

Effect of *Urtica dioica* Supplements on Egg Quality and Laying Hen's Performance



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AIMS

The purpose of this study was to investigate the effects a dietary supplement of *Urtica dioica* on laying hen's performance and egg quality.

MATERIAL AND METHODS

- The study was conducted from May to June 2014 in the area of Chemini (Algeria).
- Sixty, 25-wk-old Lohmann Brown layers were randomly divided into 3 groups with 20 hens in each group. Group 1 was the control group fed a standard commercial diet based on corn and soybean, whereas the groups 2 and 3 were fed the control diet supplemented with 1% and 1.5% of nettle respectively.
- The hens were housed in cages in the same local. Fifty five eggs were sampled 4 times in each group from 25 to 27 weeks. A total of 220 eggs were examined.



RESULTS

	Age	Control	Nettle (1%)	Nettle (1.5%)	P-Value			D 2
					Diet	Age	Diet*Age	K-
Egg weight (g)	25	55.24a±0.94	58.90b±0.96	57.92b±0.94	**	**	Ns	0.12
	26	54.93±0.96	57.20±1.05	55.42±0.94				
	27	55.21±1.02	55.77±1.05	55.04±1.02				
Yolk color	25	8.35a±0.10	8.40a±0.11	9.20b±0.11	***	***	***	0.80
	26	9.06a±0.13	9.16a±0.12	10.25b±0.12				
	27	9.42a±0.12	10.56b±0.12	10.12C±0.13				
Haugh Units	25	81.92a±1.45	83.21a±1.49	72.71b±1.45	**	***	***	0.57
	26	80.03a±1.49	79.88a±1.62	73.07b±1.45				
	27	70.39a±1.57	67.99a±1.62	73.99b±1.57				

a, b, c: the values with different superscripts are significantly different (P<0.05); Signification: Ns, P>0.05; **, P<0.01; ***, P<0.001.

CONCLUSION



The results showed that the use of 1% and 1.5% of *Urtica dioica*, had positive effects on the color of yolk of laying hens. Using different levels of *Urtica dioica* could change the characteristics of egg and could meet the preferences of consumers for the intense color of the yolk.