

Assessment of phenotypic and genetic variation against pod borer among a subset of elite pigeonpea (*Cajanus cajan*) genotypes in Kenya

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Table 1. List of 55 elite lines used in genetic diversity study, 16 for resistance field screening and their pedigree information.

S. No	Genotype	Pedigree	Field screening
1	ICEAP 01147	ICPL 87091 X ICEAP 00020	yes
2	ICEAP 01179	ICPL 87091 X ICEAP 00020	yes
3	ICEAP 01147-1	ICPL 87091 X ICEAP 00020	yes
4	ICEAP 00554	Improved	yes
5	ICEAP01541	ICEAP 00779 X ICP 6927	yes
6	ICEAP 00540	Land race	yes
7	ICEAP 00911	Improved	yes
8	ICEAP 00902	Improved	yes
9	ICEAP 01150	ICPL 87091 X ICEAP 00020	yes
10	ICEAP 00068	Improved	yes
11	ICEAP 00557	Improved	yes
12	KAT 60/8	Improved	yes
13	ICEAP 00850	Improved	yes
14	ICEAP 00979-1	ICPL 87091 X ICEAP 00068	yes
15	ICEAP 01535	ICEAP 00068 X ICEAP 00770	No
16	ICEAP 01537	ICEAP 00068 X CEAP 00755	No
17	ICEAP 01538	ICEAP 00068 X ICEAP 00755	No
18	ICPL 87091	Improved	No
19	ICPL 86012	Improved	No
20	ICPL 87105	Improved	No
21	ICP 7035 W	Improved	No
22	ICEAP 00936	Improved	No
23	ICEAP 00932	Improved	No
24	ICEAP 00933	Improved	No
25	ICEAP 01159	ICPL 87091 X ICEAP 00040	yes
26	ICEAP 01154-2	ICPL 87091 X ICEAP 00020	yes
27	ICEAP 00777	Landrace	No
28	ICEAP 01145	ICPL 87091 X ICEAP 00020	No
29	ICEAP00550	Improved	No
30	ICEAP 01150-1	ICPL 87091 X ICEAP 00020	No
31	ICEAP 01155	ICPL 87091 X ICEAP 00020	No
32	ICEAP 01157	ICPL 87091 X ICEAP 00020	No
33	ICEAP 01160	ICPL 87091 X ICEAP 00040	No

34	ICEAP 01161	ICPL 87091 X ICEAP 00040	No
35	ICEAP 01162	ICPL 87091 X ICEAP 00040	No
36	ICEAP 01164	ICPL 87091 X ICEAP 00020	No
37	ICEAP 01166/2	ICPL 87091 X ICP 13076	No
38	ICEAP 01167	ICPL 87091 X ICEAP 00020	No
39	ICEAP 01169	ICPL 87091 X ICEAP 00040	No
40	ICEAP 01170	ICPL 87091 X ICEAP 00040	No
41	ICEAP 01172-2	ICPL 87091 X ICP 13076	No
42	ICEAP 01175	ICPL 87091 X ICEAP 00040	No
43	ICEAP 01181	ICPL 87091 X ICEAP 00020	No
44	ICEAP 01530	ICEAP 00068 X ICEAP 00774	No
45	ICEAP 01536	ICEAP 00068 X ICEAP 00771	No
46	ICEAP 01525	ICEAP 00068 X ICPL 00755	No
47	ICEAP 01528	ICEAP 00068 X ICEAP 00770	No
48	ICEAP 01529	ICEAP 00068 X ICEAP 00770	No
49	ICEAP 01531	ICEAP 00068 X ICEAP 00774	No
50	ICEAP 01534	ICEAP 00435 X ICEAP 00771	No
51	ICEAP 01514/15	ICEAP 00797 X ICP 6927	No
52	ICEAP 01544/2	ICEAP 00068 X ICEAP 00770	No
53	Mthawajuni	Landrace	No
54	MZ 2/9	Landrace	No
55	UG ACC 22	Landrace	No

Table 2. List of 21 SSR markers used in pigeonpea diversity study

S.No.	Primer name	Repeat motif	PIC value	Forward primer (5'-3')
1	CcM0047	(A)12n(TC)5	0.76	TGCTTTTGGATGAAAGTAGGGA
2	CcM0602	(AT)14	0.86	TTTGCTCTATAACAAGGGATTCA
3	CcM0603	(A)21(AG)9	0.8	TGAGAGAGGATGTGTGGTGC
4	CcM0444	(TA)7	0.79	TGTCATGAGTGGCTGATCCT
5	CcM0594	(GA)9n(TC)9	0.77	GGCTTGGTCTTTCTTGGTG
6	CcM1014	(AT)10	0.6	ACCCGATCATTTTGGACAGA
7	CcM1139	(ATG)6	0.69	CAGGGACAAATGCCTGAAGT
8	CcM1348	(T)10n(AT)18	0.64	TGAAGTCATTGCACCTTGACA
9	CcM1373	(TG)7	0.73	AATCAACTCGGCCATTCTTG
10	CcM1232	(GA)6	0.68	GCTTGAGGCCTTGAGCTAGA
11	CcM1447	(AT)10	0.82	CTTCCACGGTCCAGTGAAT
12	CcM1582	(AAT)5n(TGT)8	0.69	CCAACACCTTTCCTTAGCCT
13	CcM1506	(A)10n(A)10(TA)11	0.68	TGTTTTTGCAAAGGTTTCCC
14	CcM1611	(AT)22	0.81	AAGAAAAATTCCTAAACCCGTG
15	CcM1820	(AT)14	0.75	GGCAGAAAATGGAGGGTACA
16	CcM1825	(G)13n(TG)5	0.69	TGAAGTTGGCGGAAAAACAT

17	CcM2044	(TAT)9	0.84	ATCACTCCAAGCACCCAAAC
18	CcM2049	(TAT)9	0.72	GCGACCAGGTACTTTCAAGC
19	CcM2060	(AT)21n(AT)6	0.6	TGGAGAAGAGATTCATTTATTTGATG
20	CcM2332	(ATA)13	0.72	TCCATTTTTCTTCTGCGGTG
21	CcM1598	(G) 11 (GA) 10	0.74	GCCATGGTTGAGGATGTCTT
