

Table S1. List of genotypes analyzed with information on their name, respective genetic group, geographic origin/pedigree, and results of DAPC clustering.

Genotypes	Genetic Groups	Geographic Origin/Pedigree	DAPC (K=2)	DAPC (K=3)	DAPC (K=4)	DAPC (K=5)	DAPC (K=12)
TDr_08_5_2	Breeding line	Direct selection from market variety, Ofegi, Irepo market, Oyo, Nigeria	2	1	1	5	1
TDr_08_5_1	Breeding line	Direct selection from market variety, Ofegi, Irepo market, Oyo, Nigeria	2	1	1	5	7
TDr_12_00417	Breeding line	Not available	2	1	1	5	1
TDr_00_00196	Breeding line	TDr9505576/TDr98:103* (Market variety Pouna from Kwara, Nigeria)	2	1	1	5	1
TDr_08_00640	Breeding line	TDr9700917/TDr0000380*	2	1	1	5	7
TDr_05_00389	Breeding line	Not available	1	2	3	4	5
TDr_08_00045	Breeding line	Not available	1	2	3	4	5
TDr_08_00126	Breeding line	Not available	1	2	3	4	4
TDr_08_00140	Breeding line	TDr0200076/TDr9501932*	1	2	3	4	5
TDr_05_00807	Breeding line	TDr0300101	1	2	3	4	4
TDr_13_00294	Breeding line	TDr04:219/Pouna* (Market variety from Ghana)	1	2	3	4	4
TDr_13_00415	Breeding line	TDr04:219/TDr9501932*	1	2	3	4	4
TDr_96_01817	Breeding line	TDr8900839	1	2	3	4	5
TDr_97_00793	Breeding line	TDr93:23 (Market variety, Obiaoturugo, from Ebonyi, Nigeria)	1	2	3	4	4
TDr_00_00539	Breeding line	TDr93:32 32 (Market variety, Amula, from Benue, Nigeria)/TDr9800158*	1	2	3	4	5
TDr_00_00362	Breeding line	TDr9505576/TDr9800062*	1	2	3	4	2
TDr_13_00318	Breeding line	TDr9700793/TDr9501932*	1	2	3	4	4
TDr_08_00620	Breeding line	TDr9700917/TDr0000380*	1	2	3	4	4
TDr_08_00651	Breeding line	TDr9700917/TDr0000380*	1	2	3	4	4
TDr_08_00742	Breeding line	TDr9700917/TDr0000380*	1	2	3	4	2
TDr_08_00799	Breeding line	TDr9700917/TDr0000380*	1	2	3	4	4
TDr_08_00733	Breeding line	TDr9700917/TDr9601818*	1	2	3	4	4
TDr_08_00747	Breeding line	TDr9700917/TDr9601818*	1	2	3	4	4
TDr_08_00758	Breeding line	TDr9700917/TDr9601818*	1	2	3	4	4
TDr_08_00882	Breeding line	TDr9700917/TDr9601818*	1	2	3	4	2
TDr_08_00898	Breeding line	TDr9700917/TDr9601818*	1	2	3	4	2
TDr_12_00447	Breeding line	TDr9700917/TDr9700777*	1	2	3	4	4
TDr_12_00474	Breeding line	TDr9700917/TDr9700777*	1	2	3	4	4
TDr_12_00478	Breeding line	TDr9700917/TDr9700777*	1	2	3	4	4
TDr_08_01026	Breeding line	TDr9700917/TDr9902626*	1	2	3	4	2
TDr_08_01029	Breeding line	TDr9700917/TDr9902626*	1	2	3	4	5

TDr_02_00515	Breeding line	TDr98:162 (Landrace from Nigeria)/TDr00:2:14* (Market variety, Litin-zeng, from Taraba, Nigeria)	1	2	3	4	5
TDr_89_02665	Breeding line	Direct selection through open pollination of farmer variety from Nsukka, Nigeria	1	3	3	4	2
TDr_08_21_2	Breeding line	Direct selection from market variety, Ekpeh, from Delta, Nigeria	1	3	3	4	4
TDr_08_21_3	Breeding line	Direct selection from market variety, Ekpeh, from Delta, Nigeria	1	3	3	4	4
TDr_89_02475	Breeding line	Direct selection through open pollination of farmer variety from Bagbo, Nigeria	1	3	3	4	2
TDr_89_02672	Breeding line	Direct selection through open pollination of farmer variety from Nsukka, Nigeria	1	3	4	1	8
TDr_89_02677	Breeding line	Direct selection through open pollination of farmer variety from Nsukka, Nigeria	1	3	3	4	2
TDr_93_2	Breeding line	Direct selection through open pollination of market variety, Pepa, from Abuja, Nigeria	1	3	3	4	2
TDr_05_00432	Breeding line	Not available	1	3	3	4	2
TDr_07_00157	Breeding line	Not available	1	3	3	4	2
TDr_08_00003	Breeding line	Not available	1	3	4	1	10
TDr_08_00008	Breeding line	Not available	1	3	4	1	10
TDr_08_00014	Breeding line	Not available	1	3	4	1	10
TDr_08_00023	Breeding line	Not available	1	3	4	1	8
TDr_08_00027	Breeding line	Not available	1	3	4	1	10
TDr_08_00040	Breeding line	Not available	1	3	4	1	10
TDr_08_00071	Breeding line	Not available	1	3	4	1	10
TDr_08_00083	Breeding line	Not available	1	3	4	1	10
TDr_08_00094	Breeding line	Not available	1	3	4	1	10
TDr_08_00098	Breeding line	Not available	1	3	3	4	4
TDr_08_00115	Breeding line	Not available	1	3	4	1	10
TDr_08_00119	Breeding line	Not available	1	3	4	1	10
TDr_08_00122	Breeding line	Not available	1	3	4	1	10
TDr_08_00146	Breeding line	Not available	1	3	4	1	10
TDr_08_00149	Breeding line	Not available	1	3	4	1	10
TDr_08_00153	Breeding line	Not available	1	3	3	4	2
TDr_08_00161	Breeding line	Not available	1	3	4	1	10
TDr_08_00164	Breeding line	Not available	1	3	4	1	10

TDr_08_00176	Breeding line	Not available	1	3	4	1	10
TDr_08_00185	Breeding line	Not available	1	3	4	1	10
TDr_08_00197	Breeding line	Not available	1	3	4	1	8
TDr_08_00268	Breeding line	Not available	1	3	4	1	10
TDr_08_01091	Breeding line	Not available	1	3	3	4	4
TDr_08_01123	Breeding line	Not available	1	3	3	4	2
TDr_08_01164	Breeding line	Not available	1	3	3	4	4
TDr_08_01464	Breeding line	Not available	1	3	3	4	2
TDr_08_01919	Breeding line	Not available	1	3	4	1	2
TDr_08_02381	Breeding line	Not available	1	3	3	4	4
TDr_12_00506	Breeding line	Not available	1	3	4	1	10
TDr_12_00507	Breeding line	Not available	1	3	4	1	8
TDr_12_00509	Breeding line	Not available	1	3	4	1	10
TDr_87_00211	Breeding line	Not available	1	3	3	4	4
TDr_89_00727	Breeding line	Not available	1	3	4	4	4
TDr_89_02617	Breeding line	Not available	1	3	3	4	2
TDr_94_01108	Breeding line	Not available	1	3	3	4	2
TDr_96_02433	Breeding line	Not available	1	3	3	4	2
TDr_08_00001	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00013	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00015	Breeding line	TDr0200076/TDr9501932*	1	3	3	4	2
TDr_08_00041	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00055	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00082	Breeding line	TDr0200076/TDr9501932*	1	3	3	4	4
TDr_08_00090	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00091	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00092	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00104	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00105	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00108	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00130	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00132	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00133	Breeding line	TDr0200076/TDr9501932*	1	3	3	4	4
TDr_08_00134	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00141	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00155	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00194	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00207	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00218	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00229	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00254	Breeding line	TDr0200076/TDr9501932*	1	3	4	1	10
TDr_08_00292	Breeding line	TDr0200076/TDr9501932*	1	3	3	4	2
TDr_08_00017	Breeding line	TDr0200076/TDr9501933*	1	3	3	4	4
TDr_08_01932	Breeding line	TDr0200076/TDr9700777*	1	3	4	1	10

TDr_08_01228	Breeding line	TDr0200076/TDr9902789*	1	3	4	1	10
TDr_08_01229	Breeding line	TDr0200076/TDr9902789*	1	3	4	1	10
TDr_08_01278	Breeding line	TDr0200076/TDr9902789*	1	3	4	1	10
TDr_08_01344	Breeding line	TDr0200076/TDr9902789*	1	3	3	4	2
TDr_05_00046	Breeding line	TDr0200410	1	3	4	1	8
TDr_13_00391	Breeding line	TDr04:219/TDr9501932*	1	3	3	4	4
TDr_13_00411	Breeding line	TDr04:219/TDr9501932*	1	3	4	1	4
TDr_13_00421	Breeding line	TDr04:219/TDr9501932*	1	3	4	1	10
TDr_13_00050	Breeding line	TDr04:219/TDr9501932*	1	3	3	4	4
TDr_13_00061	Breeding line	TDr04:219/TDr9501932*	1	3	3	4	4
TDr_13_00084	Breeding line	TDr04:219/TDr9501932*	1	3	3	4	4
TDr_13_00125	Breeding line	TDr04:219/TDr9600626*	1	3	4	1	4
TDr_13_00359	Breeding line	TDr04:219/TDr9700777*	1	3	3	4	4
TDr_13_00366	Breeding line	TDr04:219/TDr9700777*	1	3	4	1	8
TDr_13_00367	Breeding line	TDr04:219/TDr9700777*	1	3	3	4	4
TDr_12_00150	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00152	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00156	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	2
TDr_12_00160	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00168	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00171	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00178	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00179	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	2
TDr_12_00195	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00219	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00249	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_12_00250	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	2
TDr_12_00254	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_13_00431	Breeding line	TDr04:219/TDr9902607*	1	3	3	4	4
TDr_09_01932	Breeding line	TDr0701551	1	3	4	1	8
TDr_95_00965	Breeding line	TDr8600309	1	3	3	4	2
TDr_95_01932	Breeding line	TDr8600309	1	3	4	1	10
TDr_95_01958	Breeding line	TDr8700334	1	3	3	4	4
TDr_95_18544	Breeding line	TDr8700571	1	3	3	4	2
TDr_97_00205	Breeding line	TDr8700839/TDr8700552*	1	3	3	4	4
TDr_96_01724	Breeding line	TDr89/00839OP	1	3	4	1	8
TDr_96_01818	Breeding line	TDr89/00839OP	1	3	4	1	10
TDr_96_01395	Breeding line	TDr8901013	1	3	3	4	2
TDr_97_00903	Breeding line	TDr8901892/TDrIN94R:2*	1	3	3	4	2
TDr_97_00907	Breeding line	TDr8901892/TDrIN94R:2*	1	3	3	4	2
TDr_97_00917	Breeding line	TDr8901892/TDrIN94R:2*	1	3	4	1	8
TDr_97_00940	Breeding line	TDr8901892/TDrIN94R:2*	1	3	3	4	4
TDr_03_00180	Breeding line	TDr8902665	1	3	3	4	2
TDr_96_00582	Breeding line	TDr93:1 (Market variety, Akwoki, from Abuja,	1	3	3	4	4

		Nigeria)					
TDr_96_00604	Breeding line	TDr93:1 (Market variety, Akwoki, from Abuja, Nigeria)	1	3	3	4	2
TDr_96_00625	Breeding line	TDr93:1 (Market variety, Akwoki, from Abuja, Nigeria)	1	3	4	1	8
TDr_96_00629	Breeding line	TDr93:1 (Market variety, Akwoki, from Abuja, Nigeria)	1	3	4	1	8
TDr_99_02607	Breeding line	TDr93:1 (Market variety, Akwoki, from Abuja, Nigeria)/TDr9500858*	1	3	3	4	2
TDr_97_01715	Breeding line	TDr93:23 (Market variety, Obiaoturugo, from Ebonyi, Nigeria)/TDr93:72*	1	3	3	4	2
TDr_97_00777	Breeding line	TDr93:23 (Market variety, Obiaoturugo, from Ebonyi, Nigeria)OP	1	3	4	1	8
TDr_99_02626	Breeding line	TDr93:25 (Market variety, Igum, from Ebonyi, Nigeria)/TDr9500858*	1	3	3	4	4
TDr_99_02674	Breeding line	TDr93:25 (Market variety, Igum, from Ebonyi, Nigeria)/TDr9500858*	1	3	3	4	2
TDr_01_00405	Breeding line	TDr93:32 32 (Market variety, Amula, from Benue, Nigeria)/TDr9800137*	1	3	3	4	2
TDr_00_0058	Breeding line	TDr93:32 32 (Market variety, Amula, from Benue, Nigeria)/TDr9800158*	1	3	3	4	2
TDr_99_02354	Breeding line	TDr93:50 (Market variety from Ibadan)/TDr9500858*	1	3	3	4	2
TDr_99_02789	Breeding line	TDr93:50 (Market variety from Ibadan)/TDr9502026*	1	3	3	4	2
TDr_99_02824	Breeding line	TDr93:50 (Market variety from Ibadan)/TDr9502026*	1	3	3	4	2
TDr_97_00583	Breeding line	TDr93:50 (Market variety from Ibadan)OP	1	3	3	4	2
TDr_97_00960	Breeding line	TDr95:61(Market variety, Kamkpi, from Kogi, Nigeria)/IN94R:2*	1	3	3	4	4
TDr_13_00452	Breeding line	TDr9518544/TDr9700777*	1	3	3	4	4
TDr_13_00458	Breeding line	TDr9518544/TDr9700777*	1	3	3	4	4
TDr_13_00444	Breeding line	TDr9518544/TDr9902607*	1	3	4	1	8
TDr_05_00303	Breeding line	TDr9519156	1	3	3	4	4
TDr_05_00356	Breeding line	TDr9519156	1	3	3	4	2
TDr_05_00466	Breeding line	TDr9519156	1	3	3	4	2

TDr_05_00530	Breeding line	TDr9519156	1	3	3	4	2
TDr_05_00632	Breeding line	TDr9519177	1	3	3	4	4
TDr_05_00694	Breeding line	TDr9519177	1	3	3	4	4
TDr_11_00799	Breeding line	TDr9600604/TDr1892*	1	3	3	4	2
TDr_11_00787	Breeding line	TDr9600604/TDr1892* (genebank landrace)	1	3	3	4	2
TDr_11_00276	Breeding line	TDr9600629/TDr9902626*	1	3	3	4	2
TDr_09_00715	Breeding line	TDr9700205/TDr9501932*	1	3	4	1	8
TDr_11_00263	Breeding line	TDr9700205/TDr9902626*	1	3	3	4	4
TDr_13_00330	Breeding line	TDr9700793/TDr9501932*	1	3	4	1	8
TDr_13_00350	Breeding line	TDr9700793/TDr9501932*	1	3	4	1	8
TDr_13_00354	Breeding line	TDr9700793/TDr9501932*	1	3	3	4	4
TDr_13_00285	Breeding line	TDr9700917/Pouna* (Market variety from Ghana)	1	3	3	4	4
TDr_08_00621	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00632	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00645	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00662	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00662	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00669	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00705	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00707	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	2
TDr_08_00710	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_08_00727	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	2
TDr_08_00744	Breeding line	TDr9700917/TDr0000380*	1	3	4	1	10
TDr_08_00756	Breeding line	TDr9700917/TDr0000380	1	3	3	4	2
TDr_08_00794	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	2
TDr_08_00841	Breeding line	TDr9700917/TDr0000380*	1	3	3	4	4
TDr_13_00288	Breeding line	TDr9700917/TDr04:219*	1	3	3	4	4
TDr_08_01512	Breeding line	TDr9700917/TDr9501932*	1	3	4	1	2
TDr_13_00256	Breeding line	TDr9700917/TDr9501932*	1	3	3	4	4
TDr_13_00273	Breeding line	TDr9700917/TDr9501932*	1	3	4	1	8
TDr_08_00589	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00617	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	4
TDr_08_00639	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00641	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00648	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	4
TDr_08_00764	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00789	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00810	Breeding line	TDr9700917/TDr9601818*	1	3	4	1	8
TDr_08_00861	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	2
TDr_08_00896	Breeding line	TDr9700917/TDr9601818*	1	3	3	4	4
TDr_08_01692	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00408	Breeding line	TDr9700917/TDr9700777*	1	3	4	1	8
TDr_12_00415	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4

TDr_12_00416	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00418	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00419	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00420	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00422	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00423	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00425	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00426	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00427	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00429	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00430	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00432	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00433	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00435	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00437	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00438	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00439	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00446	Breeding line	TDr9700917/TDr9700777*	1	3	4	1	10
TDr_12_00454	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00456	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00458	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00465	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_12_00467	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00475	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	2
TDr_12_00476	Breeding line	TDr9700917/TDr9700777*	1	3	4	1	10
TDr_12_00479	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00189	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00196	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00198	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00200	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00208	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00227	Breeding line	TDr9700917/TDr9700777*	1	3	3	4	4
TDr_13_00172	Breeding line	TDr9700917/TDr9902607*	1	3	3	4	4
TDr_08_00905	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_00924	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_00926	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_00945	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_00963	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	4
TDr_08_00989	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_00998	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_01016	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	4
TDr_08_01024	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_01046	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	4
TDr_08_01051	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2
TDr_08_01085	Breeding line	TDr9700917/TDr9902626*	1	3	3	4	2

[illegible]

TDr_09_00325	Breeding line	TDr9700973/TDr9501932*	1	3	4	1	8
TDr_09_00364	Breeding line	TDr9700973/TDr9501932*	1	3	4	1	8
TDr_09_00374	Breeding line	TDr9700973/TDr9501932*	1	3	4	1	8
TDr_09_00385	Breeding line	TDr9700973/TDr9501932*	1	3	4	1	2
TDr_09_00644	Breeding line	TDr9700973/TDr9501932*	1	3	4	1	8
TDr_00_00180	Breeding line	TDr9800080/TDr98:75* (Market variety, Pouna, from Ghana)	1	3	3	4	2
TDr_11_01036	Breeding line	TDr9902793/TDr9700777*	1	3	3	4	2
TDr_01_00037	Breeding line	TDr9907026/TDr98:70* (Market variety, Pouna, from Ghana)	1	3	4	1	8
TDr_11_01041	Breeding line	TDr9919177/TDr9902607*	1	3	3	4	2
TDr_07_00732	Breeding line	TDrAmula	1	3	4	1	8
TDr_95_19158_6	Breeding line	TDrBulkAbuja1993OP	1	3	3	4	2
TDr_95_19158_8	Breeding line	TDrBulkAbuja1993OP	1	3	3	4	4
TDr_95_19177	Breeding line	TDrBulkAbuja1993OP	1	3	3	4	2
TDr_3783	Genebank landrace	Benin	2	1	1	5	7
TDr_3801	Genebank landrace	Benin	2	1	1	5	7
TDr_4087	Genebank landrace	Burkina Faso	2	1	1	5	7
TDr_1940	Genebank landrace	Cote d'Ivoire	2	1	1	5	7
TDr_2859	Genebank landrace	Cote d'Ivoire	2	1	1	5	7
TDr_1958	Genebank landrace	Ghana	2	1	1	5	7
TDr_2826	Genebank landrace	Ghana	2	1	1	5	7
TDr_3373	Genebank landrace	Ghana	2	1	1	5	7
TDr_3414	Genebank landrace	Ghana	2	1	1	5	7
TDr_2034	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2071	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2084	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2110	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2161	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2331	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2355	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2377	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2504	Genebank landrace	Nigeria	2	1	1	5	7

TDr_2554	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2558	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2561	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2645	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2660	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2664	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2688	Genebank landrace	Nigeria	2	1	1	5	1
TDr_2693	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2724	Genebank landrace	Nigeria	2	1	1	5	7
TDr_2745	Genebank landrace	Nigeria	2	1	1	5	7
TDr_3134	Genebank landrace	Nigeria	2	1	1	5	1
TDr_3288	Genebank landrace	Nigeria	2	1	1	5	7
TDr_3291	Genebank landrace	Nigeria	2	1	1	5	7
TDr_3564	Genebank landrace	Nigeria	2	1	1	5	1
TDr_3592	Genebank landrace	Nigeria	2	1	1	5	1
TDr_3660	Genebank landrace	Nigeria	2	1	1	5	7
TDr_3678	Genebank landrace	Nigeria	2	1	1	5	1
TDr_3681	Genebank landrace	Nigeria	2	1	1	5	7
TDr_3721	Genebank landrace	Nigeria	2	1	1	5	1
TDr_4187	Genebank landrace	Sierra Leone	2	1	1	5	7
TDr_1598	Genebank landrace	Togo	2	1	1	5	1
TDr_1615	Genebank landrace	Togo	2	1	1	5	1
TDr_1631	Genebank landrace	Togo	2	1	1	5	1
TDr_1723	Genebank landrace	Togo	2	1	1	5	7
TDr_1724	Genebank landrace	Togo	2	1	1	5	7
TDr_1769	Genebank landrace	Togo	2	1	1	5	1
TDr_1775	Genebank landrace	Togo	2	1	1	5	1
TDr_1807	Genebank landrace	Togo	2	1	1	5	7

TDr_1839	Genebank landrace	Togo	2	1	1	5	7
TDr_2015	Genebank landrace	Togo	2	1	1	5	7
TDr_2028	Genebank landrace	Togo	2	1	1	5	7
TDr_2330	Genebank landrace	Togo	2	1	1	5	7
TDr_2372	Genebank landrace	Togo	2	1	1	5	7
TDr_2471	Genebank landrace	Togo	2	1	1	5	1
TDr_2681	Genebank landrace	Togo	2	1	1	5	7
TDr_2777	Genebank landrace	Togo	2	1	1	5	1
TDr_2973	Genebank landrace	Togo	2	1	1	5	7
TDr_2975	Genebank landrace	Togo	2	1	1	5	7
TDr_3446	Genebank landrace	Togo	2	1	1	5	7
TDr_3469	Genebank landrace	Togo	2	1	1	5	7
TDr_3519	Genebank landrace	Togo	2	1	1	5	1
TDr_3886	Genebank landrace	Benin	1	2	3	4	5
TDr_3956	Genebank landrace	Benin	1	2	3	4	5
TDr_4086	Genebank landrace	Benin	1	2	3	4	5
TDr_1925	Genebank landrace	Cote d'Ivoire	1	2	3	4	5
TDr_2226	Genebank landrace	Cote d'Ivoire	1	2	3	4	5
TDr_2400	Genebank landrace	Cote d'Ivoire	1	2	3	4	5
TDr_2642	Genebank landrace	Cote d'Ivoire	1	2	3	4	5
TDr_1966	Genebank landrace	Ghana	1	2	3	4	5
TDr_3333	Genebank landrace	Ghana	1	2	3	4	5
TDr_3383	Genebank landrace	Ghana	1	2	3	4	5
TDr_3389	Genebank landrace	Ghana	1	2	3	4	5
TDr_2149	Genebank landrace	Nigeria	1	2	3	4	5
TDr_2158	Genebank landrace	Nigeria	1	2	3	4	5
TDr_2333	Genebank landrace	Nigeria	1	2	3	4	5
TDr_3633	Genebank landrace	Nigeria	1	2	3	4	5

TDr_3637	Genebank landrace	Nigeria	1	2	3	4	5
TDr_3983	Genebank landrace	Nigeria	1	2	3	4	5
TDr_4152	Genebank landrace	Nigeria	1	2	3	4	5
TDr_1489	Genebank landrace	Togo	1	2	3	4	5
TDr_1649	Genebank landrace	Togo	1	2	3	4	5
TDr_1663	Genebank landrace	Togo	1	2	3	4	5
TDr_1711	Genebank landrace	Togo	1	2	3	4	5
TDr_1764	Genebank landrace	Togo	1	2	3	4	5
TDr_1858	Genebank landrace	Togo	1	2	3	4	5
TDr_1977	Genebank landrace	Togo	1	2	3	4	5
TDr_2007	Genebank landrace	Togo	1	2	3	4	5
TDr_2035	Genebank landrace	Togo	1	2	3	4	5
TDr_2342	Genebank landrace	Togo	1	2	3	4	5
TDr_2991	Genebank landrace	Togo	1	2	3	4	5
TDr_2997	Genebank landrace	Togo	1	2	3	4	5
TDr_3010	Genebank landrace	Togo	1	2	3	4	5
TDr_1876	Genebank landrace	Benin	1	3	2	2	9
TDr_1899	Genebank landrace	Benin	1	3	3	4	11
TDr_1932	Genebank landrace	Benin	1	3	3	3	3
TDr_1935	Genebank landrace	Benin	1	3	3	4	2
TDr_1937	Genebank landrace	Benin	1	3	2	2	9
TDr_1943	Genebank landrace	Benin	1	3	3	4	2
TDr_2022	Genebank landrace	Benin	1	3	3	4	2
TDr_3782	Genebank landrace	Benin	1	3	3	4	6
TDr_3785	Genebank landrace	Benin	1	3	3	4	2
TDr_3814	Genebank landrace	Benin	1	3	3	4	2
TDr_3820	Genebank landrace	Benin	1	3	4	1	8
TDr_3824	Genebank landrace	Benin	1	3	3	4	2

TDr_3825	Genebank landrace	Benin	1	3	3	4	2
TDr_3828	Genebank landrace	Benin	1	3	3	3	3
TDr_3842	Genebank landrace	Benin	1	3	3	4	2
TDr_3852	Genebank landrace	Benin	1	3	3	4	2
TDr_3856	Genebank landrace	Benin	1	3	2	2	9
TDr_3863	Genebank landrace	Benin	1	3	4	1	8
TDr_3882	Genebank landrace	Benin	1	3	3	4	2
TDr_3887	Genebank landrace	Benin	1	3	2	2	9
TDr_3958	Genebank landrace	Benin	1	3	3	4	11
TDr_3961	Genebank landrace	Benin	1	3	3	3	3
TDr_3965	Genebank landrace	Benin	1	3	4	1	8
TDr_4020	Genebank landrace	Benin	1	3	4	1	8
TDr_4084	Genebank landrace	Benin	1	3	3	4	2
TDr_4191	Genebank landrace	Benin	1	3	2	2	9
TDr_4192	Genebank landrace	Benin	1	3	3	4	6
TDr_1888	Genebank landrace	Cote d'Ivoire	1	3	3	4	2
TDr_1913	Genebank landrace	Cote d'Ivoire	1	3	3	4	11
TDr_1922	Genebank landrace	Cote d'Ivoire	1	3	3	4	11
TDr_1956	Genebank landrace	Cote d'Ivoire	1	3	3	4	12
TDr_2000	Genebank landrace	Cote d'Ivoire	1	3	3	4	11
TDr_2009	Genebank landrace	Cote d'Ivoire	1	3	2	2	9
TDr_2017	Genebank landrace	Cote d'Ivoire	1	3	3	4	2
TDr_2018	Genebank landrace	Cote d'Ivoire	1	3	2	2	9
TDr_2128	Genebank landrace	Cote d'Ivoire	1	3	3	3	3
TDr_2159	Genebank landrace	Cote d'Ivoire	1	3	3	4	2
TDr_2210	Genebank landrace	Cote d'Ivoire	1	3	4	1	8
TDr_2229	Genebank landrace	Cote d'Ivoire	1	3	4	1	8
TDr_2239	Genebank landrace	Cote d'Ivoire	1	3	4	1	8

TDr_2248	Genebank landrace	Cote d'Ivoire	1	3	3	3	3
TDr_2273	Genebank landrace	Cote d'Ivoire	1	3	3	3	3
TDr_2297	Genebank landrace	Cote d'Ivoire	1	3	3	4	2
TDr_2365	Genebank landrace	Cote d'Ivoire	1	3	2	2	9
TDr_2390	Genebank landrace	Cote d'Ivoire	1	3	3	4	2
TDr_2467	Genebank landrace	Cote d'Ivoire	1	3	3	3	3
TDr_2678	Genebank landrace	Cote d'Ivoire	1	3	3	4	12
TDr_2990	Genebank landrace	Cote d'Ivoire	1	3	3	3	3
TDr_2650	Genebank landrace	Equatorial Guinea	1	3	3	4	4
TDr_1881	Genebank landrace	Ghana	1	3	4	1	8
TDr_1907	Genebank landrace	Ghana	1	3	3	3	3
TDr_1928	Genebank landrace	Ghana	1	3	2	2	9
TDr_1953	Genebank landrace	Ghana	1	3	3	4	2
TDr_2880	Genebank landrace	Ghana	1	3	3	4	11
TDr_3320	Genebank landrace	Ghana	1	3	2	2	9
TDr_3322	Genebank landrace	Ghana	1	3	3	3	3
TDr_3325	Genebank landrace	Ghana	1	3	2	2	9
TDr_3327	Genebank landrace	Ghana	1	3	3	4	2
TDr_3338	Genebank landrace	Ghana	1	3	3	4	12
TDr_3357	Genebank landrace	Ghana	1	3	4	1	8
TDr_3364	Genebank landrace	Ghana	1	3	3	4	2
TDr_3368	Genebank landrace	Ghana	1	3	3	3	3
TDr_3371	Genebank landrace	Ghana	1	3	3	4	11
TDr_3374	Genebank landrace	Ghana	1	3	2	2	9
TDr_3376	Genebank landrace	Ghana	1	3	2	2	9
TDr_3400	Genebank landrace	Ghana	1	3	3	4	12
TDr_3408	Genebank landrace	Ghana	1	3	3	4	12
TDr_3419	Genebank landrace	Ghana	1	3	2	2	9

TDr_3430	Genebank landrace	Ghana	1	3	3	4	2
TDr_4017	Genebank landrace	Ghana	1	3	2	2	9
TDr_4078	Genebank landrace	Guinea	1	3	3	4	2
TDr_4168	Genebank landrace	Guinea	1	3	3	4	2
TDr_4172	Genebank landrace	Guinea	1	3	3	4	11
TDr_4173	Genebank landrace	Guinea	1	3	4	1	8
TDr_4178	Genebank landrace	Guinea	1	3	3	4	6
TDr_4180	Genebank landrace	Guinea	1	3	3	4	2
TDr_4185	Genebank landrace	Guinea	1	3	3	4	2
TDr_2029	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2032	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2033	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2038	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2041	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2042	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2048	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2050	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2059	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2078	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2083	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2094	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2104	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2119	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2121	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2126	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2131	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2136	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2148	Genebank landrace	Nigeria	1	3	3	4	2

TDr_2155	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2163	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2167	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2175	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2195	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2197	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2201	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2207	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2211	Genebank landrace	Nigeria	1	3	4	1	2
TDr_2212	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2225	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2257	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2262	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2266	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2276	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2284	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2285	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2287	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2291	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2292	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2294	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2295	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2307	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2312	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2320	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2323	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2329	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2338	Genebank landrace	Nigeria	1	3	4	1	8

TDr_2343	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2347	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2348	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2363	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2369	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2385	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2406	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2432	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2435	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2438	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2439	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2440	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2453	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2455	Genebank landrace	Nigeria	1	3	3	4	4
TDr_2456	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2458	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2466	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2480	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2491	Genebank landrace	Nigeria	1	3	3	4	11
TDr_2503	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2506	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2512	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2514	Genebank landrace	Nigeria	1	3	3	4	4
TDr_2530	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2540	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2553	Genebank landrace	Nigeria	1	3	3	4	6
TDr_2555	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2564	Genebank landrace	Nigeria	1	3	3	4	12

TDr_2577	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2593	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2611	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2618	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2623	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2630	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2636	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2643	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2655	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2663	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2669	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2670	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2674	Genebank landrace	Nigeria	1	3	3	4	6
TDr_2683	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2687	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2692	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2694	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2698	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2701	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2726	Genebank landrace	Nigeria	1	3	2	2	9
TDr_2740	Genebank landrace	Nigeria	1	3	3	4	6
TDr_2741	Genebank landrace	Nigeria	1	3	3	4	2
TDr_2744	Genebank landrace	Nigeria	1	3	3	4	6
TDr_2749	Genebank landrace	Nigeria	1	3	3	3	3
TDr_2754	Genebank landrace	Nigeria	1	3	3	4	12
TDr_2756	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2763	Genebank landrace	Nigeria	1	3	4	1	8
TDr_2770	Genebank landrace	Nigeria	1	3	3	3	3

TDr_2787	Genebank landrace	Nigeria	1	3	3	4	11
TDr_3002	Genebank landrace	Nigeria	1	3	2	2	9
TDr_3003	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3006	Genebank landrace	Nigeria	1	3	3	4	6
TDr_3287	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3292	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3296	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3301	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3310	Genebank landrace	Nigeria	1	3	2	2	9
TDr_3311	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3312	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3316	Genebank landrace	Nigeria	1	3	2	2	9
TDr_3567	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3568	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3569	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3576	Genebank landrace	Nigeria	1	3	3	4	11
TDr_3579	Genebank landrace	Nigeria	1	3	3	4	4
TDr_3584	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3585	Genebank landrace	Nigeria	1	3	2	2	9
TDr_3590	Genebank landrace	Nigeria	1	3	3	4	11
TDr_3593	Genebank landrace	Nigeria	1	3	2	2	9
TDr_3594	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3598	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3600	Genebank landrace	Nigeria	1	3	3	4	4
TDr_3605	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3610	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3616	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3620	Genebank landrace	Nigeria	1	3	4	1	8

TDr_3621	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3623	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3624	Genebank landrace	Nigeria	1	3	3	4	6
TDr_3631	Genebank landrace	Nigeria	1	3	3	4	6
TDr_3643	Genebank landrace	Nigeria	1	3	3	4	6
TDr_3647	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3648	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3649	Genebank landrace	Nigeria	1	3	4	1	10
TDr_3663	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3668	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3671	Genebank landrace	Nigeria	1	3	3	3	3
TDr_3682	Genebank landrace	Nigeria	1	3	4	1	8
TDr_3729	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3765	Genebank landrace	Nigeria	1	3	3	4	4
TDr_3766	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3881	Genebank landrace	Nigeria	1	3	3	4	2
TDr_3974	Genebank landrace	Nigeria	1	3	3	4	6
TDr_3978	Genebank landrace	Nigeria	1	3	3	4	12
TDr_3985	Genebank landrace	Nigeria	1	3	2	2	9
TDr_4005	Genebank landrace	Nigeria	1	3	2	2	9
TDr_4028	Genebank landrace	Nigeria	1	3	3	3	3
TDr_4029	Genebank landrace	Nigeria	1	3	3	4	2
TDr_4031	Genebank landrace	Nigeria	1	3	3	4	6
TDr_4033	Genebank landrace	Nigeria	1	3	3	4	2
TDr_4038	Genebank landrace	Nigeria	1	3	3	4	12
TDr_4067	Genebank landrace	Nigeria	1	3	3	3	3
TDr_4070	Genebank landrace	Nigeria	1	3	3	4	11
TDr_4091	Genebank landrace	Nigeria	1	3	3	4	11

TDr_4092	Genebank landrace	Nigeria	1	3	3	4	2
TDr_4100	Genebank landrace	Nigeria	1	3	3	4	6
TDr_4154	Genebank landrace	Nigeria	1	3	3	4	2
TDr_4155	Genebank landrace	Nigeria	1	3	3	4	2
TDr_1491	Genebank landrace	Togo	1	3	3	4	11
TDr_1492	Genebank landrace	Togo	1	3	2	2	9
TDr_1495	Genebank landrace	Togo	1	3	2	2	9
TDr_1499	Genebank landrace	Togo	1	3	4	1	8
TDr_1500	Genebank landrace	Togo	1	3	3	4	2
TDr_1505	Genebank landrace	Togo	1	3	4	1	8
TDr_1509	Genebank landrace	Togo	1	3	3	4	11
TDr_1510	Genebank landrace	Togo	1	3	3	3	3
TDr_1513	Genebank landrace	Togo	1	3	3	3	3
TDr_1536	Genebank landrace	Togo	1	3	3	4	2
TDr_1543	Genebank landrace	Togo	1	3	2	2	9
TDr_1556	Genebank landrace	Togo	1	3	3	4	2
TDr_1559	Genebank landrace	Togo	1	3	3	3	3
TDr_1562	Genebank landrace	Togo	1	3	3	4	2
TDr_1568	Genebank landrace	Togo	1	3	3	3	3
TDr_1569	Genebank landrace	Togo	1	3	3	4	2
TDr_1576	Genebank landrace	Togo	1	3	2	2	9
TDr_1577	Genebank landrace	Togo	1	3	2	2	9
TDr_1585	Genebank landrace	Togo	1	3	4	1	8
TDr_1601	Genebank landrace	Togo	1	3	2	2	9
TDr_1608	Genebank landrace	Togo	1	3	3	4	2
TDr_1610	Genebank landrace	Togo	1	3	3	4	2
TDr_1621	Genebank landrace	Togo	1	3	4	1	8
TDr_1622	Genebank landrace	Togo	1	3	3	4	12

TDr_1628	Genebank landrace	Togo	1	3	3	4	11
TDr_1630	Genebank landrace	Togo	1	3	3	3	3
TDr_1650	Genebank landrace	Togo	1	3	4	1	8
TDr_1655	Genebank landrace	Togo	1	3	3	4	6
TDr_1657	Genebank landrace	Togo	1	3	3	4	6
TDr_1667	Genebank landrace	Togo	1	3	3	4	2
TDr_1669	Genebank landrace	Togo	1	3	4	1	8
TDr_1676	Genebank landrace	Togo	1	3	2	2	9
TDr_1684	Genebank landrace	Togo	1	3	3	4	11
TDr_1686	Genebank landrace	Togo	1	3	3	3	3
TDr_1688	Genebank landrace	Togo	1	3	2	2	9
TDr_1707	Genebank landrace	Togo	1	3	3	4	4
TDr_1709	Genebank landrace	Togo	1	3	3	4	11
TDr_1717	Genebank landrace	Togo	1	3	3	4	12
TDr_1756	Genebank landrace	Togo	1	3	3	3	3
TDr_1760	Genebank landrace	Togo	1	3	3	3	3
TDr_1761	Genebank landrace	Togo	1	3	3	4	4
TDr_1763	Genebank landrace	Togo	1	3	4	1	8
TDr_1765	Genebank landrace	Togo	1	3	3	4	6
TDr_1772	Genebank landrace	Togo	1	3	3	4	2
TDr_1790	Genebank landrace	Togo	1	3	4	1	8
TDr_1798	Genebank landrace	Togo	1	3	3	4	2
TDr_1799	Genebank landrace	Togo	1	3	3	4	2
TDr_1804	Genebank landrace	Togo	1	3	3	3	3
TDr_1809	Genebank landrace	Togo	1	3	2	2	9
TDr_1813	Genebank landrace	Togo	1	3	3	4	2
TDr_1817	Genebank landrace	Togo	1	3	2	2	9
TDr_1818	Genebank landrace	Togo	1	3	3	4	2

TDr_1825	Genebank landrace	Togo	1	3	3	3	3
TDr_1826	Genebank landrace	Togo	1	3	4	1	8
TDr_1827	Genebank landrace	Togo	1	3	4	1	8
TDr_1828	Genebank landrace	Togo	1	3	3	4	12
TDr_1829	Genebank landrace	Togo	1	3	2	2	9
TDr_1832	Genebank landrace	Togo	1	3	3	4	2
TDr_1850	Genebank landrace	Togo	1	3	3	4	6
TDr_1851	Genebank landrace	Togo	1	3	3	4	11
TDr_1856	Genebank landrace	Togo	1	3	3	4	2
TDr_1895	Genebank landrace	Togo	1	3	4	1	8
TDr_1905	Genebank landrace	Togo	1	3	3	4	6
TDr_1939	Genebank landrace	Togo	1	3	4	1	8
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TDr_2106	Genebank landrace	Togo	1	3	2	2	9
TDr_2171	Genebank landrace	Togo	1	3	3	3	3
TDr_2237	Genebank landrace	Togo	1	3	2	2	9
TDr_2242	Genebank landrace	Togo	1	3	3	3	3
TDr_2247	Genebank landrace	Togo	1	3	3	4	2
TDr_2249	Genebank landrace	Togo	1	3	3	4	11
TDr_2349	Genebank landrace	Togo	1	3	3	4	2
TDr_2350	Genebank landrace	Togo	1	3	3	4	2
TDr_2366	Genebank landrace	Togo	1	3	3	3	3
TDr_2401	Genebank landrace	Togo	1	3	3	4	12
TDr_2425	Genebank landrace	Togo	1	3	3	4	11
TDr_2431	Genebank landrace	Togo	1	3	3	3	3
TDr_2441	Genebank landrace	Togo	1	3	2	2	9
TDr_2484	Genebank landrace	Togo	1	3	3	4	2
TDr_2502	Genebank landrace	Togo	1	3	3	4	6

TDr_2532	Genebank landrace	Togo	1	3	2	2	9
TDr_2533	Genebank landrace	Togo	1	3	2	2	2
TDr_2572	Genebank landrace	Togo	1	3	3	4	6
TDr_2575	Genebank landrace	Togo	1	3	3	4	2
TDr_2580	Genebank landrace	Togo	1	3	2	2	9
TDr_2581	Genebank landrace	Togo	1	3	3	3	3
TDr_2591	Genebank landrace	Togo	1	3	4	1	8
TDr_2608	Genebank landrace	Togo	1	3	3	4	11
TDr_2710	Genebank landrace	Togo	1	3	3	4	12
TDr_2713	Genebank landrace	Togo	1	3	3	4	2
TDr_2782	Genebank landrace	Togo	1	3	3	4	2
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TDr_2903	Genebank landrace	Togo	1	3	2	2	9
TDr_2904	Genebank landrace	Togo	1	3	3	4	11
TDr_2910	Genebank landrace	Togo	1	3	3	4	11
TDr_2915	Genebank landrace	Togo	1	3	4	1	8
TDr_2926	Genebank landrace	Togo	1	3	2	2	9
TDr_2928	Genebank landrace	Togo	1	3	2	2	9
TDr_2931	Genebank landrace	Togo	1	3	4	1	8
TDr_2936	Genebank landrace	Togo	1	3	3	4	12
TDr_2946	Genebank landrace	Togo	1	3	3	4	12
TDr_2948	Genebank landrace	Togo	1	3	3	4	2
TDr_2965	Genebank landrace	Togo	1	3	3	4	12
TDr_2970	Genebank landrace	Togo	1	3	4	1	8
TDr_2974	Genebank landrace	Togo	1	3	3	4	4
TDr_2984	Genebank landrace	Togo	1	3	3	4	6
TDr_2998	Genebank landrace	Togo	1	3	2	2	9

TDr_3016	Genebank landrace	Togo	1	3	4	1	8
TDr_3433	Genebank landrace	Togo	1	3	2	2	9
TDr_3447	Genebank landrace	Togo	1	3	3	4	2
TDr_3452	Genebank landrace	Togo	1	3	4	1	8
TDr_3461	Genebank landrace	Togo	1	3	2	2	9
TDr_3466	Genebank landrace	Togo	1	3	3	4	11
TDr_3472	Genebank landrace	Togo	1	3	4	1	8
TDr_3473	Genebank landrace	Togo	1	3	3	4	11
TDr_3477	Genebank landrace	Togo	1	3	3	4	2
TDr_3483	Genebank landrace	Togo	1	3	3	4	2
TDr_3484	Genebank landrace	Togo	1	3	3	4	6
TDr_3507	Genebank landrace	Togo	1	3	4	1	8
TDr_3508	Genebank landrace	Togo	1	3	3	3	3
TDr_3510	Genebank landrace	Togo	1	3	3	4	2
TDr_3518	Genebank landrace	Togo	1	3	3	4	11
TDr_3524	Genebank landrace	Togo	1	3	3	4	4
TDr_3527	Genebank landrace	Togo	1	3	3	4	6
TDr_3536	Genebank landrace	Togo	1	3	2	2	9
TDr_3540	Genebank landrace	Togo	1	3	3	4	2
TDr_3543	Genebank landrace	Togo	1	3	3	4	6
TDr_3544	Genebank landrace	Togo	1	3	3	4	2
TDr_3547	Genebank landrace	Togo	1	3	2	2	9
TDr_3551	Genebank landrace	Togo	1	3	4	1	8
TDr_3556	Genebank landrace	Togo	1	3	3	4	11
Ehobia	Market variety	Bodija Market, Nigeria	1	2	3	4	11
Efuru	Market variety	Bodija Market, Nigeria	1	2	3	4	4
Aloshi	Market variety	Lafia Market, Nigeria	1	2	3	4	5
Dente	Market variety	Accra Market, Ghana	1	3	3	4	11

Pouna	Market variety	Accra Market, Ghana	1	3	3	4	11
Jirad_04_219/Amula	Market variety	Bodija Market, Nigeria	1	3	3	4	4
Jircas_99_00777/Breeding line	Market variety	Bodija Market, Nigeria	1	3	3	4	2
Omi_efun_5	Market variety	Bodija Market, Nigeria	1	3	3	3	3
Omi_efun_7	Market variety	Bodija Market, Nigeria	1	3	3	4	4
TDr_Efuru	Market variety	Bodija Market, Nigeria	1	3	3	4	2
TDr_Idu_Ekpeye	Market variety	Bodija Market, Nigeria	1	3	3	4	2
Ufenyi	Market variety	Bodija Market, Nigeria	1	3	3	4	4
Ekiti	Market variety	Ekiti Market, Nigeria	1	3	3	4	2
Alumaco_2	Market variety	Gwagwalada Market, Nigeria	1	3	3	4	2
Makakusa	Market variety	Gwagwalada Market, Nigeria	1	3	3	4	2
Obioturugu	Market variety	Igbariam Market, Nigeria	1	3	3	4	2
Pepa	Market variety	Igbariam Market, Nigeria	1	3	3	4	2
Alumaco_1	Market variety	Lafia Market, Nigeria	1	3	3	4	2
Ogini	Market variety	Lafia Market, Nigeria	1	3	3	4	2
TDr_Gbangu	Market variety	Lafia Market, Nigeria	1	3	3	4	2
Amola	Market variety	Lafia/Gwagwalada Market, Nigeria	1	3	3	4	2
TDr_Ame	Market variety	Lafia/Gwagwalada Market, Nigeria	1	3	3	4	2
TDr_Amula	Market variety	Lafia/Gwagwalada Market, Nigeria	1	3	3	4	2
TDr_River_Omuku (Danacha)	Market variety	Omuku Market, Nigeria	1	3	3	4	2
Keemi	Market variety	Shaki Market, Nigeria	1	3	3	4	2
Hembakwase	Market variety	Zakin-Bian Market, Nigeria	1	3	3	4	2
TDr_Adaka	Market variety	Zakin-Bian Market, Nigeria	1	3	3	4	2

Genotypes in RED indicate a genebank landrace/market variety; \* represents a bi-parental cross

Table S3. Summary of DAPC cluster groups at different K values.

DAPC	K = 2	Clusters	Breeding Lines	Genebank Landraces	Market Varieties	Cluster Assigned Probability
		1	309	403	27	100
		2	5	59	0	100
	K = 3	1	5	59	3	100
		2	27	31	24	100
		3	282	372	0	99.8
	K = 4	1	5	59	0	100
		2	1	63	0	100
		3	186	287	27	99.8
		4	122	3	0	97.7
	K = 5	1	121	53	0	97.7
		2	1	63	0	100
		3	1	52	1	100
		4	186	235	26	99.8
		5	5	59	0	100
	K = 12	1	3	19	0	100
		2	81	106	18	96.58
		3	1	52	1	100
		4	105	10	4	96.63
		5	7	31	1	92.3
		6	0	26	0	88.46
		7	2	40	0	100
		8	60	51	0	99.09
		9	1	62	0	100
		10	54	1	0	96.36
		11	0	40	3	97.67
		12	0	24	0	100

Figure S1. Determination of optimal number of ADMIXTURE clusters using cross-validation error rates for K=2 to K=50.

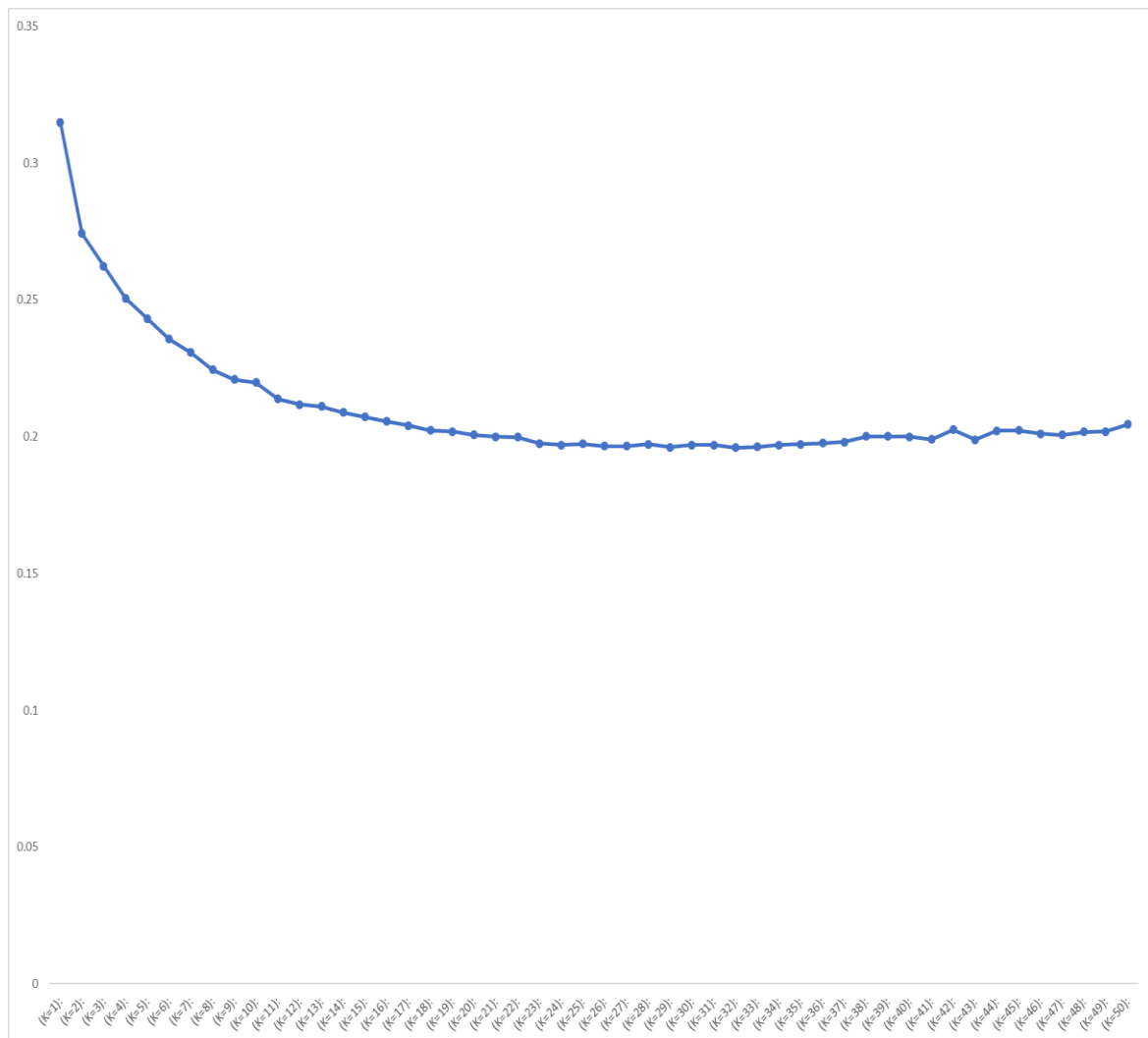
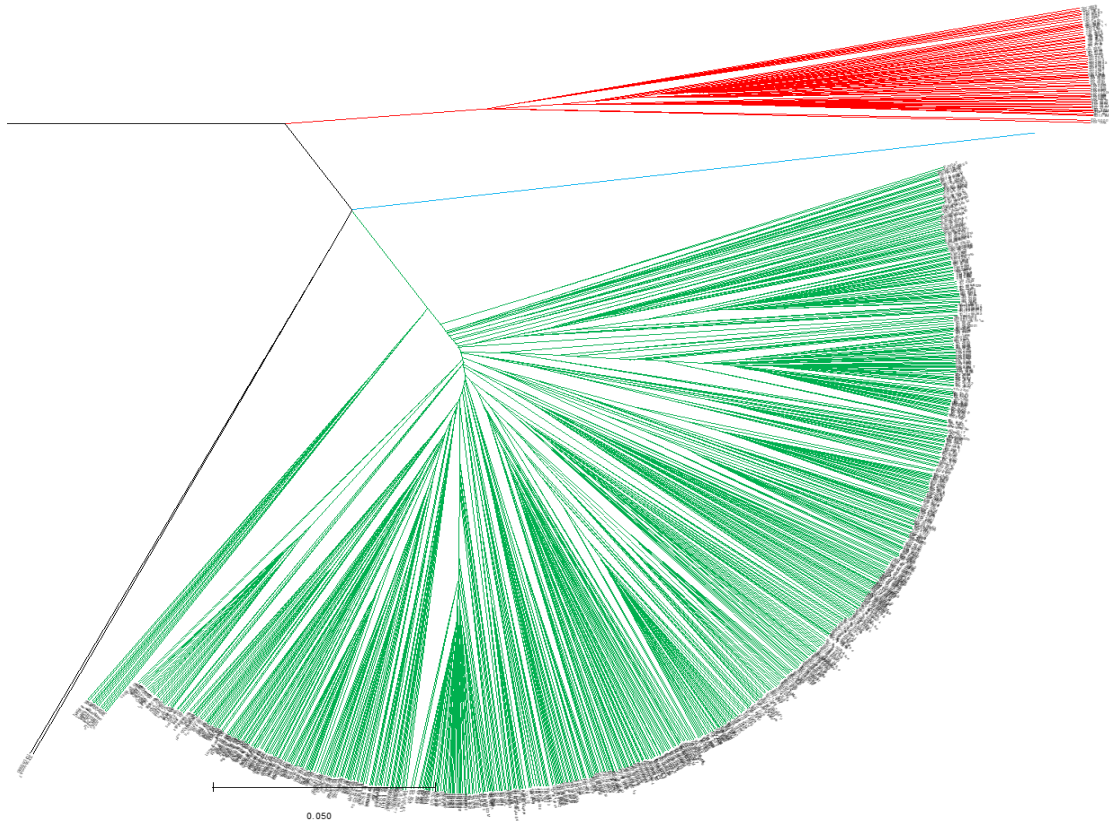


Table S4. Summary of ADMIXTURE cluster groups at different K values.

ADMIXTURE		Clusters	Breeding Lines	Genebank Landraces	Market Variety
	K=2	1	308	401	26
		2	4	54	0
		Admixed	2	7	1
	K=3	1	5	52	6
		2	129	236	10
		3	178	169	11
		Admixed	2	5	0
	K=4	1	1	63	0
		2	107	109	16
		3	172	150	3
		4	5	58	0
		Admixed	29	82	8
	K=10	1	63	42	8
		2	43	1	0
		3	0	71	1
		4	4	31	0
		5	3	19	0
		6	101	1	0
		7	1	38	0
		8	1	50	1
		9	0	74	0
		10	1	63	0
		Admixed	97	72	17

Figure S2

. Phylogenetic tree consisting of 803 genotypes using 3,432 SNPs.



**Green:** Cluster 1 consisting of a mixture of breeding lines, genebank landraces and market varieties; **Red:** Cluster 2 consisting of majorly genebank landraces; **Black:** Cluster 3 consisting breeding lines; **Blue:** Cluster 4 consisting market variety