

**Table S1. GenBank accession information on the YABBY genes that were used in our phylogenetic analysis**

Species and/or gene	Gene lineage	GenBank accession number
<i>Amborella trichopoda A</i>	<i>FIL/YAB3</i>	CV002899
<i>Amborella trichopoda B</i>	—	CV005012
<i>Amborella trichopoda C</i>	<i>YAB2</i>	AB126654
<i>Amborella trichopoda CRC</i>	<i>CRC</i>	AJ877257
<i>Antirrhinum majus A</i>	<i>CRC</i>	AJ559642
<i>Antirrhinum majus B</i>	<i>INO</i>	AY451400
<i>Antirrhinum majus C</i>	<i>YAB2</i>	AJ808095
<i>Antirrhinum majus GRAM</i>	<i>FIL/YAB3</i>	AJ804783
<i>Antirrhinum majus PROL</i>	<i>YAB5</i>	AJ559762
<i>Aquilegia formosa CRC</i>	<i>CRC</i>	AY854797 (this study)
<i>Aquilegia sp.</i>	<i>FIL/YAB3</i>	—
<i>Asparagus officinalis</i>	<i>YAB2</i>	CV459037
<i>Capparis flexuosa CRC</i>	<i>CRC</i>	AY854798 (this study)
<i>ChloYAB324</i>	<i>FIL/YAB3</i>	—
<i>ChloYAB329</i>	<i>FIL/YAB3</i>	—
<i>Chrysanthemum × morifolium</i>	<i>FIL/YAB3</i>	AY173066
<i>Citrus sinensis A</i>	<i>CRC</i>	CN185168
<i>Citrus sinensis B</i>	<i>FIL/YAB3</i>	CK935155
<i>Citrus sinensis C</i>	<i>YAB2</i>	CK933417
<i>Cleome sparsifolia CRC</i>	<i>CRC</i>	AY854803 (this study)
<i>CRC (Arabidopsis thaliana)</i>	<i>CRC</i>	AF132606
<i>Cycas rumphii</i>	—	CB093758
<i>FIL (Arabidopsis thaliana)</i>	<i>FIL/YAB3</i>	AF136538
<i>Gossypium hirsutum CRC1</i>	<i>CRC</i>	AY854804 (this study)
<i>Gossypium hirsutum CRC2</i>	<i>CRC</i>	AY854805 (this study)
<i>Gossypium raimondii</i>	<i>YAB5</i>	CO100015
<i>Grevillea robusta CRC</i>	<i>CRC</i>	(this study)
<i>Hedyotis centranthoides</i>	<i>CRC</i>	CB088054
<i>INO (Arabidopsis thaliana)</i>	<i>INO</i>	AF195047
<i>Lepidium africanum CRC</i>	<i>CRC</i>	AY854802 (this study)
<i>Lycopersicon esculentum A</i>	<i>FIL/YAB3</i>	AW623191 + BE354691
<i>Lycopersicon esculentum B</i>	<i>CRC</i>	AI771643 + AI483816
<i>Lycopersicon esculentum C</i>	<i>YAB5</i>	AI484101 + BW684955
<i>Lycopersicon esculentum D</i>	<i>YAB2</i>	BW69229
<i>Lycoris longitu</i>	<i>YAB2</i>	CN453541
<i>Malus × domestica A</i>	<i>FIL/YAB3</i>	CO576666 + CO540988 + CN996971
<i>Malus × domestica B</i>	<i>YAB5</i>	CN580139 + CO051593
<i>Malus × domestica C</i>	<i>YAB2</i>	CV631928
<i>Nicotiana tabacum CRC1</i>	<i>CRC</i>	AY854799 (this study)
<i>Nicotiana tabacum CRC2</i>	<i>CRC</i>	AY854800 (this study)
<i>Nuphar advena A</i>	<i>FIL/YAB3</i>	CD474192 + CV001750 + CD474498
<i>Nuphar advena B</i>	<i>YAB2</i>	CD472928
<i>Nymphaea alba</i>	<i>INO</i>	AB092980
<i>Oryza sativa A</i>	<i>FIL/YAB3</i>	XM467005
<i>Oryza sativa B</i>	<i>FIL/YAB3</i>	NM197274
<i>Oryza sativa C</i>	<i>INO</i>	(from genomic sequence)
<i>Oryza sativa D</i>	<i>YAB2</i>	TC264221
<i>Oryza sativa DL</i>	<i>CRC</i>	AB106553
<i>Oryza sativa FIL1</i>	<i>YAB2</i>	AF098752
<i>Oryza sativa FIL2</i>	<i>YAB2</i>	AU094964
<i>Persea americana</i>	<i>YAB2</i>	CV004856 + CV000415
<i>Petunia hybrida CRC</i>	<i>CRC</i>	AY854801 (this study)
<i>Pinus sitchensis</i>	—	DR517093
<i>Pinus taeda</i>	—	DR100835
<i>Populus balsamifera</i>	<i>YAB2</i>	BU871780
<i>Populus euphratica</i>	<i>YAB5</i>	AJ773836
<i>Populus tremula</i>	<i>FIL/YAB3</i>	BU830431
<i>Solanum tuberosum A</i>	<i>FIL/YAB3</i>	CK266773
<i>Solanum tuberosum B</i>	<i>YAB5</i>	CV506612
<i>Triticum aestivum A</i>	<i>CRC</i>	AF545436
<i>Triticum aestivum B</i>	<i>FIL/YAB3</i>	AY330228
<i>Vitis shuttleworthii A</i>	<i>FIL/YAB3</i>	CV096830
<i>Vitis shuttleworthii B</i>	<i>YAB5</i>	CV098755
<i>Vitis vinifera</i>	<i>YAB2</i>	CF373869 + CF609595
<i>Welwitschia mirabilis</i>	—	CV004246 + CV005289
<i>YABBY2 (Arabidopsis thaliana)</i>	<i>YAB2</i>	AF136539
<i>YABBY3 (Arabidopsis thaliana)</i>	<i>FIL/YAB3</i>	AF136540
<i>YABBY5 (Arabidopsis thaliana)</i>	<i>YAB5</i>	AK119091
<i>Zea mays A</i>	<i>CRC</i>	AY104291
<i>Zea mays B</i>	<i>FIL/YAB3</i>	AY313902

Unannotated genes from a single species are distinguished by a letter, immediately following the species name.