

Table(3): Laying rate during 8 successive laying periods as affected by Na gene and dietary protein level in Sharkasi chickens.

Factor	Group	LR1 23-26 wks	LR2 27-30 wks	LR3 31-34 wks	LR4 35-38 wks	LR5 39-42 wks	LR6 43-36 wks	LR7 47-50 wks	LR8 51-54 wks
Genotype (G)	G 1- Na/na	45.50	69.30	73.90	78.60 ^A	53.70 ^A	61.80	56.60	51.60 ^A
	G 2- Na/Na	45.00	74.80	72.10	77.00 ^A	54.30 ^A	58.40	52.80	46.80 ^B
	G 3- na/na	39.80	67.00	66.10	65.80 ^B	47.90 ^B	55.00	51.00	45.70 ^B
Protein level(P)	P 1- High P	44.80	72.80	72.40	75.10 ^A	54.40 ^A	59.30	54.20	49.10 ^A
	P 2- Low P	42.20	68.00	69.30	72.40 ^B	50.70 ^B	57.50	52.60	46.80 ^B
Interactions(G x P)	G1xP1	48.60 ^A	69.80 ^B	73.90 ^A	80.00	58.00	63.10 ^A	56.80 ^A	52.50
	G1xP2	42.50 ^{AB}	68.90 ^B	73.80 ^A	77.10	53.60	60.70 ^A	56.40 ^A	50.70
	G2xP1	45.00 ^{AB}	75.70 ^A	74.30 ^A	77.50	55.40	58.20 ^{AB}	53.20 ^{AB}	48.00
	G2xP2	45.10 ^{AB}	73.80 ^{AB}	70.10 ^{AB}	76.40	53.20	58.60 ^{AB}	52.30 ^{AB}	45.60
	G3xP1	45.70 ^B	72.85 ^A	68.40 ^{AB}	67.90	50.00	56.80 ^B	52.80 ^{AB}	47.10
	G3xP2	38.90 ^C	61.30 ^C	63.60 ^C	63.80	45.70	53.20 ^C	49.30 ^B	44.30
ANOVA	d.f	Probabilities							
Genotype (G)	2	**	**	**	**	**	**	**	**
Protein level (P)	1	**	**	**	**	**	**	**	**
(G x P)	2	**	**	**	N.S.	N.S.	**	**	N.S.
Error	661								

a,b,c, means within the same factor within the same column with different superscripts are significantly different (P<0.05).

** = Highly significant (P<0.01).

N.S. = Non significant.

L.R. = Laying rate

Table(4): Egg production performance and body weight as affected by naked neck gene (Na) and dietary protein level in Sharkasi chickens.

Factor	Group	A.S.M.	TEN	ALR (%)	A.E.W. (g)	TEM (kg)	E90	LR90 (%)	W24 (g)	W40 (g)	W52 (g)
Genotype (G)	G 1- Na/na	169.70 ^B	138.20	61.70	45.00 ^A	6.219	63.50 ^A	70.60 ^A	1273 ^B	1442 ^A	1557 ^A
	G 2- Na/Na	170.30 ^B	135.10	60.30	45.20 ^A	6.105	63.10 ^A	70.20 ^A	1301 ^A	1455 ^A	1573 ^A
	G 3- na/na	174.10 ^A	122.80	54.80	42.60 ^B	5.230	59.30 ^B	65.90 ^B	1263 ^B	1400 ^B	1509 ^B
Protein level (P)	P 1- High P	170.70 ^B	135.30	60.40	44.60	6.035	62.45 ^A	69.48 ^A	1280	1450 ^A	1555
	P 2- Low P	171.80 ^A	129.00	57.70	43.90	5.660	61.50 ^B	68.30 ^B	1275	1415 ^B	1537
Interactions (GxP)	G1xP1	168.80	140.90 ^A	62.90 ^A	45.20	6.366 ^A	63.80	70.90	1278	1454	1557 ^A
	G1xP2	170.50	135.70 ^{AB}	60.60 ^{AB}	44.70	6.065 ^{AB}	63.30	70.30	1269	1430	1557 ^A
	G2xP1	170.40	136.70 ^{AB}	61.00 ^{AB}	45.60	6.233 ^A	63.10	70.10	1302	1469	1564 ^A
	G2xP2	170.20	133.50 ^{AB}	59.60 ^{AB}	44.80	5.980 ^{AB}	63.20	70.20	1300	1444	1580 ^A
	G3xP1	173.40	128.00 ^B	57.20 ^B	43.00	5.507 ^B	60.40	67.20	1267	1430	1547 ^A
	G3xP2	174.70	117.70 ^C	52.50 ^C	42.20	4.970 ^C	58.10	64.60	1260	1370	1474 ^B
ANOVA	d. f						Probabilities				
Genotype (G)	2	**	**	**	**	**	**	**	**	**	**
Protein level (P)	1	*	**	**	**	**	*	*	N.S.	**	N.S.
(G x P)	2	N.S.	**	**	N.S.	**	N.S.	N.S.	N.S.	N.S.	**
Error	661										

a,b,c, means within the same factor within the same column with different superscripts are significantly different (P<0.05).

* = significant (P<0.05), ** = Highly significant (P<0.01), N.S. = Non significant.

A.S.M = Age at sexual maturity.

T.E.M = Total egg mass.

TEM = Total egg number (8 laying periods). E 90= Egg number till 90 day from age at sexual maturity.

A.L.R. % = Average laying rate.

L.R 90 = Laying rate till 90 day from age at sexual maturity.

A.E.W. = Average egg weight.

W 20, W 40 and W 52= Body weight at 20,40& 52 wks of age.

Table(5): Egg quality as affected by naked neck gene (Na) and dietary protein level at 40 and 52 wks of age.

Factor	Group	Egg weight (g)	Albumen (%)	Yolk (%)	Shell (%)	Shell strength (kg/cm ²)	Shell thickness (mm)
Genotype (G)	G 1- Na/na	47.18 ^B	56.86 ^B	32.43 ^B	10.70 ^B	4.84 ^B	0.39 ^B
	G 2- Na/Na	49.48 ^A	57.85 ^A	31.75 ^C	10.40 ^C	4.48 ^C	0.37 ^C
	G 3- na/na	46.80 ^B	55.25 ^C	33.70 ^A	11.05 ^A	5.54 ^A	0.41 ^A
Protein level (P)	P 1- High P	48.34 ^A	57.19 ^A	32.18 ^B	10.63	4.97	0.39
	P 2- Low P	47.27 ^B	56.12 ^B	33.07 ^A	10.80	5.04	0.40
Age (A)	A 1- 40 wks	45.07 ^B	57.15 ^A	32.01 ^B	10.84 ^A	5.03 ^A	0.39
	A 2- 52 wks	50.57 ^A	56.17 ^B	33.24 ^A	10.59 ^B	4.88 ^B	0.39
ANOVA	d. f.	Probabilities					
Genotype (P)	2	**	**	**	**	**	**
Protein level (P)	1	**	**	**	N.S.	N.S.	N.S.
Age (A)	1	**	**	**	*	*	N.S.
G x P	2	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
G x A	2	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
P x A	1	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Error	230						

a,b,c, means within the same factor within the same column with different superscripts are significantly different (P<0.05).

* = significant (P<0.05), ** = Highly significant (P<0.01, N.S. = Non significant).

Table(6): Feather %, carcass%, dressing%, organs percentages and body temperature as affected by naked neck gene (Na) and dietary protein level at 40 and 52 wks of age.

Factor	Group	Feather (%)	Abdominal fat (%)	Carcass (%)	Giblets (%)	Dressing (%)	Ovary (%)	Oviduct (%)	Body temperature (°C)
Genotype (G)	G 1- Na/na	3.63 ^B	2.17 ^B	63.24 ^A	4.94 ^B	68.18 ^A	2.69 ^B	3.55 ^A	42.21 ^B
	G 2- Na/Na	3.32 ^C	1.67 ^C	63.92 ^A	5.32 ^A	69.24 ^A	2.96 ^A	3.70 ^A	41.90 ^C
	G 3- na/na	4.94 ^A	2.68 ^A	58.46 ^B	4.64 ^B	63.10 ^B	2.36 ^C	3.22 ^B	42.47 ^A
Protein level (P)	P 1- High P	4.14 ^A	1.98 ^B	61.57	5.81 ^A	67.38 ^A	2.79 ^A	3.74 ^A	42.16 ^B
	P 2- Low P	3.82 ^B	2.37 ^A	61.50	4.93 ^B	66.43 ^B	2.56 ^B	3.25 ^B	42.30 ^A
Age (A)	A 1- 40 wks	4.08 ^A	1.93 ^B	61.87	4.93	66.80	2.80 ^A	3.55	42.20
	A 2- 52 wks	3.84 ^B	2.41 ^A	61.20	4.81	66.01	2.54 ^B	3.43	42.30
ANOVA	d.f	Probabilities							
Genotype (P)	2	**	**	**	**	**	**	**	**
Protein (P)	1	**	**	N.S.	*	*	*	**	*
Age (A)	1	*	**	N.S.	N.S.	N.S.	**	N.S.	N.S.
G x P	2	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
G x A	2	N.S.	**	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
P x A	1	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Error	110								

a,b,c, means within the same factor within the same column with different superscripts are significantly different (P<0.05).

* = significant (P<0.05), ** = Highly significant (P<0.01, N.S. = Non significant).