

Table S1. Analysis of *G. hirsutum* ZFP gene family and its orthologs in AA and DD cotton genomes.

GeneID	Length of amino acid	Gene name	Orthologous	Length of amino acid	Genename
CotAD_24466	263	GhZFP1-1	Cotton_A_35683	261	GaZFP1-1
CotAD_10965	253	GhZFP2-1	NA	NA	NA
CotAD_00109	293	GhZFP2-2	Cotton_A_01186	270	GaZFP2-2
CotAD_06894	253	GhZFP3-1	Cotton_A_09094	253	GaZFP3-1
CotAD_40989	253	GhZFP3-2	NA	NA	NA
CotAD_58159	250	GhZFP4-2	Cotton_A_30668	250	GaZFP4-2
CotAD_52379	239	GhZFP5-1	NA	NA	NA
CotAD_55461	239	GhZFP5-2	Cotton_A_19328	239	GaZFP5-2
CotAD_24947	204	GhZFP6-1	Cotton_A_05952	204	GaZFP6-1
NA	NA	NA	Cotton_A_30896	241	GaZFP6-2
CotAD_24229	250	GhZFP7-1	Cotton_A_28213	202	GaZFP7-1
CotAD_75509	243	GhZFP8-1	Cotton_A_40927	243	GaZFP8-1
NA	NA	NA	Cotton_A_40319	248	GaZFP8-2
NA	NA	NA	Cotton_A_38190	295	GaZFP10-1
NA	NA	NA	Cotton_A_05560	246	GaZFP10-2
NA	NA	NA	Cotton_A_00942	228	GaZFP10-3
NA	NA	NA	Cotton_A_25087	171	GaZFP10-7
NA	NA	NA	Cotton_A_07903	198	GaZFP10-8
NA	NA	NA	Cotton_A_25086	206	GaZFP10-9
CotAD_32787	178	GhZFP10-10	Cotton_A_23121	178	GaZFP10-10
CotAD_41655	270	GhZFP10-12	Cotton_A_07313	270	GaZFP10-12
NA	NA	NA	Cotton_A_24729	191	GaZFP11-1
NA	NA	NA	Cotton_A_28643	200	GaZFP11-2
NA	NA	NA	Cotton_A_31377	165	GaZFP11-3
NA	NA	NA	Cotton_A_00011	206	GaZFP11-5
NA	NA	NA	Cotton_D_gene_10023188	261	GrZFP1-1
NA	NA	NA	Cotton_D_gene_10022380	253	GrZFP2-1
NA	NA	NA	Cotton_D_gene_10015323	271	GrZFP3-1
NA	NA	NA	Cotton_D_gene_10037091	293	GrZFP3-2
CotAD_47390	250	GhZFP4-1	Cotton_D_gene_10030397	116	GrZFP4-1
NA	NA	NA	Cotton_D_gene_10009040	399	GrZFP5-1
NA	NA	NA	Cotton_D_gene_10001715	349	GrZFP6-1
NA	NA	NA	Cotton_D_gene_10024530	318	GrZFP7-1
CotAD_42933	248	GhZFP8-2	Cotton_D_gene_10036444	400	GrZFP8-2
CotAD_43757	235	GhZFP8-3	Cotton_D_gene_10006192	235	GrZFP8-3
CotAD_47769	269	GhZFP8-4	NA	NA	NA
CotAD_50182	295	GhZFP10-1	Cotton_D_gene_10004243	490	GrZFP10-1
CotAD_18982	295	GhZFP10-2	Cotton_D_gene_10026033	456	GrZFP10-2
CotAD_15364	228	GhZFP10-3	NA	NA	NA
CotAD_30572	224	GhZFP10-4	NA	NA	NA
CotAD_31112	176	GhZFP10-5	Cotton_D_gene_10021529	238	GrZFP10-5
CotAD_36452	215	GhZFP10-6	Cotton_D_gene_10037780	215	GrZFP10-6
CotAD_16589	216	GhZFP10-7	NA	NA	NA
CotAD_07166	228	GhZFP10-8	Cotton_D_gene_10024620	228	GrZFP10-8
CotAD_31113	170	GhZFP10-9	Cotton_D_gene_10021528	170	GrZFP10-9
NA	NA	NA	Cotton_D_gene_10009865	221	GrZFP10-10
CotAD_11415	274	GhZFP10-11	Cotton_D_gene_10015481	272	GrZFP10-11
CotAD_17560	192	GhZFP10-13	Cotton_D_gene_10024366	190	GrZFP10-13
NA	NA	NA	Cotton_D_gene_10001027	198	GrZFP11-2
NA	NA	NA	Cotton_D_gene_10005248	171	GrZFP11-4
NA	NA	NA	Cotton_D_gene_10017952	342	GrZFP11-3
CotAD_24782	207	GhZFP11-1	Cotton_D_gene_10021164	192	GrZFP11-1

Table S2. Analysis of duplication events in *G. hirsutum* ZFP genes located in chromosomes.

Gene ID	Gene name	Duplication type
CotAD_24466	GhZFP1-1	Whole Genome/Segmental Duplication
CotAD_10965	GhZFP2-1	Whole Genome/Segmental Duplication
CotAD_00109	GhZFP2-2	Whole Genome/Segmental Duplication
CotAD_06894	GhZFP3-1	Whole Genome/Segmental Duplication
CotAD_40989	GhZFP3-2	Whole Genome/Segmental Duplication
CotAD_47390	GhZFP4-1	Whole Genome/Segmental Duplication
CotAD_58159	GhZFP4-2	Whole Genome/Segmental Duplication
CotAD_52379	GhZFP5-1	Whole Genome/Segmental Duplication
CotAD_55461	GhZFP5-2	Whole Genome/Segmental Duplication
CotAD_24229	GhZFP7-1	Whole Genome/Segmental Duplication
CotAD_75509	GhZFP8-1	Whole Genome/Segmental Duplication
CotAD_42933	GhZFP8-2	Whole Genome/Segmental Duplication
CotAD_43757	GhZFP8-3	Whole Genome/Segmental Duplication
CotAD_47769	GhZFP8-4	Whole Genome/Segmental Duplication
CotAD_50182	GhZFP10-1	Whole Genome/Segmental Duplication
CotAD_18982	GhZFP10-2	Whole Genome/Segmental Duplication
CotAD_30572	GhZFP10-4	Whole Genome/Segmental Duplication
CotAD_31112	GhZFP10-5	Whole Genome/Segmental Duplication
CotAD_36452	GhZFP10-6	Whole Genome/Segmental Duplication
CotAD_16589	GhZFP10-7	Whole Genome/Segmental Duplication
CotAD_07166	GhZFP10-8	Whole Genome/Segmental Duplication
CotAD_11415	GhZFP10-11	Whole Genome/Segmental Duplication
CotAD_41655	GhZFP10-12	Whole Genome/Segmental Duplication
CotAD_17560	GhZFP10-13	Whole Genome/Segmental Duplication
CotAD_24782	GhZFP11-1	Whole Genome/Segmental Duplication
CotAD_24947	GhZFP6-1	dispersed
CotAD_15364	GhZFP10-3	dispersed
CotAD_31113	GhZFP10-9	dispersed
CotAD_32787	GhZFP10-10	dispersed

Table S3. A list of primers used in this study.

Gene name	Forward primer	Reverse primer
GhZFP1-1	GGCATAATGAATGGTCTAGA	GTGTTGAAAGGGTTAACACT
GhZFP2-1	ACGTCATAGTTGGTCAAGAC	CTTCCTGGTTAACATTGAGA
GhZFP2-2	CCTCCTATAGACCAACAACC	GCATCTCTTCCTTCTTAGGC
GhZFP3-1	CGTCATAGTTGGTCAAGACC	CCTGGTTAACATTGACTG
GhZFP4-1	GAACACCAGACACCAGAAAC	CCAAGTCCACTGGTTCTTTA
GhZFP5-1	GCTGATTTCACTCCTTACGA	AGTGGGAAGAAGAAGGCTTGA
GhZFP6-1	CATCGTATATGTTGCAAGGT	ACGATCCTAGACGAAGATGT
GhZFP7-1	AGATACAAGAAGTGGGGCAC	GGTGTTGCCATTGCTATAAA
GhZFP8-1	TACGGTTCAAAGAACTCAT	GTAGATCCAACTCACATGG
GhZFP8-2	TGGGGTTATGGAGAATTCCT	TTGGCTTGGATTCATAAACG
GhZFP8-3	TGGAACAATACCATTAACGC	ACTCTCGGAACTTGAATCAC
GhZFP8-4	CTATCCCGACCTTTCATCAT	TCACTCGTGAGAAAGTTTCA
GhZFP10-1	AGCAGATTATGTCCAAACCG	TAGGGCTAAGCTCAGACACC
GhZFP10-3	GACAGCATCAAGGGCTATTA	ACTTCACCTTTGGTTGAACA
GhZFP10-4	TTGACAGCTGACAGATATGG	TGTTGTTGTCTTCATCAGCT
GhZFP10-5	GAAGCAGCATGCACTTTAGA	AAGTTCAAGAACCTGCCATT
GhZFP10-6	TCTCCATCTATGAACCCATG	GTCGAAGCTCTAGATCAAGC
GhZFP10-9	AAAGGACAGTCATTTGGGTC	CCTAAGCTCAAGGTCCAAGT
GhZFP10-10	GCCCTAATGGTCTTTTCTTC	TCTATGCCCTAATCGAAGTT
GhZFP10-11	CATCGATTCATCTTCTACCC	CGTCCTTGAATGTACTGCTT
GhZFP10-13	GCTACTGCTATTTCCCTCGTC	GCTCCCACCATTAAGATTAC
GhZFP11-1	TCTTACTCTTCCACCCTCC	CATTAACCAAACCAATCTCC
GhUBQ7	GCATTCCACCTGACCAACA	CGCATTAGGGCACTCTTTT