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( / / : / / : )

(Con)

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(DW)

/

(OL<sub>0.75</sub>)

/

(OL<sub>0.9</sub>)

/

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OL<sub>0.9</sub>

(P< / )

( )

(P< / )

OL<sub>0.9</sub>

OL<sub>0.9</sub>

(P< / )

OL<sub>0.75</sub> OL<sub>0.9</sub>

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(Con)

(DW)  
/ ( ) C  
(OL<sub>0.75</sub>)  
/ ' )  
(OL<sub>0.9</sub>)

OL<sub>0.75</sub> /  
( Us, Patent 5,714,150 )

/ OL<sub>0.9</sub>  
/

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$$X = \quad x \quad x \quad x$$

$$OL_{0.75} = / \quad x / \quad x \quad x$$

$$OL_{0.9} = / / \quad x / \quad x / \quad x$$

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SAS

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(%)	(%)	(Kcal/kg)		(%)	(%)	
/	/		%	/	/	
/	/		%	/	/	
/	/		%	/	/	
/	/		%	/	/	
/	/		%	/	/	
/	/		% +	/	/	
/	/		%	/	/	
/	/		%	/	/	
/	/		%	/	/	
/	/		%	/	/	
				/	/	E
				/	/	D <sub>3</sub>
				/	/	B

( / / )			
( )			
/ ± / <sup>b</sup>	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>	Con
/ ± / <sup>b</sup>	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>	DW
/ ± / <sup>b</sup>	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>	OL <sub>0.75</sub>
/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	OL <sub>0.9</sub>

Con  
OL<sub>0.75</sub> (% ) DW  
(% / )

( / ) DW  
( / ) Con

(P< / )  
=DW =Con  
/ =OL<sub>0.75</sub>  
/ =OL<sub>0.9</sub>

( ) ( )  
( ) (P< / )

DW  
OL<sub>0.75</sub> Con ( / )  
( / )

OL<sub>0.9</sub> ( / ) DW ( / )  
( / ) OL<sub>0.9</sub> ( / ) OL<sub>0.75</sub>  
( / ) OL<sub>0.75</sub> ( / OL<sub>0.9</sub>)  
OL<sub>0.9</sub> (P< / )

(P< / )

( )  
(% / ) DW

OL<sub>0.75</sub> ( / ) OL<sub>0.9</sub>  
OL<sub>0.9</sub>  
(P< / )

( / / )			
( )			
/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	Con
/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	DW
/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	OL <sub>0.75</sub>
/ ± / <sup>b</sup>	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>	OL <sub>0.9</sub>

(P< / )  
=DW =Con  
/ =OL<sub>0.75</sub>  
/ =OL<sub>0.9</sub>

( / ) OL<sub>0.9</sub> ( / ) Con  
OL<sub>0.9</sub> ( / ) Con  
( / ) Con ( / )  
( / ) OL<sub>0.9</sub>  
OL<sub>0.9</sub> (P< / )

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/ a / a / a / a / a / a / a / a / a / a / a / ab	Con
/ a / a / a / a / a / a / a / a / a / a / a / a	DW
/ b / a / a / a / a / a / a / a / a / a / a / ab	OLE <sub>0.75</sub>
/ b / a / a / a / a / a / a / a / a / a / a / b	OLE <sub>0.9</sub>
/ / / / / / / / / / / / /	±SE
(P < / )	
/	=OL0.75
/	=DW
/	=Con
/	=OL0.9

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DW

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DW

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( ) OL<sub>0.9</sub>

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( ) ( )

( ) ( )

(OL<sub>0.9</sub>)

OL<sub>0.9</sub> OL<sub>0.75</sub>

IL-10 IL-6

B IL-6

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( ) ( )

( ) ( )

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**REFERENCES**

1. Benavente-Garcia, O., J. Castillo, J. Lorente, A. Ortuno, & J. Del Rio, 2000. Antioxidant activity of phenolics extracted from olea europaea L. leaves. Food Chemistry, 68:457–462.

2. Bisignano, G., A. Tomaino, R. Lo Cascio, G. Crisafi, N. Eccella, & A. Saija. 1999. On the in-vitro antimicrobial activity of oleuropein and hydroxy tyrosol. *The Journal of Pharmacy and Pharmacology*, 51(8): 971-974.
3. Burke, W. H. 1996. Effects of an in ovo injection of an anti-androgen on embryonic and post hatching growth of broiler chicks. *Poultry Science*, 75 (5): 648- 655.
4. Burke, W. H. & M. H. Henry. 1999. Gonadal development and growth of chickens and turkey hatched from eggs injected with an aromatase inhibitor. *Poultry Science*, 78: 1019-1033.
5. Christensen, V., J. P. McMurtry, W. E. Donaldson, & K. E. Nestor. 2001. Incubation temperature affects plasma insulin-like growth factors in embryos from selected lines of turkeys. *Poultry Science*, 80: 949-954.
6. DiMello J. P. F. 1994. Amino acid imbalance, antagonisms and toxicities. In: amino acids in farm animal nutrition, PP: 63-97. J. P. F. DiMello, Editor. Cab International.
7. Faghihi, S. M. 1999. Side effects of antibiotics in veterinary medicine. 11th Iranian veterinary congress, PP: 300.
8. Farhoomand, P. 2002. Animal and poultry nutrition and preservation. Jahad Daneshgahi Press of west Azarbayjan, PP: 180-188.
9. Golchin Kohi, M. 2004. Effects of methionin and garlic powder on performance and immune system of Arian's broilers. Postgraduate thesis, College of Agricultural Sciences, University of Guilan.
10. Johnston, A. P., H. Liv, T. Oconnell, P. Phelps, M. Bland, J. Tyczkowski, A. Kemper, T. Hording, A. Avakian, E. Handdad, C. Whitfill, R. Gildersleeve, & G. A. Ricks. 1997. Applications In Ovo Technology. *Poultry Science*, 76: 165- 178.
11. Kocamis, H., Y. N. Yeni, D. C. Kirkoatric-Keller, & J. Killerfer. 1999. Postnatal growth of broiler in response to in ovo administration of chicken growth hormone. *Poultry Science*, 78: 1219- 1226.
12. Maafi, M. & K. R. Yazdi. 1999. Workshop on poultry nutrition. The unit of education and research Press, Deputy of Agriculture, Kosar Economic Institute, PP: 93-97.
13. Ohta, Y. & M. T. Kidd. 2001. Optimum site for in ovo amino acid injection in broiler breeder eggs. *Poultry Science*, 80 (10): 1425- 1429.
14. Ouhadina, H. 1991. Essentials of poultry rearing (broiler and layer). Arzhang Press, PP: 387.
15. Paul, S. & D. C. Nash. 1997. Herbal health report: Olive leaf extract regains interest as a superb anti-microbial agent. *Dynamic Chiropractic*, 15(15) 1-7.
16. Pinchasov, Y., C. X. Mendonca, & L. S. Jensen. 1990. Broiler chick response to low protein diets supplemented with synthetic amino acids. *Poultry Science*, 69 (11) : 1950-1955.
17. Polzonetti, V., D. Egidi, & A. Vita. 2004. Involvement of oleuropein in (some) digestive metabolic pathways. *Food Chemistry*, 88 (1):11- 15.
18. Prescott, J. F., J. D. Baggot & R. D. Walker. 2000. Antimicrobial therapy in veterinary medicine, 3rd edition. Iowa State University Press, PP: 564- 565.
19. SAS institute. 1992. SAS user's Guide. Release 6.30. Edition. SAS institute Inc. Carge, NC.
20. Sharma, J. M., and B. R. Burmester. 1982. Resistance of Marek,s disease at hatching in chickens vaccinated as embryos with the turkey herpes virus. *Avian Disease*, 27:134-149.
21. Thomke, S. & K. Elwinger. 1998. Growth promotants in feeding pigs and poultry II. mode of action of antibiotic growth promotants. *Annales de Zootechnie*, 47: 153-167.
22. Walker, M. 1998. Olive leaf extract, the total antimicrobial. *Nutrition Science News*, 3 (1): 18-19.
23. Zaghari, M. & A. R. Jafari. 2003. Broiler breeding stock. Aye Press, PP: 233.
24. Zhai, S., L. Neumoan, M. A. Latour, & P. Y. Hester. 2006. The effect of in ovo injection of L-carnitine on hatch rate and body weight of white leghorns. *Poultry Science*, 85 (Suppl. 1): 146.