

	**	**	*	*
	-	-	-	*
E-mail: noor20abd@yahoo.com	-	-	-	**
%15.5				
%1	%2.5	/		2745
28.5	%26	13		%59
	138			
			(p<0.05)	%13
%32			%35	
			(p<0.05)	%35
	%13			
	%13			

تاريخ استلام البحث 2011 / 11 / 22 .

تاريخ قبول النشر 2012 / 4 / 22 .

(1984)
(Lean)
(2005
(1980)

Nigella Sativa Meal (NSM)

(1993 Eisenberg)
(% 37 - 34)
(%26.2 - 9)
Abdel-Maged ; 1994 El-Faham)
(1994) Galil (2009 ; 2007
(1999) Omar

Thymoquinone (2005) Kanter

%11 - 5

El-Ayek)
;2009 ; 2007 Abdel-Maged ; 2001 El-Kady ; 1999
(2012) 2011
%26 13 %59 28.5

%2

43.7 ± 86.6 42.2 ± 86.6

39.5 ± 86.4

(control ration)

(1)

1984 / 2745 N.R.C. %15.5

% 59 28.5
%10

%26 13

%100

.(1)

420 418 450

. 1

					%
		NSM %26	NSM %13		
		35	35	35	
		----	30	45	
		26	19	12	
		----	----	5	
		26	13	----	
		10	----	----	
		1	1	1	
		1.5	1.5	1.5	
		0.5	0.5	0.5	
	**NSM	----	----	----	*
96.4	94.3	93.4	92.3	91.6	%
2.8	34	15.8	15.7	15.5	%
0.6	26.2	7.7	6.3	3.2	%
38.4	9.4	9.3	7.6	8.3	%
48.3	25	59.5	62.8	65.1	% N.F.E.
9.9	5.4	7.7	7.6	7.9	%
1285	3777	2907	2860	2745	/ ME

.(1978)

(1996) A.O.A.C.

%60

*
**

2010\8\24

%1

%2.5

138

15

(Caliber)

.(1987)

Al-Mallah

)

)

(

(

Forrset (1966)

Henderson (1962) Orts
(C.R.D.)

.(1975)

.(1980)

%13

11.1 12.3

%26

174.8 194.2 173

%

.(2)

/

(P <0.05)

%21.7 24.5

/ 88.4 107.6 86.4

.(2) / / 0.641 0.780 0.626

%35

/ 7.1 4.8 7.3

.(2)

%13

) 3185 2954 2419
 %26
 %35 (2)

%13

%26

%28.5 %13
 (2001) El-Gendy
 (2001) El- Kady) %100
 %11.7

2011

%100

2

%26	%13	:	
17.6 ± 86.4	19.5 ± 86.8	18.8 ± 86.6	(1)
21.3 ± 174.8	18.8 ± 194.2	22.8 ± 173	
6.2 ± 88.4	3.9 ± 107.6	7.8 ± 86.4	(2)
0.04 ± 0.641	0.29 ± 0.78	0.06 ± 0.626	
3.42	3.42	3.42	/ /
1.14	1.14	1.14	/ /
4.56	4.56	4.56	/ /
7.1	5.8	7.3	/
5.34	4.39	5.46	/
1.78	1.46	1.82	(3) /
2954	2419	3185	(ID) 1

± .1

(P<0.05) .2

400 .3

(3)

%13) () (

%35

(3) 5868 3919 6013

(2011)

%11 7

3

			(1)
%26	%13	:	
19.8 ± 174.8	18.8 ± 194.2	22.8 ± 173	
12.4 ± 91.6	11.1 ± 101.7	12.5 ± 93	/
12 ± 88.2	11 ± 98.9	12.2 ± 91.5	/
1.1 ± 50.1	1.1 ± 50.9	0.9 ± 52.9	(2) %
6.5 ± 37.3	3.6 ± 36.8	4 ± 37.9	(2)
0.9 ± 11.4	0.5 ± 10.8	0.9 ± 8.5	(3) %
0.6 ± 17.4	0.5 ± 16.5	1.4 ± 17.8	(4) %
0.5 ± 3.3	0.4 ± 4	0.4 ± 3.1	()
5868	3919	6013	(5)() 1

1. ± (SE)
2. .100 X (/) =
3. .100 X (/ (+ + +)) =
4. .100 X (/ (+ + + +)) =
- 5.

: 3.7 4.3 6.7 (P<0.05)

(4)

(4)

)

%26

(3

.4

±	±	±	*
%26	%13	:	
94.2 ± 931	120.1 ± 897.5	112.9 ± 971.3	()
65.2 ± 533	66.5 ± 543.8	88.8 ± 676.3	()
19.6 ± 146.3	37.1 ± 132.5	29.9 ± 107.5	()
18.3 ± 251.3	40.6 ± 221.3	22.8 ± 187.5	()
2.3 ± 57.1	3.4 ± 61.3	1.7 ± 69.2	%
1.3 ± 15.6	3 ± 14.2	1.8 ± 10.4	%
1.5 ± 27.4	3.3 ± 24.5	3 ± 20.4	%
1.8 ± 72.7	3.3 ± 75.5	1.8 ± 79.6	% (+)
** 0.8 ± 3.7	0.4 ± 4.3	0.4 ± 6.7	:
0.7 ± 2.1	0.4 ± 2.5	0.2 ± 3.4	:

.(SE)

±

*

.(P< 0.05)

**

(1)

(2011)

(

)

.(5)

(4)

%13

%30

.5

			*
: %26	: %13	:	
8.2 ± 148	5.9 ± 147	10.2 ± 158.3	()
10.4 ± 137.4	4.8 ± 136.8	9.4 ± 156.8	()
9.5 ± 143	7.2 ± 142.5	10 ± 157.4	()
5.1 ± 106	1.8 ± 105	5.4 ± 112.5	()
3.7 ± 111	2.1 ± 113.8	5.4 ± 117.5	()
3.9 ± 31.2	2.2 ± 32.8	3.3 ± 36.7	()
3.5 ± 34	2.5 ± 35.0	3.2 ± 41.3	()

(SE) ± *

/

/

.1978 .

.1980 .

.917

.2005 .

.1980 .

.1984 .

()

.2009 .

.53 - 47 1 23 .

.2011 .

.92-87 2 25

.2012

. 2 40 .

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EVALUATING THE USING OF *NIGILLA SATIVA* MEAL IN THE RATION OF SHARABI GROWING CALVES FROM WEANING TO SLAUGHTER WEIGHT ON THEIR PERFORMANCE AND CARCASS TRAITS

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ABSTRACT

Fifteen Sharabi growing calves about 3-4 months old were divided into three groups. The first was fed on a control concentrate ration according to N.R.C., 1984 recommendations, containing 15.5% crude protein and 2740 Kcal ME/kg. . The same previous ration with addition of 13 and 26% of *Nigella sativa* meal to replace 28.5 and 59% of the total crude protein were fed to the 2nd and 3rd groups. The feeding trial continued to the 138th days where the total amount of feed intake and total body gain of the calves were calculated. At the end of the experiment, body dimensions of all calves were measured. Also all calves were slaughtered and their carcass parameters were taken, as well as the calculations of meat , fat and bone ratios of the rib region . The results showed a significant differences at (P<0.05) in the mean daily body gain and meat to fat ratio between the three groups. However, the results showed no significant differences for body dimensions as well as the other carcass parameters among the three groups. Also, the results showed an improvement in the cost of both one Kg body weight gain

and one Kg of cold carcass weight produced by 22 and 35%, respectively for the calves consumed rations contained 13% of *Nigella Sativa* meal in comparison with calves consumed control ration. It can be concluded that it is possible to add 13% of *Nigella sativa* meal to the ration of growing Sharabi calves without any adverse effects on their performance and carcass traits, which can improve income of fattening.

Key words: *Nigella sativa* meal, growing calves, performances, carcass traits