os07g38410.1
Monocots	Poales	Gramineae	Zea mays	Zm00001d002829_T001, Zm00001d013895_T002, Zm00001d018829_T001, Zm00001d021863_T001, Zm00001d025944_T001, Zm00001d028216_T001, Zm00001d031109_T002, Zm00001d032502_T001, Zm00001d033508_T001, Zm00001d041277_T002, Zm00001d048083_T001
Eudicots	Ranunculales	Ranunculaceae	Coptis chinensis	Cch00028704-PA, Cch00023982-PA, Cch00033443-PA, Cch00002121-PA, Cch000003736-PA
Eudicots	Ranunculales	Papaveraceae	Papaver somniferum	PS1015680.1, PS0206010.1, PS0206020.1, PS0206030.1, PS0412300.1, PS0414520.1, PS0511010.1, PS0513290.1, PS0539180.1, PS0710750.1, PS0819560.1, PSUN43240.PSUN43240.1
Rosids Core Eudicots	Vitales	Vitaceae	Vitis vinifera	Vitvi01g00013_P001, Vitvi06g00972_P001, Vitvi11g00492_P001, Vitvi08g00274_P001, Vitvi15g00708_P001, Vitvi01g00703_P001, Vitvi02g00510_P001
Rosids	Sapindales	Rutaceae	Citrus clementina	Ciclev10009560m, Ciclev10021834m, Ciclev10022170m, Ciclev10029354m, Ciclev10033714m, Ciclev10033770m
Rosids	Brassicales	Brassicaceae	Arabidopsis thaliana	AT1G08465.1, AT1G23420.2, AT1G69180.1, AT2G26580.1, AT2G45190.1
Rosids	Rosales	Cannabaceae	Cannabis sativa	Cs_C05H1G183830, Cs_C07H1G284650, Cs_C09H1G358710, Cs_C01H1G013660, Cs_C02H1G050890
Rosids	Rosales	Moraceae	Morus notabilis	MonoXP_010093672.1, MonoXP_010088882.1, MonoXP_024017521.1, MonoXP_010090516.1, MonoXP_010105229.1, MonoXP_024024007.1, MonoXP_024017519.1, MonoXP_024017520.1
Rosids	Malpighiales	Euphorbiaceae	Ricinus communis	XM_002511626.3, XM_048370469.1, XM_048379966.1, XM_048379962.1, XM_002527155.4, XM_015727481.3, XM_048376377.1, XM_015723143.3, XM_048376379.1, XM_025158496.2, XM_015717278.3, XM_002515834.4

				rna-XM_027485731.1, rna-XM_027485734.1, rna-XM_027485730.1, rna-XM_027485738.1, rna-XM_027485736.1, rna-XM_027485732.1, rna-XM_027485733.1, rna-XM_027485735.1, rna-XM_027485737.1, rna-XM_027490417.1, rna-XM_027490416.1, rna-XM_027492268.1, rna-XM_027506970.1, rna-XM_027505779.1, rna-XM_027476304.1, rna-XM_027480082.1, rna-XM_027479274.1, rna-XM_027479273.1
Rosids	Fabales	Fabaceae	Abrus precatorius	
Rosids	Cucurbitales	Cucurbitaceae	Lagenaria siceraria	Lsi07G013310.1, Lsi11G003260.1, Lsi04G005610.1, Lsi06G009810.1, Lsi09G003970.1, Lsi08G016690.1
Rosids	Saxifragales	Crassulaceae	Rhodiola crenulata	CCG018987.1, CCG020078.1, CCG011262.1, CCG028060.1, CCG000956.1, CCG022305.1, CCG017250.2
Superasterids	Caryophyllales	Polygonaceae	Fagopyrum tataricum	FtPinG0003162600.01.T01, FtPinG0000155700.01.T01, FtPinG0000507400.01.T01, FtPinG0000273100.01.T01, FtPinG0000211900.01.T01, FtPinG0003638300.01.T01, FtPinG0001121900.01.T01
Asterids	Cornales	Nyssaceae	Camptotheca acuminata	Cac_g004636.t1, Cac_g010164.t1, Cac_g028617.t1, Cac_g032185.t1, Cac_g001678.t1, Cac_g005011.t1
Asterids	Garryales	Eucommiaceae	Eucommia ulmoides	IMPTEUL1N79075_1, IMPTEUL1N62868_1, IMPTEUL1N65848_1, IMPTEUL1N17831_1, IMPTEUL1N117376_1, IMPTEUL1N85381_1
Asterids	Gentianales	Apocynaceae	Catharanthus roseus	CrChr1.2999, CrChr2.2199, CrChr5.1213, CrChr6.3293, CrChr8.250
Asterids	Lamiales	Lamiaceae	Salvia miltiorrhiza	Sm07A57T62.1, Sm05A9T87.1, Sm05G542T19.1, Sm08A218T35.1, Sm06A299T33.1
Asterids	Solanales	Solanaceae	Solanum lycopersicum	Solyc06g073920.3.1, Solyc05g005240.2.1, Solyc05g012050.3.1, Solyc11g071810.2.1, Solyc12g009580.2.1, Solyc01g091010.3.1, Solyc01g010240.3.1, Solyc08g079100.3.1
Asterids	Asterales	Campanulaceae	Platycodon grandiflorus	IMPTPGR2N29515_1, IMPTPGR2N23408_1, IMPTPGR2N8535_1, IMPTPGR2N81453_1, IMPTPGR2N45768_1
Asterids	Asterales	Asteraceae	Lactuca sativa	Lsat_1_v5_gn_7_9041.1, Lsat_1_v5_gn_7_43360.1, Lsat_1_v5_gn_3_128981.1, Lsat_1_v5_gn_3_53601.1, Lsat_1_v5_gn_3_3040.1, Lsat_1_v5_gn_0_27800.1, Lsat_1_v5_gn_6_2400.1, Lsat_1_v5_gn_8_58340.3, Lsat_1_v5_gn_5_94941.2
Asterids	Dipsacales	Caprifoliaceae	Lonicera japonica	Lj9A567T72.1, Lj6A777G36.1, Lj2C211G2.1
Asterids	Apiales	Apiaceae	Daucus carota	DCAR_004921, DCAR_007074, DCAR_008464, DCAR_008543, DCAR_012254, DCAR_014892, DCAR_026683, DCAR_027801, DCAR_030050, DCAR_031517