Table 2: Least-square means and standard errors (± S.E) for body weight (g.) at different ages for lines by generation in Dokki-4 strain.

Generation	Line.	Body weight (g.)at							
		hatch		4-week		8-week		12-week	
		M	F	M	F	M	F	M	F
Base Generation	1	33.38±0.15	32.27±0.14	214.3±1.96	209.1±1.89	548.5±4.17	489.2±4.03	828.0±5.50	722.5±5.32
	2	33.16±0.25	32.35±0.24	212.1±3.39	209.7±3.24	545.9±7.22	491.2±6.90	825.3±9.32	729.8±9.11
1st generation	1	32.46±0.15	32.60±0.13	231.2±2.06	223.4±1.81	576.6±4.39	521.8±3.86	800.5±5.79	705.6±5.10
	2	32.96±0.26	33.07±0.24	236.2±3.58	229.8±3.16	597.3±7.62	529.7±6.72	899.6±10.05	780.0±8.86
2nd generation	1	32.40±0.15	32.91±0.13	216.5±2.06	215.9±1.81	551.6±4.39	489.1±3.86	825.2±5.79	727.8±5.10
	2	32.26±0.26	32.51±0.24	249.3±3.58	240.1±3.16	601.4±7.62	574.7±6.72	952.4±10.05	818.9±8.86
Effect of gen.	0	32.33±0.06		210.69±0.74^{c}		510.66±2.29^{c}		762.93±3.91 ^{c}	
	1	32.81±0.06		226.77±0.73^{b}		542.04±229^{b}		809.63±3.18^{b}	
	2	32.55±0.07		236.70±0.66^{a}		568.66±2.16^{a}		844.88±2.54^{a}	
Effect of line	1	32.44±0.09^{b}		214.35±1.56^{b}		515.53±3.32^{b}		772.70±4.39^{b}	
	2	32.59±0.07^{a}		229.35±0.87^{a}		551.34±2.28^{a}		810.45±2.74^{a}	
Effect of sex	M	32.48±0.06		227.91±1.01		572.96±2.39^{a}		874.46±3.13^{a}	
	F	32.60±0.10		223.40±0.96		521.76±2.92^{b}		755.55±1.90^{b}	
Significance									
Generation		NS		*		*		*	
Line		*		**		*		**	
Sex.		NS		NS		**		**	
Gen * Line		*		**		**		**	
Line* Sex		NS		*		*		*	
Gen.* Line* Sex		NS		NS		*		*	

a,b Means in each column in each classification Bering different letters, differ significantly ($P<0.5$).

*= Significant ($P<0.5$), **= Significantly ($P < 0.01$), NS= Not significant, L1= Unselected line (CL), L2 = Selected line (SL).

Table 3: Least-square means and standard errors (± S.E) of daily weight gain (gram/day) at different age for lines by generation in Dokki-4 strain

Generation	Line.	Daily gain (gram/day)							
		(0-4 week)		(4-8 week)		(8-12 week)		(0-8 week)	
		M	F	M	F	M	F	M	F
Base generation	1	6.49±0.029	6.32±0.028	10.93±0.137	10.00±0.122	9.96±0.205	8.31±0.198	9.22±0.226	8.15±0.219
	2	6.42±0.051	6.33±0.049	11.92±0.237	10.05±0.227	9.95±0.355	8.50±0.340	9.17±0.391	8.19±0.374
1st generation	1	7.09±0.031	6.81±0.027	12.34±0.144	10.65±0.127	10.56±0.216	8.68±0.190	9.72±0.238	8.73±0.209
	2	7.26±0.054	7.03±0.048	12.90±0.250	10.70±0.220	10.78±0.375	8.92±0.331	10.08±0.413	8.87±0.364
2nd generation	1	6.57±0.031	6.53±0.027	11.96±0.144	9.75±0.127	9.75±0.216	8.50±0.190	9.26±0.238	8.14±0.209
	2	7.75±0.054	7.31±0.048	12.56±0.250	11.95±0.220	12.54±0.375	8.70±0.331	10.16±0.413	9.68±0.364
Effect of gen.	0	6.37± 0.021[a]		10.71± 0.095[a]		8.91± 0.142[c]		8.54± 0.156[c]	
	1	6.93± 0.020[b]		11.26± 0.094[b]		9.54± 0.144[b]		9.09± 0.159[b]	
	2	7.29± 0.020[a]		11.85± 0.094[a]		9.85± 0.144[a]		9.57± 0.159[a]	
Effect of line	1	6.49± 0.014[a]		10.75± 0.068[a]		9.16± 0.101[a]		8.62± 0.112[a]	
	2	7.03± 0.025[b]		11.50 ± 0.117[b]		9.59± 0.175[b]		9.26 ± 0.193[b]	
Effect of sex	M	6.99 ± 0.022[a]		12.32. ± 0.111[a]		10.75 ± 0.15[a]		9.65 ± 0.16[a]	
	F	6.81 ± 0.019[b]		10.65 ± 0.110[b]		8.68 ± 0.21[b]		8.73 ± 0.15[b]	
Significance									
Generation		*		*		*		*	
Line		*		*		*		*	
Sex.		NS		**		**		**	
Gen * Line		*		*		*		*	
Line* Sex		NS		*		*		*	
Gen.* Line* Sex		NS		*		Ns		*	

a,b Means in each column in each classification Bering different letters, differ significantly (P<0.5).

*= Significant (P<0.5), **= Significantly (P < 0.01), NS= Not significant, L1= Unselected line (CL), L2 = Selected line (SL).

Table 4: Least-square means and standard errors (± S.E) of feed conversion (gram/day) at different age for lines by generation in Dokki-4 strain

Generation.	Line.	Feed conversion (gram feed/ gain)					
		(0-4 week)		(4-8 week)		(8-12 week)	
		M	F	M	F	M	F
Base generation	1	5.11±0.033	5.16±0.032	5.07±0.077	6.33±0.075	7.18±0.076	8.70±0.076
	2	5.03±0.057	5.12±0.055	4.84±0.134	5.89±0.128	6.69±0.13	8.55±0.127
1st generation	1	4.38±0.035	4.63±0.030	4.35±0.081	5.16±0.071	5.96±0.080	7.81±0.071
	2	4.18±0.060	4.28±0.053	3.96±0.141	4.64±0.124	5.82±0.140	7.46±0.123
2nd generation	1	4.77±0.035	4.84±0.030	4.66±0.081	5.65±0.071	6.98±0.080	7.87±0.071
	2	3.80±0.060	4.15±0.053	3.97±0.141	4.19±0.124	4.83±0.140	7.27±0.123
Effect of gen. 0		5.10±0.023[a]		5.61±0.053[a]		7.96±0.053[b]	
1		4.47±0.023[b]		4.73±0.054[a]		6.98±0.054[a]	
2		4.21±0.016[b]		4.37±0.038[b]		6.64±0.038[a]	
Effect of line 1		4.95±0.02[b]		5.48±0.066[b]		7.56±0.065[b]	
2		4.43±0.02[a]		4.64±0.06[a]		7.01±0.06[a]	
Effect of sex M		4.50±0.02[b]		4.42±0.05[a]		6.13±0.05[a]	
F		4.63±0.02[b]		5.16±0.05[b]		7.81±0.05[b]	
Significance							
Generation		*		*		*	
Line		*		*		*	
Sex.		*		*		*	
Gen * Line		NS		*		*	
Line*Sex		NS		NS		*	
Gen.* Line* Sex		*		*		Ns	

a,b Means in each column in each classification Bering different letters, differ significantly (P<0.5).

*= Significant (P<0.5), **= Significantly (P < 0.01), NS= Not significant, L1= Unselected line (CL), L2 = Selected line (SL).

Table 5 : Least-square means and standard errors (± S.E) of body measurements (shank length, keel and body circumference) during growing period for lines and by generation in Dokki-4 strain.

Gen.	*Line*	Sex	Shank Length			Keel Length			Body circumference		
			4 -week	8-week	12 -week	4- week	8-week	12-week	4- week	8-week	12-week
Base Gen.	1	1	4.53±0.19	6.48±0.18	7.62±0.17	4.85±0.21	6.29±0.24	7.99±0.35	12.81±0.14	18.29±0.42	23.41±0.64
		2	4.30±0.18	5.70±0.17	7.10±0.18	4.70±0.20	6.10±0.32	7.75±0.33	12.10±0.40	16.11±0.44	20.62±0.62
	2	1	4.46±0.33	6.41±0.32	7.58±0.32	4.79±0.37	6.20±0.42	7.91±0.59	12.94±0.72	18.30±0.78	23.61±1.11
		2	4.28±0.32	5.50±0.30	6.98±0.28	4.65±0.35	6.14±0.39	7.80±0.56	12.06±0.68	16.22±0.74	19.89±1.06
1st Gen.	1	1	4.71±0.20	6.98±0.19	7.90±0.19	5.58±0.22	7.91±0.25	8.76±0.36	14.32±0.44	16.22±0.47	24.16±0.67
		2	4.51±0.18	6.15±0.17	7.48±0.16	5.10±0.22	6.98±0.32	8.12±0.38	14.11±0.38	18.45±0.42	22.32±0.59
	2	1	4.43±0.35	6.38±0.34	7.52±0.33	4.92±0.39	6.27±0.44	7.89±0.63	13.12±0.76	18.46±0.82	23.52±1.17
		2	4.31±0.30	5.62±0.29	7.01±0.08	4.70±0.34	6.15±0.39	7.75±0.55	12.86±0.67	16.56±0.72	20.11±1.03
2nd Gen.	1	1	4.86±0.21	7.42±0.25	8.46±0.37	5.82±0.13	7.98±0.41	9.95±0.28	15.98±0.63	22.68±0.63	25.78±0.29
		2	4.68±0.16	6.85±0.09	7.65±0.26	5.49±0.15	7.56±0.51	8.89±0.23	15.06±0.18	19.86±0.32	23.50±0.24
	2	1	4.45±0.24	6.45±0.25	7.62±0.16	5.10±0.17	6.38±0.39	7.90±0.46	13.06±0.28	18.61±0.16	23.40±0.32
		2	4.31±0.23	6.10±0.32	7.12±0.16	4.91±0.13	6.21±0.51	7.82±0.36	12.99±0.27	16.88±0.36	20.67±0.27
Gen. effect		0	4.39±0.13^{c}	6.09±0.17^{b}	7.32±0.12^{b}	4.74±0.15^{b}	6.18±0.16^{b}	7.86±0.24^{b}	12.47±0.29^{b}	17.23±0.31^{b}	21.88±0.32^{b}
		1	4.48±0.11^{b}	6.37±0.12^{b}	7.48±0.13^{b}	5.08±0.15^{a}	6.72±0.17^{a}	8.18±0.24^{a}	13.60±0.29^{a}	18.48±0.45^{a}	22.53±0.45^{a}
		2	4.60±0.12^{a}	6.63±0.14^{a}	7.63±0.16^{a}	5.33±0.16^{a}	7.03±0.26	8.64±0.18	14.27±0.45^{a}	19.51±0.35^{a}	23.34±0.42^{a}
Line effect		1	4.38±0.16^{b}	6.13±0.16^{b}	7.30±0.16^{b}	4.79±0.18^{b}	6.23±0.21^{b}	7.84±0.29^{b}	12.84±0.36^{b}	17.50±0.39^{b}	18.93±0.55^{b}
		2	4.60±0.09^{a}	6.65±0.09^{a}	7.78±0.10^{a}	5.27±0.11^{a}	7.07±0.12^{a}	8.61±0.12^{a}	14.06±0.17^{a}	19.31±0.21^{a}	21.27±0.32^{a}
Sex effect		M	4.57±0.14^{NS}	6.69±0.13^{a}	7.78±0.13^{a}	5.18±0.16^{a}	6.72±0.17^{a}	8.43±0.25^{a}	13.71±0.30^{a}	19.31±0.33^{a}	24.83±0.47^{a}
		F	4.41±0.13^{NS}	6.04±0.12^{b}	7.22±0.12^{b}	4.92±0.14^{b}	6.52±0.16^{b}	8.02±0.23^{b}	13.20±0.28^{b}	17.50±0.30^{b}	20.85±0.43^{b}
Significance:											
Generation			*	*	*	*	*	*	**	**	**
Line			Ns	*	*	*	*	*	**	**	**
Sex.			Ns	*	*	Ns	*	*	**	**	**
Gen * Line			Ns	Ns	*	Ns	Ns	NS	Ns	*	*
Line*Sex			*	*	*	*	*	*	*	*	*
Gen.* Line* Sex			Ns	*	Ns	Ns	*	*	*	*	*

a,b Means in each column in each classification Bering different letters, differ significantly ($P<0.5$).

*= Significant ($P<0.5$), **= Significantly ($P < 0.01$), NS= Not significant, L1= Unselected line (CL), L2 = Selected line (SL).