

Supplementary Table S1: Comparison between phenotypic flower expression and marker prediction of one hundred and ninety (190) *D. rotundata* clones in 2017 and 2018 planting seasons.

Genotypes	sp16 Amplification	Predicted sex genotype	Observed sex phenotype		Accuracy (%)
			2017	2018	
Akunchi	1	F	F	F	100
TDr89/02475	1	F	F	F	100
TDr89/02665	1	F	F	F	100
Nduu	1	F	F	F	100
TDr11/00873	1	F	F	F	100
TDr95/19156	1	F	F	F	100
TDr97/00793	1	F	F	F	100
Alumaco	1	F	M	M	0
Faketsa	0	M	M	M	100
TDr11/00163	0	M	M	M	100
TDr95/01932	0	M	M	M	100
TDr05/00491	1	F	MFD	MFD	100
TDr09/00002	1	F	MMD	MMD	100
TDr09/00058	0	M	M	M	100
TDr11/00034	1	F	M	M	0
TDr11/00497	0	M	M	M	100
TDr11/00835	0	M	F	F	0
TDr09/00082	1	F	M	M	0
TDr11/00582	0	M	M	M	100
Amula	1	F	MMD	MMD	100
TDr11/00421	1	F	M	M	0
TDr11/00396	1	F	M	M	0
TDr11/00585	0	M	M	M	100
TDr11/00492	0	M	M	M	100
TDr11/00278	1	F	MMD	MMD	100
TDr11/00101	0	M	M	M	100
TDr89/02157	1	F	F	F	100
Leusi	0	M	M	M	100
Pouna	0	M	M	M	100
TDr95/18544	0	M	F	F	100
TDr97/00917	1	F	F	F	100
Ojuyawo	1	F	F	F	100
Ehobia	1	F	M	M	0
TDr99/02626	0	M	M	M	100
TDr97/00632	1	F	F	F	100
Agbanwobe	1	F	F	F	100

TDr95/19177	1	F	MMD	MMD	100
TDr00/00362	0	M	M	M	100
Yangbedu	0	M	M	M	100
TDr06-15	1	F	M	M	0
TDr99/02789	0	M	M	M	100
Meccakusa	1	F	F	F	100
TDr99/02562	0	M	M	M	100
TDr97/00205	1	F	F	F	100
TDr95/18988	1	F	F	F	100
TDr04-219	1	F	MFD	MFD	100
Panpas	1	F	F	F	100
TDr08-21-2	1	F	F	F	100
TDr96/00629	1	F	MFD	MFD	100
TDr95/19158	1	F	F	F	100
TDr89/02677	1	F	M	M	0
Ufenyi	1	F	F	F	100
TDr99/02607	0	M	M	M	100
TDr08-21-3	1	F	F	F	100
TDr1601-12	1	F	NFI	NFI	
TDr1601-15	1	F	NFI	NP	
TDr1601-17	1	F	NFI	M	0
TDr1601-19	1	F	NFI	F	100
TDr1601-2	1	F	NFI	F	100
TDr1601-20	1	F	NFI	M	0
TDr1601-3	1	F	NFI	NFI	
TDr1601-4	0	M	NFI	NFI	
TDr1606-21	0	M	NFI	M	100
TDr1606-24	1	F	NFI	M	0
TDr1606-32	0	M	NFI	M	100
TDr1606-33	0	M	NFI	M	100
TDr1606-44	1	F	NFI	NFI	
TDr1606-45	0	M	NFI	NP	
TDr1606-48	1	F	NFI	NP	
TDr1606-53	1	F	NFI	M	0
TDr1614-16	1	F	NFI	NFI	
TDr1614-17	1	F	NFI	NFI	
TDr1614-21	0	M	NFI	NP	
TDr1614-23	0	M	NFI	M	100
TDr1614-24	1	F	NFI	NFI	
TDr1614-25	0	M	NFI	M	100
TDr1614-29	0	M	NFI	M	100
TDr1614-30	0	M	NFI	M	100

TDr1620-1	0	M	NFI	M	100
TDr1620-10	1	F	NFI	NP	
TDr1620-2	0	M	NFI	M	100
TDr1620-3	1	F	NFI	F	100
TDr1620-5	1	F	NFI	NFI	
TDr1620-6	1	F	NFI	NFI	
TDr1620-7	1	F	NFI	NFI	
TDr1620-8	0	M	NFI	NFI	
TDr1619-112	0	M	NFI	M	100
TDr1619-20	1	F	NFI	NFI	
TDr1619-39	1	F	NFI	NP	
TDr1619-45	1	F	NFI	NP	
TDr1619-66	1	F	NFI	MMD	100
TDr1619-67	0	M	NFI	NP	
TDr1619-71	1	F	NFI	NP	
TDr1619-98	1	F	NFI	NP	
TDr1632-18	1	F	NFI	NFI	
TDr1632-27	0	M	NFI	M	100
TDr1632-45	1	F	NFI	M	0
TDr1632-52	0	M	NFI	NFI	
TDr1632-55	1	F	NFI	NFI	
TDr1652-10	1	F	NFI	NFI	
TDr1652-12	1	F	NFI	F	100
TDr1652-13	1	F	NFI	NFI	
TDr1652-21	1	F	NFI	NP	
TDr1652-28	1	F	NFI	M	0
TDr1652-39	1	F	NFI	NFI	
TDr1652-50	1	F	NFI	NP	
TDr1652-74	1	F	NFI	NFI	
TDr1655-25	1	F	NFI	NFI	
TDr1655-29	1	F	NFI	M	0
TDr1655-40	0	M	NFI	NP	
TDr1655-49	1	F	NFI	NFI	
TDr1655-56	1	F	NFI	NFI	
TDr1655-63	1	F	NFI	M	0
TDr1655-84	1	F	NFI	M	0
TDr1401161-106	0	M	NFI	M	100
TDr1401161-71	1	F	NFI	NFI	
TDr1401161-74	1	F	NFI	NP	
TDr1401161-93	0	M	NFI	NFI	
TDr1401161-97	0	M	NFI	M	100
TDr1401112-202	0	M	NFI	M	100

TDr1401112-210	0	M	NFI	F	0
TDr1401112-224	1	F	NFI	NP	
TDr1401112-257	0	M	NFI	NP	
TDr1401112-52	1	F	NFI	NFI	
TDr1401220-224	1	F	NFI	NP	
TDr1401220-26	1	F	NFI	M	0
TDr1401220-34	1	F	NFI	NFI	
TDr1401220-56	1	F	NFI	NP	
TDr1401220-6	0	M	NFI	F	0
TDr97/00793-13	0	M	NFI	M	100
TDr97/00793-15	0	M	NFI	NFI	
TDr97/00793-18	1	F	NFI	NFI	
TDr97/00793-21	1	F	NFI	M	0
TDr97/00793-26	0	M	NFI	NFI	
TDr97/00793-27	1	F	NFI	NP	
TDr97/00793-29	1	F	NFI	NFI	
TDr97/00793-32	0	M	NFI	NFI	
TDr97/00793-49	1	F	NFI	NFI	
TDr97/00793-5	1	F	NFI	M	0
TDr97/00793-50	0	M	NFI	NFI	
TDr97/00793-55	0	M	NFI	NFI	
TDr89/02157-10	1	F	NFI	NFI	
TDr89/02157-12	1	F	NFI	F	100
TDr89/02157-15	0	M	NFI	NFI	
TDr89/02157-18	0	M	NFI	M	100
TDr89/02157-20	0	M	NFI	M	100
TDr89/02157-23	1	F	NFI	NFI	
TDr89/02157-28	1	F	NFI	F	100
TDr89/02157-35	0	M	NFI	NFI	
TDr89/02157-41	0	M	NFI	NFI	
TDr89/02157-5	1	F	NFI	NFI	
TDr89/02157-59	0	M	NFI	M	100
TDr89/02157-7	1	F	NFI	NFI	
TDr89/02475-108	0	M	NFI	M	100
TDr89/02475-56	1	F	NFI	NFI	
TDr89/02475-64	1	F	NFI	NFI	
TDr89/02475-66	1	F	NFI	NFI	
TDr89/02475-72	0	M	NFI	NFI	
TDr89/02475-75	0	M	NFI	NFI	
TDr89/02475-87	1	F	NFI	NFI	
TDr89/02475-96	0	M	NFI	NFI	
TDr97/00205-150	0	M	NFI	NFI	

TDr97/00205-216	1	F	NFI	NFI	
TDr97/00205-227	1	F	NFI	M	0
TDr97/00205-231	1	F	NFI	M	0
TDr97/00205-31	1	F	NFI	NFI	
TDr97/00205-42	1	F	NFI	NFI	
TDr97/00205-61	1	F	NFI	NFI	
TDr97/00205-66	1	F	NFI	NFI	
TDr89/18988-40	1	F	NFI	M	0
TDr89/18988-42	1	F	NFI	NFI	
TDr89/18988-51	0	M	NFI	M	100
TDr89/18988-56	1	F	NFI	NFI	
TDr89/18988-80	1	F	NFI	NFI	
TDr89/18988-87	1	F	NFI	NFI	
TDr89/18988-94	1	F	NFI	NFI	
TDr89/18988-95	0	M	NFI	NFI	
Ojuyawo-18	1	F	NFI	NFI	
Ojuyawo-23	0	M	NFI	NFI	
Ojuyawo-27	0	M	NFI	M	100
Ojuyawo-83	0	M	NFI	M	100
Ojuyawo-84	0	M	NFI	NFI	
Ojuyawo-86	0	M	NFI	NFI	
Ojuyawo-163	0	M	NFI	M	100
Ojuyawo-171	0	M	NFI	NFI	
TDr97/00632-41	1	F	NFI	NFI	
TDr97/00632-60	1	F	NFI	NFI	
TDr97/00632-88	1	F	NFI	M	0
TDr95/19158-13	1	F	NFI	NFI	
TDr95/19158-11	1	F	NFI	NFI	
Average prediction accuracy					73.53

F = female genotype (ZW); M= male genotype (ZZ); MFD = monoecious female dominant (ZW); MMD = monoecious male dominant (ZW); NFI = No Flower Information; NP = No survival.