

**Supplementary Table S1: Genotype name, pedigree and origin of selected genotypes**

Sr. No.	Genotype	Accession No.	Origin	Sr. No.	Genotype	Accession No.	Origin
1	<i>G. barbadense</i>	3-79-2	Wild cotton germplasm nursery of China	67	<i>G. darwinii</i>	AD5-60	San Cristobal, Galapagos islands
2	<i>G. barbadense</i>	3-79-3	Wild cotton germplasm nursery of China	68	<i>G. darwinii</i>	AD5-61-1	San Cristobal, Galapagos islands
3	<i>G. barbadense</i>	AD2-1-1 GLPS	SantaCruz,Galapagos islands	69	<i>G. darwinii</i>	AD5-61-2	San Cristobal, Galapagos islands
4	<i>G. barbadense</i>	AD2-1-2 GLPS	SantaCruz,Galapagos islands	70	<i>G. darwinii</i>	AD5-61-3	San Cristobal, Galapagos islands
5	<i>G. barbadense</i>	AD2-1-3 GLPS	SantaCruz,Galapagos islands	71	<i>G. darwinii</i>	AD5-61-4	San Cristobal, Galapagos islands
6	<i>G. barbadense</i>	AD2-1-4 GLPS	SantaCruz,Galapagos islands	72	<i>G. darwinii</i>	AD5-61-5	San Cristobal, Galapagos islands
7	<i>G. barbadense</i>	AD2-1-5 GLPS	SantaCruz,Galapagos islands	73	<i>G. darwinii</i>	AD5-61-6	San Cristobal, Galapagos islands
8	<i>G. barbadense</i>	AD2-6	Santa Cruz, Galapagos islands	74	<i>G. darwinii</i>	AD5-61-7	San Cristobal, Galapagos islands
9	<i>G. barbadense</i>	AD2-2 GLPS	SantaCruz,Galapagos islands	75	<i>G. darwinii</i>	AD5-61-8	San Cristobal, Galapagos islands
10	<i>G. barbadense</i>	AD2-3-1 GLPS	SantaCruz,Galapagos islands	76	<i>G. darwinii</i>	AD5-61-9	San Cristobal, Galapagos islands
11	<i>G. barbadense</i>	AD2-3-2 GLPS	Santa Cruz, Galapagos islands	77	<i>G. darwinii</i>	AD5-61-10	San Cristobal, Galapagos islands
12	<i>G. barbadense</i>	AD2-4-1 GLPS	Santa Cruz, Galapagos islands	78	<i>G. darwinii</i>	Subsp.darwini II-1	Wild cotton germplasm nursery of China
13	<i>G. barbadense</i>	AD2-4-2 GLPS	Santa Cruz, Galapagos islands	79	<i>G. darwinii</i>	Subsp.darwini II-2	Wild cotton germplasm nursery of China
14	<i>G. barbadense</i>	AD2-5-1 GLPS	Santa Cruz, Galapagos islands	80	<i>G. klotzschianum</i>	D3-k-lz	Wild cotton germplasm nursery of China
15	<i>G. barbadense</i>	AD2-5-2 GLPS	Santa Cruz, Galapagos islands	81	<i>G. klotzschianum</i>	D3k-21-1	Santa Cruz, Galapagos islands
16	<i>G. barbadense</i>	AD2-5-3 GLPS	Santa Cruz, Galapagos islands	82	<i>G. klotzschianum</i>	D3k-21-2	Santa Cruz, Galapagos islands
17	<i>G. barbadense</i>	AD2-5-4 GLPS	Santa Cruz, Galapagos islands	83	<i>G. klotzschianum</i>	D3k-21-3	Santa Cruz, Galapagos islands
18	<i>G. barbadense</i>	XH-18	Wild cotton germplasm nursery of China	84	<i>G. klotzschianum</i>	D3k-21-4	Santa Cruz, Galapagos islands
19	<i>G. barbadense</i>	XH-21	Wild cotton germplasm nursery of China	85	<i>G. hirsutum</i>	CCRI12	Wild cotton germplasm nursery of China
20	<i>G. barbadense</i>	Sibruk Egyptian	Wild cotton germplasm nursery of China	86	<i>G. hirsutum</i>	CCRI16	Wild cotton germplasm nursery of China
21	<i>G. darwinii</i>	AD5-lz	Wild cotton germplasm nursery of China	87	<i>G. tomentosum</i>	AD3-27	Hawaiian Islands
22	<i>G. darwinii</i>	AD5-3	Wild cotton germplasm nursery of China	88	<i>G. tomentosum</i>	AD3-28-1	Hawaiian Islands
23	<i>G. darwinii</i>	AD5-7	Wild cotton germplasm nursery of China	89	<i>G. tomentosum</i>	AD3-28-2	Hawaiian Islands
24	<i>G. darwinii</i>	AD5-25-1	SantaCruz,Galapagos islands	90	<i>G. tomentosum</i>	AD3-30-1	Hawaiian Islands
25	<i>G. darwinii</i>	AD5-26-1	Isabela, Galapagos islands	91	<i>G. tomentosum</i>	AD3-30-2	Hawaiian Islands
26	<i>G. darwinii</i>	AD5-26-2	Isabela, Galapagos islands	92	<i>G. tomentosum</i>	AD3-lz	Hawaiian Islands
27	<i>G. darwinii</i>	AD5-28-1	Isabela, Galapagos islands	93	<i>G. tomentosum</i>	AD3-70	Hawaiian Islands
28	<i>G. darwinii</i>	AD5-28-2	Isabela, Galapagos islands	94	<i>G. tomentosum</i>	AD3-71	Hawaiian Islands
29	<i>G. darwinii</i>	AD5-28-3	Isabela, Galapagos islands	95	<i>G. tomentosum</i>	AD3-72	Hawaiian Islands
30	<i>G. darwinii</i>	AD5-28-4	Isabela, Galapagos islands	96	<i>G. tomentosum</i>	AD3-73	Hawaiian Islands
31	<i>G. darwinii</i>	AD5-29-1	Isabela, Galapagos islands	97	<i>G. tomentosum</i>	AD3-68	Hawaiian Islands
32	<i>G. darwinii</i>	AD5-29-2	Isabela, Galapagos islands	98	<i>G. tomentosum</i>	AD3-69	Hawaiian Islands
33	<i>G. darwinii</i>	AD5-30-1	Isabela, Galapagos islands	99	<i>G. tomentosum</i>	AD3-21	Oahu, Hawaiian Islands
34	<i>G. darwinii</i>	AD5-30-2	Isabela, Galapagos islands	100	<i>G. tomentosum</i>	AD3-23	Oahu, Hawaiian Islands
35	<i>G. darwinii</i>	AD5-30-3	Isabela, Galapagos islands	101	<i>G. tomentosum</i>	AD3-24	Oahu, Hawaiian Islands
36	<i>G. darwinii</i>	AD5-30-4	Isabela, Galapagos islands	102	<i>G. tomentosum</i>	AD3-25	Oahu, Hawaiian Islands
37	<i>G. darwinii</i>	AD5-31-1	Isabela, Galapagos islands	103	<i>G. tomentosum</i>	AD3-26	Oahu, Hawaiian Islands
38	<i>G. darwinii</i>	AD5-31-2	Isabela, Galapagos islands	104	<i>G. tomentosum</i>	AD3-32	Lanai , Hawaiian Islands
39	<i>G. darwinii</i>	AD5-31-3	Isabela, Galapagos islands	105	<i>G. tomentosum</i>	AD3-33	Oahu, Hawaiian Islands
40	<i>G. darwinii</i>	AD5-43	Isabela, Galapagos islands	106	<i>G. tomentosum</i>	AD3-35	Big island, Hawaiian Islands
41	<i>G. darwinii</i>	AD5-48	Isabela, Galapagos islands	107	<i>G. tomentosum</i>	AD3-36	Big island, Hawaiian Islands
42	<i>G. darwinii</i>	AD5-50	Isabela, Galapagos islands	108	<i>G. tomentosum</i>	AD3-37	Lanai , Hawaiian Islands
43	<i>G. darwinii</i>	AD5-51	Isabela, Galapagos islands	109	<i>G. tomentosum</i>	AD3-38	Lanai , Hawaiian Islands
44	<i>G. darwinii</i>	AD5-52	Isabela, Galapagos islands	110	<i>G. tomentosum</i>	AD3-39	Lanai , Hawaiian Islands
45	<i>G. darwinii</i>	AD5-53	Isabela, Galapagos islands	111	<i>G. tomentosum</i>	AD3-40	Lanai , Hawaiian Islands
46	<i>G. darwinii</i>	AD5-54-1	Isabela, Galapagos islands	112	<i>G. tomentosum</i>	AD3-41	Lanai , Hawaiian Islands
47	<i>G. darwinii</i>	AD5-54-2	Isabela, Galapagos islands	113	<i>G. tomentosum</i>	AD3-42	Lanai , Hawaiian Islands
48	<i>G. darwinii</i>	AD5-55	Isabela, Galapagos islands	114	<i>G. tomentosum</i>	AD3-45	Molokai , Hawaiian Island
49	<i>G. darwinii</i>	AD5-22	SantaCruz,Galapagos islands	115	<i>G. tomentosum</i>	AD3-46	Molokai , Hawaiian Island
50	<i>G. darwinii</i>	AD5-24	SantaCruz,Galapagos islands	116	<i>G. tomentosum</i>	AD3-47	Molokai , Hawaiian Island
51	<i>G. darwinii</i>	AD5-25-2	SantaCruz,Galapagos islands	117	<i>G. tomentosum</i>	AD3-49	Molokai , Hawaiian Island
52	<i>G. darwinii</i>	AD5-32-1	SantaCruz,Galapagos islands	118	<i>G. tomentosum</i>	AD3-50	Oahu, Hawaiian Islands
53	<i>G. darwinii</i>	AD5-32-2	SantaCruz,Galapagos islands	119	<i>G. ekmanianum</i>	AD6-01-1	Dominican Republic, US NPGS
54	<i>G. darwinii</i>	AD5-33	SantaCruz,Galapagos islands	120	<i>G. ekmanianum</i>	AD6-01-2	Dominican Republic, US NPGS
55	<i>G. darwinii</i>	AD5-34-1	SantaCruz,Galapagos islands	121	<i>G. ekmanianum</i>	AD6-01-3	Dominican Republic, US NPGS
56	<i>G. darwinii</i>	AD5-34-2	SantaCruz,Galapagos islands	122	<i>G. ekmanianum</i>	AD6-02-4	Dominican Republic, US NPGS
57	<i>G. darwinii</i>	AD5-34-3	SantaCruz,Galapagos islands	123	<i>G. ekmanianum</i>	AD6-03-7	Dominican Republic, US NPGS
58	<i>G. darwinii</i>	AD5-34-4	SantaCruz,Galapagos islands	124	<i>G. ekmanianum</i>	AD6-03-8	Dominican Republic, US NPGS
59	<i>G. darwinii</i>	AD5-34-5	SantaCruz,Galapagos islands	125	<i>G. ekmanianum</i>	AD6-03-9	Dominican Republic, US NPGS
60	<i>G. darwinii</i>	AD5-35-1	SantaCruz,Galapagos islands	126	<i>G. ekmanianum</i>	AD6-03-10	Dominican Republic, US NPGS
61	<i>G. darwinii</i>	AD5-35-2	SantaCruz,Galapagos islands	127	<i>G. ekmanianum</i>	AD6-03-11	Dominican Republic, US NPGS
62	<i>G. darwinii</i>	AD5-56	San Cristobal, Galapagos islands	128	<i>G. ekmanianum</i>	AD6-03-12	Dominican Republic, US NPGS
63	<i>G. darwinii</i>	AD5-57	San Cristobal, Galapagos islands	129	<i>G. stephensii</i>	AD7-01-13	Wake Atoll, US NPGS
64	<i>G. darwinii</i>	AD5-58	San Cristobal, Galapagos islands	130	<i>G. stephensii</i>	AD7-01-14	Wake Atoll, US NPGS
65	<i>G. darwinii</i>	AD5-59-1	San Cristobal, Galapagos islands	131	<i>G. stephansii</i>	AD7-01-15	Wake Atoll, US NPGS
66	<i>G. darwinii</i>	AD5-59-2	San Cristobal, Galapagos islands	132	<i>G. stephansii</i>	AD7-01-16	Wake Atoll, US NPGS