

Table (6): Semen quality and serum biochemical of local Sinai laying cocks fed diets containing different levels of Metabolizable energy and Coenzyme Q10

Factors		Semen quality traits				Serum biochemical traits				
		V ¹	MM ²	PM% ³	C *10 ⁹ ⁴	Ch ⁵ mg/dl	Trig ⁶ mg/dl	HDL ⁷ mg/dl	LDL ⁸ mg/dl	HDL/L DL
Energy Kcal/Kg of diet										
E1 2940		0.29	4.30	69.44	5.41	158.7 ^a	260.6	32.7	66.3 ^a	0.52
E2 2800		0.29	5.10	79.40	6.10	145.3 ^b	248.9	32.0	56.3 ^b	0.56
Pooled SEM		0.04	0.30	3.43	0.29	2.98	11.84	1.19	1.59	0.03
Significance test		0.930	0.096	0.061	0.113	0.008	0.499	0.700	0.012	0.200
Co enzyme Q10 (Co Q10) (mg/kg)										
0.0		0.36	4.50	71.67	5.70	174.0 ^a	251.7	35.0 ^a	65.0 ^a	0.65 ^a
7.5 s		0.22	5.00	77.50	6.08	144.0 ^b	255.0	29.0 ^b	56.5 ^b	0.46 ^b
7.7 n		0.30	4.70	74.17	5.50	138.0 ^b	257.5	33.0 ^{ab}	62.5 ^{ab}	0.59 ^a
Pooled SEM		0.05	0.37	4.19	0.35	3.65	14.50	1.46	1.95	0.03
Significance test		0.213	0.638	0.626	0.513	0.000	0.960	0.038	0.026	0.012
Interaction (Energy*Co Q10)										
2940	0.0	0.30	3.67	61.67	5.28	200.0 ^a	266.7	34.0 ^{ab}	78.0 ^a	0.44 ^b
	7.5 s	0.23	4.70	75.00	6.09	140.0 ^b	270.0	36.0 ^a	56.0 ^{bc}	0.43 ^b
	7.5 n	0.33	4.67	71.70	4.87	136.0 ^b	245.0	38.0 ^a	65.0 ^{bc}	0.69 ^a
2800	0.0	0.42	5.33	81.67	6.11	148.0 ^b	236.7	36.0 ^a	60.0 ^c	0.69 ^a
	7.5 s	0.20	5.33	80.00	6.07	148.0 ^b	240.0	32.0 ^{abc}	52.0 ^c	0.69 ^a
	7.5 n	0.27	4.67	76.70	6.14	140.0 ^b	270.0	28.0 ^{bc}	57.0 ^{bc}	0.49 ^b
Pooled SEM		0.08	0.53	5.93	0.49	5.16	20.51	2.07	2.76	0.04
Significance test		0.438	0.310	0.269	0.357	0.000	0.706	0.010	0.000	0.000

a, b : Means in the same column bearing different superscripts are significantly different (P≤0.05).

NS = Non-significant; * = P≤0.05, SEM= Standard error mean ;

V¹= Volume; MM²=Mass motility; PM³= Progressive motility; C⁴= Concentration of sperms; Ch⁵ = Cholesterol; Trig⁶= Triglycerides; HDL⁷= High density lipoprotein; LDL⁸= Low density lipoprotein.