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36

12 6)

2010/10/31

2010/6/1

(/ /

/ / 12

(P<0.01)

74.75 37.66

40.61

47

52.16

52.66 46.94

68.55

الكلمات المفتاحية : نياسين ، إجهاد حراري ، أبقار حليب ، فريزيان ، قمة الإنتاج.

%70

(1994 Armstrong)

° 27

10

(2010)

(2010)

Liu

° 27

° 20

(2000) Larry

. 2011 / 12 / 1

. 2012 / 2 / 26

(1982)

(Hyperthermia)

/ 12

(2008) Goble

/

(1998) Ali

1.90 - 0.66

(/ / 12 6)

2010/6/1

55-50

2010/10/31

22-18

6

40

(14 - 12)

10

15

20

2.5

2.5

10

()

36

2

9

20

5

18

() B

() A

b3 b2 b1 a3 a2 a1

3

3

6

()

/ / 6

b2 a2 / / 12

b3 a3

b1 a1

b1

10

12

(2004) SAS (CRD) (3 × 2) (1955) Duncan

:

$$Y_{ijk} = \mu + N_i + S_j + NS_{(ij)} + e_{ijk}$$

. i j () k = Y_{ijk}
 = μ
 = N_i
 = S_j
 = NS (ij)
 = e_{ijk}
 .σ²e

14.5 3.48 / / 12 / / 6

0.89 ± 37.66 (12)
 0.80 ± 41.50

1.92 ± 52.16

NADP NAD

(2001 EL-Barody 1984 Hutjens) Riddell

. (2009) Tamizrad Karkoodi (1981)

(P<0.01)

± 40.61

1.87 ± 46.94

1.39

6.33

(2008 Schreiner)

تأثير التداخل بين النياسين والرش في الوقت اللازم لبلوغ قمة الإنتاج
1

/ / 12
0.02 ± 35
/ / 6
2.33 ± 56.66

/ / 12
27.75
3.17 ± 74.75
2

1981 Riddell) . VFA
Goble 2002 1996 Ottou Doreau 1983 Shields
(2009 Tamizrad Karkoodi 2008

. 1

()	±	
1.82 ± 43.77	36	المتوسط العام
a 1.87 ± 46.94	18	
b 1.39 ± 40.61	18	
()		
a 1.92 ± 52.16	12	0
b 0.80 ± 41.50	12	6
c 0.89 ± 37.66	12	12
(×)		
a 2.33 ± 56.66	6	0 +
c 0.40 ± 43.83	6	6 +
cd 0.80 ± 40.33	6	12 +
b 1.66 ± 47.66	6	0 +
d 0.70 ± 39.16	6	6 +
e 0.02 ± 35.00	6	12 +

المتوسطات التي تحمل حروفاً مختلفة / عامل يختلف عن بعضها معنوياً عند مستوى (P<0.01)

تأثير الرش في طول قمة الإنتاج

3.52 ± 68.55

2.53 ± 52.66

(2008 Bilby)

/ / 12

2.94 ± 83.66

/ 6

41

28

2.23 ± 70.66

/

2 .

()	±	
2.54 ± 60.61	36	
b 2.53 ± 52.66	18	
a 3.52 ± 68.55	18	
		()
c 2.03 ± 47.00	12	0
b 3.41 ± 60.08	12	6
a 3.17 ± 74.75	12	12
		(×)
d 1.87 ± 42.66	6	0 +
c 1.25 ± 49.50	6	6 +
b 1.95 ± 65.83	6	12 +
c 2.66 ± 51.33	6	0 +
b 2.23 ± 70.66	6	6 +
a 2.94 ± 83.66	6	12 +

المتوسطات التي تحمل حروفاً مختلفة / عامل يختلف عن بعضها معنوياً عند مستوى (P<0.01)

** 2272.111	** 361.000	1	
** 2321.694	** 677.444	2	
** 125.694	** 16.333	2	x
29.655	9.522	30	

**(P<0.01).

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EFFECT OF NIACIN SUPPLEMENTATION AND SPRAY WATER ON QUICK ACCESS TO THE PEAK AND LENGTH OF LACTATION FOR FRIESIAN COWS UNDER HEAT STRESS CONDITION.

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ABSTRACT

This study was conducted in AL- Ishaqi Cattle Station , north of Baghdad, and use of 36 multiparous Friesian cows in the in the early season productivity, cows were divided randomly into two main groups are set equal spraying and the control group without spray and Each group was divided into three sub-groups for the period from 1/6/2010 to 31/10/2010 to study the effect of niacin supplementation (0 , 6 , 12 gm /day / cow) and spraying water in the middle of the day and at frequent intervals with niacin on quick access to the peak lactation and length , The results of statistical analysis showed the speed of access to the peak lactation and the length of the peak of the cows significantly affected ($P < 0.01$) by niacin supplementation amounted to 37.66 days and 74.75 days respectively as compared to the group that did not receive niacin 52.16 days and 47 days , the impact of spraying on the same traits high significant 40.61 day , 68.55 day versus 46.94 day , 52.66 day , For cows that have not sprayed also the interaction between the niacin and spraying on these traits was highly significant .

Key words : niacin , heat stress , dairy cattle , Friesian , peak lactation