

Table S1. Complete set of classified C2H2 zinc finger proteins in *A. thaliana*. Listed are ZFP subsets and subfamilies as classified in the text. ZFPs that are conserved in other phyla than plants are highlighted in green, members of the A1-family in blue and of the C1-family in red. **Legend:** reference numbers for subsets assigned to plant subfamilies (pl-SF) or evolutionary conserved subfamilies (cons. SF), AGIcode with database link, gene name (if available), names of cons. SF, ZFarrangement (i= isolated/dispersed ZFs, u = ZF with unusual spacing, d = degenerated ZFs, - = tandem arrangement/short linker (1-10 amino acids), * = linker 0 amino acids, . = dispersed arrangement/long spacer), conserved non-finger domains (NFDs), novel = conserved plant/AT motifs found with MEME. Family and domain acronyms are explained in Table 2.

Subset	AGIcode	Gene name	Cons. ZF-fam	ZFarrangement	conserved NFDs	Remarks/Refer.
A tandem						
A1 pl-SF						
A1a-01	At1g03840	-	-	1i.2u-3-4	novel	[19]
A1a-02	At1g14580	-	-	1i.2u-3-4	novel	[20]
A1a-03	At1g55110	-	-	1i.2u-3-4	novel	
A1a-04	At2g02070	-	-	1i.2u-3-4	novel	
A1a-05	At2g02080	-	-	1i.2u-3-4	novel	
A1a-06	At3g13810	-	-	1i.2u-3-4	novel	
A1a-07	At3g45260	-	-	1i.2u-3-4	novel	
A1a-08	At3g50700	-	-	1i.2u-3-4	novel	
A1a-09	At4g02670	-	-	1i.2u-3-4	novel	
A1a-10	At5g03150	-	-	1i.2u-3-4	novel	
A1a-11	At5g44160	-	-	1i.2u-3-4	novel	
A1a-12	At5g60470	-	-	1i.2u-3-4	novel	
A1a-13	At5g66730	-	-	1i.2u-3-4	novel	
A1b-01	At1g25250	-	-	1i.2u-3-4	novel	
A1b-02	At1g68130	-	-	1i.2u-3-4	novel	
A1b-03	At2g01940	-	-	1i.2u-3-4	novel	
A1c-01	At1g34370	-	-	1i.2u-3u-4	novel	
A1c-02	At5g22890	-	-	1i.2u-3u-4	novel	
A1d-01	At1g08290	WIP3	-	1i.2u-3-4u	novel	
A1d-02	At1g13290	WIP6	-	1i.2u-3-4u	novel	
A1d-03	At1g34790	TT1	-	1i.2u-3-4u	novel	[22]
A1d-04	At1g51220	WIP5	-	1i.2u-3-4u	novel	
A1d-05	At3g20880	WIP4	-	1i.2u-3-4u	novel	
A1d-06	At3g57670	WIP2	-	1i.2u-3-4u	novel	
A2 pl-SF						
A2-01	At3g48430	-	-	1df*2-3-4	JmjN+JmjC	
A2-02	At5g04240	-	-	1df*2-3-4	JmjN+JmjC	
A3 pl-SF						
A3-01a	At2g23740	-	-	1-2.3i.	PreSETSET	
A4 cons. SF						
A4-01	At5g14140	-	newSF1	1-2.3i		
A4-02	At3g62240	-	newSF2	1*2u*3u	RING	
A4-03	At2g47090	-	newSF2	1*2u	RING	
A4-04	At1g30970	-	ZP207SF	1*2		
A4-05	At4g06634	-	YY1	1-2-3-4.5i		[10]
B cons. SF						
B1-01	At1g72050	TF3A	TF3A	1i.2-3-4. 5-6-7u-8-9		[9]

<i>Subset</i>	<i>AGICode</i>	<i>Gene name</i>	<i>Cons. ZF-fam</i>	<i>ZFarrangement</i>	<i>conserved NFDs</i>	<i>Remarks/Refer.</i>
C dispersed						
C1 C2H3						
C1-1i pl-SF						
C1-1iAa-01	At1g66140	ZFP 4	-	1i	novel	[25]
C1-1iAa-02	At1g24630	ZFP 7	-	1i	novel	[25]
C1-1iAa-03	At1g80730	ZFP 1	-	1i	novel	[25]
C1-1iAa-04	At5g57520	ZFP 2	-	1i	novel	[25]
C1-1iAa-05	At5g10970	-	-	1i	novel	
C1-1iAa-06	At5g25160	ZFP 3	-	1i	novel	[25]
C1-1iAa-07	At5g14010	-	-	1i	novel	
C1-1iAa-08	At5g48890	-	-	1i	novel	
C1-1iAb-01	At2g41940	ZFP 8	-	1i	novel	[25]
C1-1iAb-02	At3g58070	-	-	1i	novel	
C1-1iAb-03	At5g06650	-	-	1i	novel	
C1-1iAc-01	At5g27880	-	-	1i	novel	
C1-1iAc-02	At5g01860	-	-	1i	novel	
C1-1iAd-01	At1g67030	ZFP 6	-	1i	novel	[25]
C1-1iAd-02	At1g68360	-	-	1i	novel	
C1-1iAd-03	At1g10480	ZFP 5	-	1i	novel	[25]
C1-1iAe-01	At5g05120	-	-	1i	novel	
C1-1iAf-01	At3g09290	-	-	1i	novel	
C1-1iAf-02	At3g53820	-	-	1i	novel	
C1-1iAf-03	At5g43540	-	-	1i	novel	
C1-1iAf-04	At3g23140	-	-	1i	novel	
C1-1iAg-01	At2g42410	ZFP11	-	1i	novel	[33]
C1-1iAg-02	At3g23130	SUP	-	1i	novel	[28, 30, 34]
C1-1iAg-03	At4g17810	-	-	1i	novel	
C1-1iAg-04	At2g37740	ZFP10	-	1i	novel	
C1-1iAg-05	At5g06070	RBE	-	1i	novel	[32]
C1-1iAh-01	At1g13400	-	-	1i	novel	
C1-1iAh-02	At1g68480	-	-	1i	novel	[47, 48]
C1-1iBx-01	At5g54360	-	-	1i	novel	
C1-1iBx-02	At5g54340	-	-	1i	novel	
C1-1iCa-01	At4g35610	-	-	1i	novel	
C1-1iCa-02	At4g35700	-	-	1i	novel	
C1-1iCb-01	At4g16610	-	-	1i	novel	
C1-Sa pl-SF						
C1-1iSa-01	At2g15740	-	-	1i	nd	
C1-1iSa-02	At2g18490	-	-	1i	nd	
C1-1iSa-03	At5g42640	-	-	1i	nd	
C1-Q pl-SF						
C1-1iQ-01	At2g36475	-	-	1i	nd	
C1-1iQ-02	At4g04885	-	-	1i	nd	
C1-1iQ-03	At1g66500	-	-	1i	nd	
C1-1iQ-04	At5g43620	-	-	1i	nd	
C1 cons. SF						
C1-1iSF1-01	At5g09740	-	SAS	1i	ChromoSAS	H3C ZF type
C1-1iSF1-02	At5g64610	-	SAS	1i	ChromoSAS	H3C ZF type
C1-unique						
C1-1iU-01	At2g01650	-		1i	UBX	H3C ZF type
C1-1iU-02	At4g25610	-		1i		

<i>Subset</i>	<i>AGICode</i>	<i>Gene name</i>	<i>Cons. ZF-fam</i>	<i>ZFarrangement</i>	<i>conserved NFDs</i>	<i>Remarks/Refer.</i>
C1-2i pl-SF						
C1-2iA-01	At2g37430	ZAT11	-	1i.2i	novel	[26]
C1-2iA-02	At3g53600	-	-	1i.2i	novel	
C1-2iB-01	At2g28710	-	-	1i.2i	novel	
C1-2iB-02	At3g46070	-	-	1i.2i	novel	
C1-2iB-03	At3g46080	-	-	1i.2i	novel	
C1-2iB-04	At3g46090	ZAT7	-	1i.2i	novel	[26]
C1-2iB-05	At5g59820	ZAT12	-	1i.2i	novel	[26]
C1-2iC-01	At2g28200	ZAT5	-	1i.2i	novel	[26]
C1-2iC-02	At3g10470	-	-	1i.2i	novel	
C1-2iC-03	At5g03510	-	-	1i.2i	novel	
C1-2iC-04	At5g04390	-	-	1i.2i	novel	
C1-2iD-01	At1g27730	ZAT10	-	1i.2i	novel	[26]
C1-2iD-02	At3g19580	AZF2	-	1i.2i	novel	[27]
C1-2iD-03	At3g49930	-	-	1i.2i	novel	
C1-2iD-04	At5g04340	-	-	1i.2i	novel	
C1-2iD-05	At5g43170	AZF3	-	1i.2i	novel	[27]
C1-2iD-06	At5g67450	AZF1	-	1I.2I	novel	[27]
C1-2iX1-01	At1g02040	-	-	1i.2i	novel	
C1-2iX2-01	At2g26940	-	-	1i.2i	novel	
C1-2iX3-new	At4g04404	-	-	1i.2id	nd	
C1C2 mixed						
C1C2-2iX-01	At3g01030	-	-	1i.2i	novel	H4H and H3H
C1C2-2iX-02	At5g15480	-	-	1i.2i	novel	ZF types
C1-3i pl-SF						
C1-3iA-01	At1g02030	ZAT1	-	1i.2i.3i	novel	[26]
C1-3iA-02	At2g45120	-	-	1i.2i.3i	novel	
C1-3iA-03	At3g60580	-	-	1i.2i.3i	novel	
C1-3iB-01	At5g61470	-	-	1i.2i.3i	novel	
C1-3iC-01	At2g17180	-	-	1i.2i.3i	novel	
C1-3iC-02	At4g35280	-	-	1i.2i.3i	novel	
C1-3iD-01	At1g26590	-	-	1i.2i.3i	novel	
C1-3iD-02	At1g26610	-	-	1i.2i.3i	novel	
C1-4i pl-SF						
C1-4iA-01	At1g49900	ATZF1	-	1i.2i.3i.4i	novel	
C1-4iB-01	At5g56200	-	-	1i.2i.3i.4i	novel	
C1-5i pl-SF						
C1-5iX-01	At3g29340	-	-	1i.2i.3i.4i .5i.6id	novel	

<i>Subset</i>	<i>AGICode</i>	<i>Gene name</i>	<i>Cons. ZF-fam</i>	<i>ZFarrangement</i>	<i>conserved NFDs</i>	<i>Remarks/Refer.</i>
C2 C2H4						
C2-1i p1-SF						
C2-1iA-01	At1g11490	-	-	1i	novel	
C2-1iA-02	At1g47860	-	-	1i	novel	
C2-1iA-03	At1g75710	-	-	1i	novel	
C2-1iA-04	At2g29660	-	-	1i	novel	
C2-1iA-05	At4g27240	-	-	1i	novel	
C2-1iA-06	At5g54630	-	-	1i	novel	
C2-B At-SF						
C2-1iB-01	At1g65110	-	-	1i	novel	SF has also
C2-1iB-02	At1g65120	-	-	1i	novel	DUF627 and
C2-1iB-03	At1g65130	-	-	1i	novel	DUF629 (Pfam)
C2-1iB-04	At1g65200	-	-	1i	novel	
C2-1iB-05	At2g27630	-	-	1i	novel	
C2-1iB-06	At2g27650	-	-	1i	novel	C3C ZF type
C2-1iB-07	At2g34220	-	-	1i	novel	
C2-1iB-08	At2g34230	-	-	1i	novel	
C2-1iB-09	At2g34240	-	-	1i	novel	
C2-1iB-10	At3g47890	-	-	1i	novel	
C2-1iB-11	At3g47910	-	-	1i	novel	
C2-1iB-12	At5g02660	-	-	1i	novel	
C2-1iB-13	At5g51530	-	-	1i	novel	C3C ZF type
C2-1iB-14	At5g61940	-	-	1i	novel	C3C ZF type
C2-1iB-15	At5g61950	-	-	1i	novel	C3C ZF type
C2-1iB-16	At1g52430	-	-	1id	novel	C0C ZF type
C2-1iB-17	At1g52450	-	-	1id	novel	C0C ZF type
C2-Sb At-SF						
C2-1iSb-01	At4g26030	-	-	1i	nd	
C2-1iSb-02	At5g22990	-	-	1i	nd	
C2 pairs						
C2-1iC-01	At4g12240	-	-	1i	novel	
C2-1iC-02	At5g52010	-	-	1i	novel	
C2-1iD-01	At3g44750	-	-	1i	novel	HD2 [49]
C2-1iD-02	At5g03740	-	-	1i	novel	HD2 [49]
C2-1iE-01	At3g02790	-	-	1i	novel	
C2-1iE-02	At5g16470	-	-	1i	novel	
C2-1iF-01	At3g57480	-	-	1i	2x ZF-AN1	
C2-1iF-02	At2g41835	-	-	1i.2i	2X ZF-AN1	
C2-unique						
C2-1iU1-01	At1g04445	-	-	1i		
C2-1iU2-01	At3g01460	-	-	1i	2PHD/RING 1MBD	H4C ZF type
C2 cons. SF						
C2-1iSF1-01	At2g27100	SE	SE	1i	newNFD	[17]
C2-1iSF2-01	At5g40710	-	newSF3	1i	nd	
C2-1iSF2-02	At5g63280	-	newSF3	1i	nd	
C2-1iSF3-01	At5g01160	-	E7	1i	RING	E7-cadher.bdg.
C2-1iSF4-01	At3g12270	-	PRMT	1i	PRMT3	Arg-met-trans.
C2-1iSF5-01	At5g01310	-	newSF4	1i	HLH=ORF1	
C2-1iSF6-01	At2g35670	FIS2	VEF	1i	newNFD	[12]
C2-1iSF6-02	At4g16845	VRN2	VEF	1i	newNFD	[14]
C2-1iSF6-03	At5g51230	EMF2	VEF	1i	newNFD	[15]

<i>Subset</i>	<i>AGICode</i>	<i>Gene name</i>	<i>Cons. ZF-fam</i>	<i>ZFarrangement</i>	<i>conserved NFDs</i>	<i>Remarks/Refer.</i>
C3 C2H5						
C3 p1-SF						
C3-1iA-01	At3g27970	-	-	1i	EXO3	
C3-1iA-02	At5g40310	-	-	1i	EXO3	
C3-3iA-03	At2g48100	-	-	1i.2i.3i	EXO3	
C3-1iB-01	At1g01350	-	-	1i	C3H.RING. DUF537	
C3-2iB-02	At3g62850	-	-	1i.2i	2 DUF537	
C3-4iB-03	At5g61190	-	-	1i.2i.3i.4i	DUF537	
C3 cons. SF						
C3-1iSF1-01	At5g26610	-	newSF5	1i	G-patch	U1-ZF
C3-1iSF2-01	At3g02860	-	newSF6	1i	nd	
C3-1iSF3-01	At1g01930	-	newSF7	1i	ANK	U1-ZF
C3-1iSF4-01	At1g43860	-	newSF8	1i	UPF0023	U1-ZF
C3-1iSF5-01	At1g50670	-	newSF9	1i	OTU	
C3-1iSF6-01	At1g55460	-	KIN17	1i	KOW	U1-ZF
C3-1iSF7-01	At3g05760	-	newSF10	1i	nd	U1-ZF
C3-1iSF8-01	At2g32600	-	SAP62	1i	nd	U1-ZF
C3-1iSF9-01	At5g06160	-	SAP61	1i	nd	X13 spacing
C3-1iSF10-01	At2g27760	-	IPPT	1i	IPPT	X13 spacing
C3-2iSF11-01	At1g74250	-	DNAJ	1i.2i	DNAJ	U1-ZF
C3-2iSF12-01	At2g36930	-	newSF11	1i.2i	nd	U1-ZF
C3-2iSF13-01	At1g04850	-	newSF12	1i.2i	UBA/PUG	
C3-4iSF14-01	At2g24500	FZF	FZFnew	1i.2i.3i.4u	nd	U1-ZF
C3-4iSF14-02	At4g31420	FZF	FZFnew	1i.2i.3i.4u	nd	U1-ZF
C3-4iSF15-01	At2g19380		newSF13	1i.2i.3i.4	RRM	U1-ZF