

Appendix

Appendix Table 1: Mean squares of for growth and crop phenology of common bean as affected by varieties and NP rates at Mechara, 2012.

Mean Squares										
Source of variation	DF	DFE	DFF	DNM	NEN	NNEN	TNN	LAP	LAI	SCH
Rep	2	0.12 ns	36.62*	28.07*	1298.4*	64.39*	858.90*	236519*	1.45*	17.2**
Variety	3	2.44*	250.36**	13.44**	8936**	1837.95**	7546.7**	1321105**	8.46**	713.8***
NP	4	0.39 ns	21.06**	58.86**	38503.9**	4346.70**	66458.3**	5803812**	36.33***	241.23*
Var x NP	12	0.96*	1.26ns	0.792 ns	1423**	433.75**	2374.9**	79942 ns	0.511 ns	337.91**
Error	38	0.45	1.95	0.91	280.7	21.55	345.4	49468	0.31	16.58
CV%		6.70	3.20	1.30	14.70	8.90	11.20	14.40	14.40	4.80

**, * and ns: significant at ($P<0.01$) and non-significant ($P<0.05$), respectively.

DF: Degree of Freedom; DFE: Days to 50% Emergence; DFF: Days to 50% Flowering; DNM: Days to 90% Maturity; NEN: Effective Number of Nodules; NEN: Non-effective Number of Nodules; TNN: Total Number of Nodules; LAI: Leaf Area Index; SCH: Stand Count at Harvest

Appendix Table 2: Mean squares of for yield and yield components of common bean as affected by varieties and NP rates at Mechara, 2012.

Mean Squares									
Sources of variation	DF	BY	GY	HI	HSW	NPP	NSPP	(TN %)	(AP %)
Rep	2	8.96 ns	45.619*	0.008*	0.860*	14.18*	0.490*	0.046*	0.020*
Variety	3	1689.22**	177.83**	0.013*	36.732**	142.39**	1.549**	0.363**	0.317**
NP	4	3138**	564.139**	0.014*	10.174**	525.98**	1.913**	0.541**	1.546**
Var x NP	12	572.15**	23.04*	0.009*	0.574 ns	23.62 ns	0.106 ns	0.052**	0.045**
Error	38	32.01	9.039	0.004	0.419	11.29	0.074	0.008	0.006
CV%		10.40	15.80	17.50	3.20	18.90	6.30	2.90	15.50

**, * and ns: significant at ($P<0.01$) and non-significant ($P<0.05$), respectively.

DF: Degree of Freedom; BY: Biological Yield; GY: Grain Yield; HI: Harvest Index; HSW: Hundred Seed Weight; NPP: Number of Pods per Plant; NSPDP: Number of Seeds per Pod; N%: Percentage of N content in the leaf; P mg/kg: Phosphorus content in the leaf