HMMER results   SMART results

❖PF05920   Homeobox KN domain

❖PF03789   ELK domain

❖PF03790   KNOX domain

❖PF03791   KNOX domain
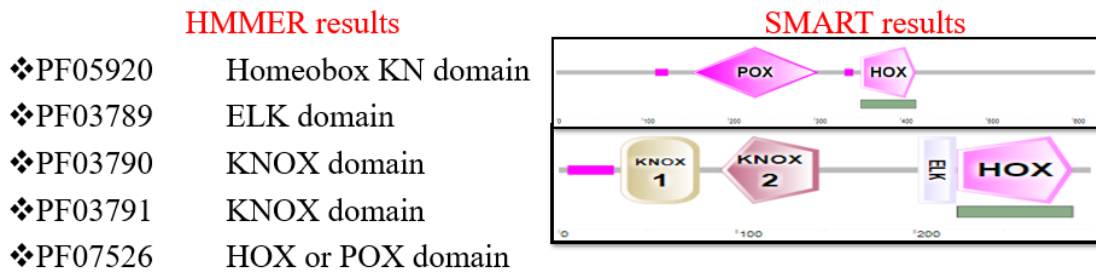
❖PF07526   HOX or POX domain

Fig. S1: HMMER and SMART domain analysis representing TALE domains against each Pfam number.
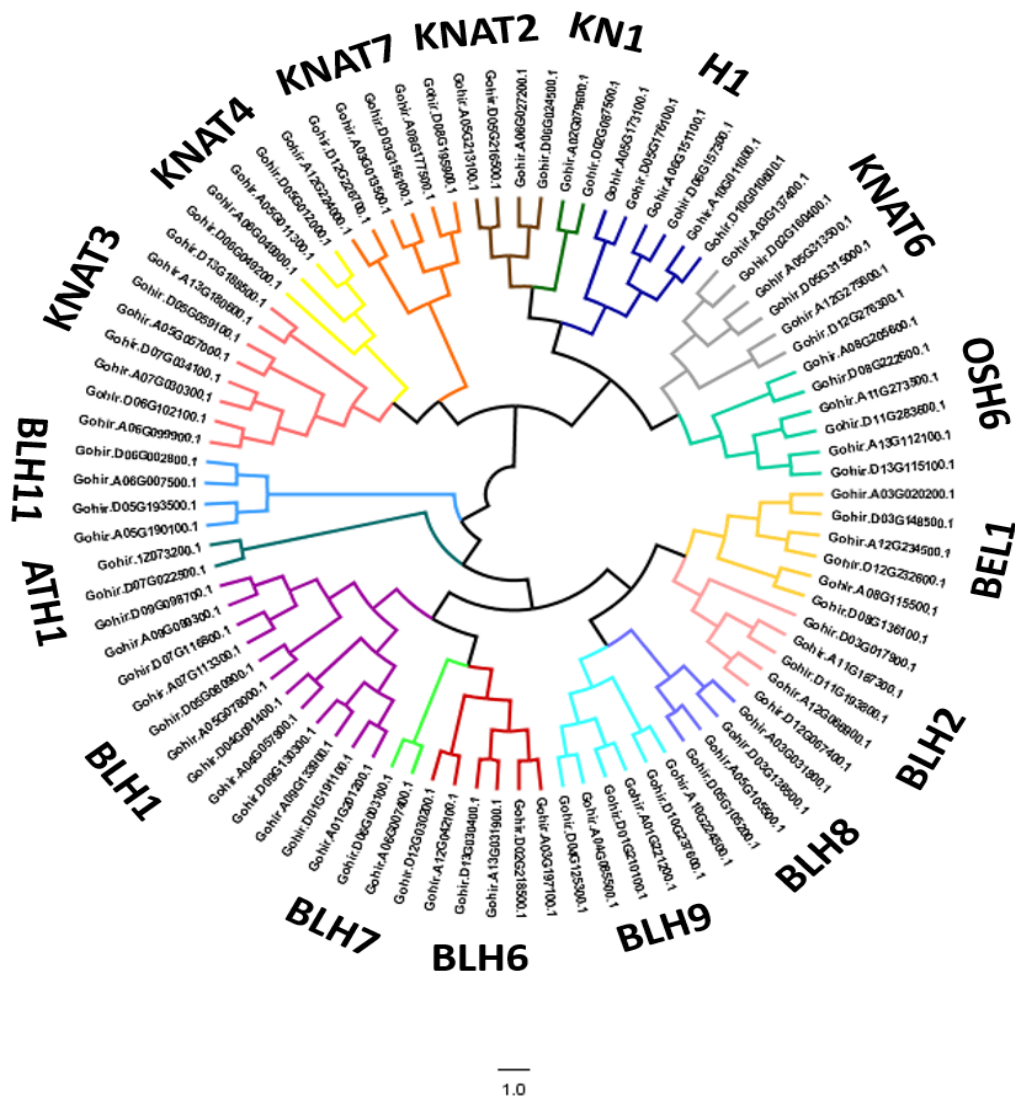

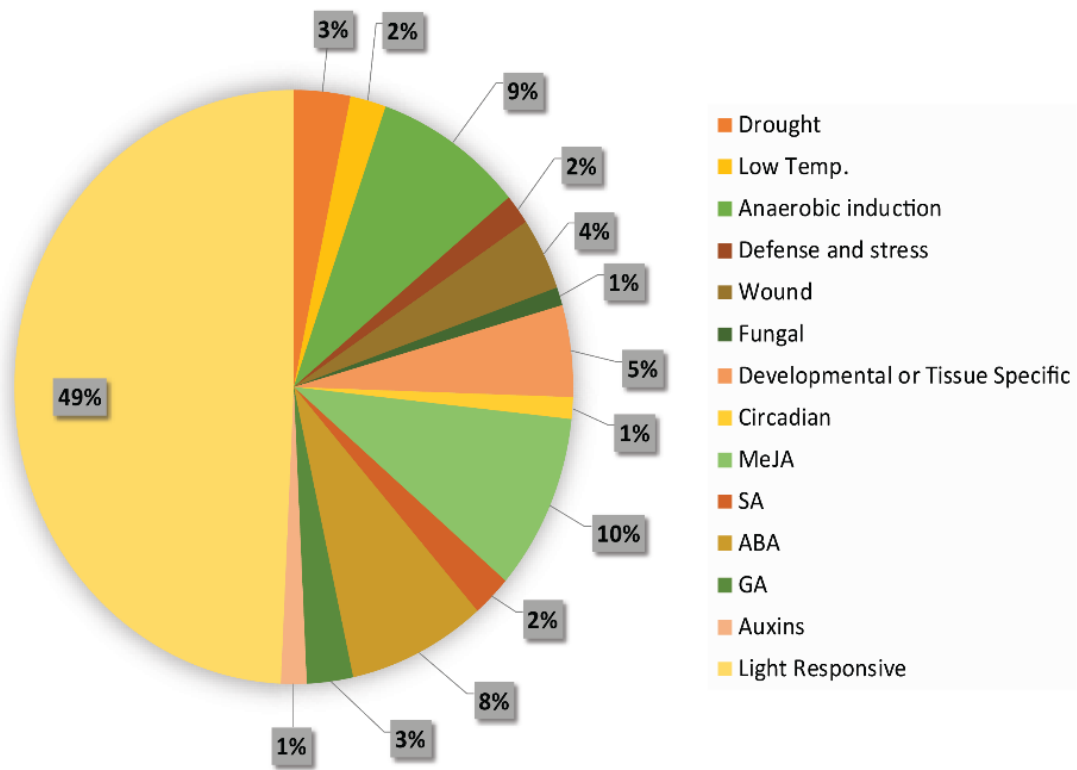**Fig. S2:** NJ Phylogenetic tree of *G. hirsutum* TALE genes

Fig. S3: Pie graph showing results of promotor analysis of total 89 identified TALE genes in upland cotton

Table S1. Ka/Ks rates and estimated time for duplication events in *GhTALE* genes

Query acc.	chr no.	subject acc	chr no.	ka	ks	ka/ks	estimated time	duplication	purifying selection
Gohir.A03G013500.1	A03	Gohir.D12G226700.1	D12	0.078	0.777	0.100	25.883	Segmental	Yes
Gohir.A03G013500.1	A03	Gohir.A12G224000.1	A12	0.080	0.723	0.110	24.097	Segmental	Yes
Gohir.A03G013500.1	A03	Gohir.A08G177500.1	A08	0.035	0.635	0.054	21.180	Segmental	Yes
Gohir.A03G013500.1	A03	Gohir.D08G195900.1	D08	0.036	0.662	0.054	22.077	Segmental	Yes
Gohir.A03G137400.1	A03	Gohir.D02G160400.1	D02	0.004	0.046	0.089	1.537	Segmental	Yes
Gohir.A03G197100.1	A03	Gohir.D02G218500.1	D02	0.025	0.072	0.340	2.400	Segmental	Yes
Gohir.A05G011300.1	A05	Gohir.A06G049900.1	A06	0.078	0.441	0.176	14.690	Segmental	Yes
Gohir.A05G011300.1	A05	Gohir.D06G049200.1	D06	0.076	0.410	0.185	13.660	Segmental	Yes
Gohir.A05G057000.1	A05	Gohir.D06G102100.1	D06	0.106	0.595	0.178	19.847	Segmental	Yes
Gohir.A05G173100.1	A05	Gohir.D06G157300.1	D06	0.085	0.512	0.166	17.060	Segmental	Yes
Gohir.A05G213100.1	A05	Gohir.A06G027200.1	A06	0.070	0.572	0.123	19.053	Segmental	Yes
Gohir.A05G213100.1	A05	Gohir.D06G024500.1	D06	0.069	0.524	0.132	17.467	Segmental	Yes
Gohir.A06G027200.1	A06	Gohir.D05G216500.1	D05	0.072	0.588	0.122	19.600	Segmental	Yes
Gohir.A06G049900.1	A06	Gohir.D05G012000.1	D05	0.077	0.429	0.180	14.313	Segmental	Yes
Gohir.A06G151100.1	A06	Gohir.A05G173100.1	A05	0.084	0.527	0.159	17.557	Segmental	Yes
Gohir.A06G151100.1	A06	Gohir.D05G176100.1	D05	0.084	0.491	0.172	16.360	Segmental	Yes
Gohir.A07G030300.1	A07	Gohir.A05G057000.1	A05	0.080	0.508	0.158	16.923	Segmental	Yes
Gohir.A08G177500.1	A08	Gohir.D12G226700.1	D12	0.088	0.686	0.128	22.853	Segmental	Yes
Gohir.A08G177500.1	A08	Gohir.A12G224000.1	A12	0.089	0.626	0.142	20.880	Segmental	Yes
Gohir.A08G177500.1	A08	Gohir.D03G156100.1	D03	0.032	0.621	0.051	20.683	Segmental	Yes
Gohir.A12G224000.1	A12	Gohir.D08G195900.1	D08	0.089	0.649	0.137	21.623	Segmental	Yes
Gohir.A12G224000.1	A12	Gohir.D03G156100.1	D03	0.080	0.696	0.115	23.193	Segmental	Yes
Gohir.A13G180600.1	A13	Gohir.A05G057000.1	A05	0.113	0.642	0.176	21.410	Segmental	Yes
Gohir.A13G180600.1	A13	Gohir.D07G034100.1	D07	0.098	0.597	0.164	19.887	Segmental	Yes
Gohir.D03G156100.1	D03	Gohir.D12G226700.1	D12	0.078	0.748	0.104	24.940	Segmental	Yes
Gohir.D03G156100.1	D03	Gohir.D08G195900.1	D08	0.033	0.647	0.051	21.570	Segmental	Yes
Gohir.D05G012000.1	D05	Gohir.D06G049200.1	D06	0.075	0.399	0.189	13.290	Segmental	Yes
Gohir.D05G176100.1	D05	Gohir.D06G157300.1	D06	0.083	0.476	0.175	15.863	Segmental	Yes
Gohir.D06G024500.1	D06	Gohir.D05G216500.1	D05	0.071	0.539	0.131	17.980	Segmental	Yes
Gohir.D07G022500.1	D07	Gohir.1Z073200.1	Scaffold	0.014	0.034	0.422	1.127	Segmental	Yes
Gohir.D07G034100.1	D07	Gohir.A05G057000.1	A05	0.080	0.506	0.158	16.863	Segmental	Yes
Gohir.D08G195900.1	D08	Gohir.D12G226700.1	D12	0.088	0.709	0.123	23.627	Segmental	Yes
Gohir.D13G188500.1	D13	Gohir.A05G057000.1	A05	0.109	0.623	0.175	20.763	Segmental	Yes
Gohir.D13G188500.1	D13	Gohir.D07G034100.1	D07	0.094	0.574	0.163	19.140	Segmental	Yes
Mean							**17.923**		
Maximum							**25.883**		
Minimum							**1.127**		