

Table S1. Mean seed yield (kg ha⁻¹) for bean genotypes tested in five environments in Tanzania: Env 1 = Mbeya 2013, Env 2 = Morogoro 2013, Env 3 = Morogoro 2014, Env 4 = Mbeya 2014, and Env 5 = Arusha 2014; GM = geometric mean.

s/n	ADP	Name	GH	Env 1	Env 2	Env 3	Env 4	Env 5	GM
1	ADP-001	Rozi Koko	Bush	874	677	696	1388	595	806
2	ADP-004	Kilombero	Bush	977	990	789	1447	1111	1042
3	ADP-006	W6 16465	Bush	890	602	1058	1261	535	825
4	ADP-007	Bukoba	Bush	623	110	580	1705	335	469
5	ADP-010	Canada	Bush	860	1011	826	1672	1053	1048
6	ADP-013	Kibumbula	Bush	840	469	905	1861	1177	952
7	ADP-014	Kiangwe	Bush	670	488	1033	2002	1050	934
8	ADP-016	Gololi	Bush	755	317	958	1406	482	689
9	ADP-018	Sodan	Bush	767	497	845	1322	687	782
10	ADP-019	Kasukanywele	Bush	871	738	816	1929	523	880
11	ADP-020	Kigoma	Bush	799	505	617	1449	589	734
12	ADP-022	Kisapuri	Bush	925	307	869	1554	662	760
13	ADP-023	Mshoronyloni	Bush	800	482	625	1378	886	783
14	ADP-024	Yellow	Bush	712	474	683	1062	646	692
15	ADP-027	Incomparable	Bush	796	239	606	1307	715	640
16	ADP-028	Sisi	Bush	923	670	943	1379	780	911
17	ADP-030	RH No.6	Bush	500	89	601	1534	790	504
18	ADP-031	RH No.11	Bush	814	849	841	1900	721	955
19	ADP-033	Kijivu	Bush	871	895	729	1309	818	905
20	ADP-035	Kokola	Bush	640	185	1160	1654	950	736
21	ADP-036	Lyamungu 85	Bush	514	239	689	1469	590	593
22	ADP-037	W6 16488	Bush	1001	288	932	2058	1304	937
23	ADP-038	Moono	Bush	845	851	913	1855	1168	1073
24	ADP-041	Mrondo	Vine	613	512	1096	1671	649	821
25	ADP-044	Kijivu	Vine	737	672	728	1828	1283	967
26	ADP-047	Msolini	Vine	614	409	684	1723	1704	872
27	ADP-053	Maharage Makubwa	Vine	626	591	807	1938	1370	955
28	ADP-054	W6 16447	Vine	438	252	952	1766	890	698
29	ADP-055	Kabuku	Vine	401	382	862	2008	1119	784
30	ADP-056	Soya	Vine	362	257	547	1303	692	540
31	ADP-057	Kijivu	Vine	562	222	365	1933	1665	681
32	ADP-064	W6 16500	Vine	544	289	1239	1248	1174	778
33	ADP-069	Soya	Vine	371	438	963	1309	637	665

34	ADP-071	Njano-Dolea	Vine	307	56	939	1822	1185	511
35	ADP-072	Masusu	Vine	561	184	839	1703	962	677
36	ADP-076	Kablanketi	Vine	615	207	414	1483	597	542
37	ADP-080	Kablanketi	Vine	600	624	764	1860	824	848
38	ADP-084	Kablanketi Ndefu	Vine	410	119	694	1695	1695	627
39	ADP-087	Kablanketi	Vine	524	409	547	1510	431	598
40	ADP-089	Kablanketi	Vine	655	297	692	1387	662	658
41	ADP-090	Kasukanywele	Vine	722	226	884	1712	840	730
42	ADP-091	W6 16560	Vine	488	24	343	1554	1270	380
43	ADP-093	Moro	Vine	465	186	611	1180	938	567
44	ADP-094	Lushala	Vine	508	462	802	1185	1449	798
45	ADP-096	Rojo	Bush	118	144	763	1101	472	368
46	ADP-098	Selian 97	Bush	1001	426	842	1381	742	819
47	ADP-099	Bwana Shamba	Bush	1265	904	677	1407	1265	1066
48	ADP-102	Jesca	Bush	1023	1173	962	1895	940	1155
49	ADP-103	Pesa	Bush	918	752	652	1418	392	758
50	ADP-106	Zawadi	Bush	1048	1240	417	989	686	819
51	ADP-107	Mshindi	Bush	418	608	517	1470	410	602
52	ADP-109	Kablanketi	Vine	819	470	593	1468	719	752
53	ADP-110	SUG-131	Vine	629	578	906	1360	1377	908
54	ADP-111	Uyole 98	Vine	866	302	1185	1533	1114	881
55	ADP-112	Uyole 96	Vine	1260	561	708	1577	1131	978
56	ADP-113	OPS-RS4	Vine	416	179	1245	2127	1065	732
57	ADP-115	Bonus	Vine	377	158	689	1811	1421	638
58	ADP-117	A483	Vine	703	536	763	941	636	703
59	ADP-118	Werna	Vine	425	363	579	1196	846	618
60	ADP-119	A193	Vine	485	273	637	1575	1148	687
61	ADP-121	Kranskop	Vine	513	222	421	1628	989	599
62	ADP-123	Jenny	Vine	726	294	513	1505	607	631
63	ADP-124	Maini	Bush	158	130	1132	763	209	326
64	ADP-126	Selian 05	Vine	860	198	559	1481	1672	749
65	ADP-190	G 1678	Vine	805	305	920	1032	1275	785
66	ADP-208	G 4644	Bush	991	656	960	912	597	806
67	ADP-211	G 4780	Bush	814	143	711	1469	749	619
68	ADP-220	G 5625	Vine	852	761	780	1969	1283	1050
69	ADP-224	G 6239	Vine	595	247	691	1647	771	664
70	ADP-232	G 7930	Bush	1058	495	762	1365	1045	893
71	ADP-242	G 9013	Bush	646	623	785	1263	981	829
72	ADP-247	G 9975	Vine	1039	730	1031	1581	1526	1135
73	ADP-267	G 12689	Bush	990	88	845	1343	624	573
74	ADP-269	G 13092	Bush	571	680	570	960	650	673
75	ADP-271	G 13167	Bush	298	445	712	634	383	470

76	ADP-276	G 13654	Vine	1299	477	1087	1942	946	1044
77	ADP-277	G 13778	Bush	1237	1083	1070	1177	780	1056
78	ADP-288	G 16110A	Vine	615	289	793	1842	1203	792
79	ADP-303	G 17913	Bush	1303	878	733	1111	340	795
80	ADP-310	G 18356	Bush	951	582	610	1350	547	757
81	ADP-345	G 22147	Bush	1342	751	990	1504	877	1056
82	ADP-346	G 22246	Vine	821	141	1006	1661	1032	725
83	ADP-354	G 22502	Vine	890	468	689	1576	840	824
84	ADP-367	G 23086	Vine	864	328	810	1546	1358	864
85	ADP-383	PI 209486	Vine	817	184	964	1260	773	676
86	ADP-390	PI 307808	Bush	1080	391	671	1677	718	806
87	ADP-391	PI 308894	Vine	636	637	793	1232	715	777
88	ADP-395	PI 310511	Bush	879	575	690	995	940	799
89	ADP-427	Badillo	Vine	426	440	845	749	375	537
90	ADP-428	Colorado	Bush	1068	525	580	1158	342	664
91	ADP-430	PR1013-3	Bush	334	316	824	705	573	512
92	ADP-431	Gurabo 5	Bush	781	230	533	1365	499	579
93	ADP-434	PR0737-1	Vine	620	587	701	856	655	678
94	ADP-436	JB-178	Bush	730	468	882	1187	767	772
95	ADP-437	PC-50	Bush	668	434	1200	1526	717	824
96	ADP-438	46-1	Vine	682	101	655	1191	773	529
97	ADP-442	Larga Comercial	Vine	540	364	827	1201	1302	760
98	ADP-447	INIAP 414	Bush	969	360	734	1785	692	794
99	ADP-449	INIAP 420	Bush	525	390	762	1370	271	566
100	ADP-453	INIAP 428	Vine	431	88	463	1581	678	452
101	ADP-462	PI 527540	Vine	445	90	733	1377	969	523
102	ADP-464	PI 353534	Bush	927	306	775	1629	1028	819
103	ADP-465	PI 321094	Vine	257	283	688	1009	554	489
104	ADP-466	PI 449430	Bush	684	745	859	1342	250	681
105	ADP-467	PI 209808	Vine	674	522	726	1548	974	826
106	ADP-468	PI 527538	Bush	1019	843	275	1493	697	755
107	ADP-469	PI 527521	Bush	765	290	910	1233	297	594
108	ADP-472	PI 527537	Vine	1140	54	694	1584	1386	623
109	ADP-476	Heirloom	Vine	453	180	852	1175	935	598
110	ADP-478	PI 353536	Bush	751	653	943	1436	577	825
111	ADP-479	PI 527530	Vine	1198	250	592	1647	1103	797
112	ADP-480	PI 209804	Bush	1068	798	639	1201	814	882
113	ADP-481	PI 449428	Bush	957	630	1141	1494	611	911
114	ADP-482	PI 209802	Bush	983	663	1233	1232	682	924
115	ADP-483	PI 209815	Vine	913	584	951	1766	655	899
116	ADP-508	Calembe	Vine	938	60	637	1714	762	542
117	ADP-510	Ohlio de perdiz	Vine	868	83	524	1448	1005	560

118	ADP-513	Canario	Vine	793	185	732	1655	1088	720
119	ADP-518	Mantega blanca, Kibala	Bush	647	299	856	1584	406	639
120	ADP-519	Katarina, Cela	Bush	987	733	1175	1912	583	989
121	ADP-520	Chumbo, Cela	Vine	710	73	645	1336	1090	546
122	ADP-521	Cebo, Cela	Bush	784	189	875	1574	404	607
123	ADP-523	Canario, Cela	Vine	902	321	719	1236	1268	799
124	ADP-526	Bilfa Uyole	Bush	722	255	817	1538	1187	772
125	ADP-603	Wallace 773-V98	Bush	858	386	799	1274	504	702
126	ADP-604	1062-V98	Bush	1074	566	638	1243	1051	873
127	ADP-605	1132-V96	Bush	661	711	1066	429	501	640
128	ADP-606	NY 104	Bush	584	425	691	1269	502	642
129	ADP-607	NY 105	Bush	622	232	931	1260	375	576
130	ADP-610	G 122	Bush	803	1071	759	1400	772	933
131	ADP-611	Pompadour B	Bush	1166	753	942	1370	850	993
132	ADP-612	ICA Quimbaya	Bush	831	438	1347	1890	1093	1003
133	ADP-620	UCD 0405	Bush	763	804	1130	1448	940	988
134	ADP-628	H9659-27-7	Vine	423	528	497	1392	800	658
135	ADP-629	H9659-27-10	Vine	630	583	669	1173	671	720
136	ADP-633	TARS-HT2	Vine	692	613	1190	1203	668	835
137	ADP-635	OAC Redstar	Vine	835	202	999	1069	676	656
138	ADP-636	Montcalm	Bush	729	533	697	783	570	655
139	ADP-637	Isabella	Bush	940	508	948	1316	534	795
140	ADP-638	Red Hawk	Bush	891	793	510	986	509	710
141	ADP-639	Chinook 2000	Bush	977	728	869	1172	468	805
142	ADP-640	Beluga	Bush	688	504	670	1154	513	672
143	ADP-643	Cardinal	Bush	635	546	642	1257	556	689
144	ADP-644	Fox Fire	Bush	1257	703	634	1530	642	887
145	ADP-645	Lassen	Bush	993	640	731	1104	732	822
146	ADP-646	Myasi	Bush	628	320	942	1499	877	757
147	ADP-647	Red Kanner	Bush	1100	399	759	1058	390	672
148	ADP-648	Red Kloud	Bush	1425	326	954	1925	1118	991
149	ADP-650	K-42	Bush	997	798	901	1342	551	881
150	ADP-651	K-59	Bush	1207	1056	580	1060	477	821
151	ADP-652	Lisa	Bush	912	503	452	937	316	572
152	ADP-653	USDK-CBB-15	Bush	1196	692	702	1176	591	834
153	ADP-654	USDK-4	Bush	802	603	759	730	653	706
154	ADP-655	Fiero	Bush	762	886	733	767	615	748
155	ADP-656	Royal Red	Bush	1110	758	720	1032	607	824
156	ADP-657	Kardinal	Bush	1210	610	828	1372	398	803
157	ADP-658	Blush	Bush	989	749	689	1172	445	767
158	ADP-659	USLK-1	Bush	764	1046	678	944	973	870

159	ADP-660	Krimson	Bush	911	615	945	1600	599	873
160	ADP-661	USCR-7	Bush	804	596	688	860	762	736
161	ADP-663	USCR-CBB-20	Bush	825	803	678	1117	614	790
162	ADP-664	Silver Cloud	Bush	993	772	837	1086	641	851
163	ADP-665	USWK-CBB-17	Bush	636	537	607	863	221	524
164	ADP-666	USWK-6	Bush	1030	751	681	1137	284	702
165	ADP-667	VA-19	Bush	1335	923	855	1576	843	1070
166	ADP-668	Cran-09	Bush	590	511	921	1551	698	786
167	ADP-670	AC Calmont	Bush	993	817	868	980	469	798
168	ADP-672	CDRK	Bush	1093	925	871	1312	588	926
169	ADP-673	UC Nichols	Bush	732	614	945	1158	410	726
170	ADP-674	UCD 0704	Bush	688	514	910	1160	488	711
171	ADP-675	UCD 0801	Bush	999	773	779	1715	810	965
172	ADP-676	CELRK	Bush	823	1438	461	1305	535	824
173	ADP-677	Etna	Bush	743	567	919	1334	471	754
174	ADP-679	Red Rover	Bush	730	1214	738	833	450	755
175	ADP-680	Clouseau	Bush	958	933	841	1072	492	831
176	ADP-681	Belagio	Vine	523	213	509	1053	809	546
177	ADP-683	IJR	Vine	618	501	892	1672	771	813
178	ADP-684	Majesty	Vine	730	297	949	1179	1192	780
179	ADP-685	Chianti	Vine	654	259	834	1282	529	626
180	ADP-686	UCD 707	Bush	825	570	469	1726	715	771
181	ADP-687	Pink Panther	Bush	1161	938	1251	1408	908	1117
182	G4445A	Ex Rico 23	Vine	269	316	440	808	841	480
183	G51295A	BAT 477	Vine	163	341	430	1168	1419	524
