

(2)

(2)

(1)

553 ( - )  
2007 1982 206  
General Linear Model

4.90±459.12 Duncan  
(0.001 > p) .SPSS

365

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(1)

(2)

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# Factors Affecting the Calving Interval of Holstein Friesian Cattle in Kharabo Dairy Station

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and S.K.Mousa<sup>(2)</sup>

## ABSTRACT

This study was conducted at Kharabo Dairy Station belongs to the Faculty of agriculture, University of Damascus. 553 records for 206 Holstein Friesian cattle were used to study factors affecting the calving interval during 1982 to 2007. Data were exposed according to GLM, and analysis of variance was used to determine the calving interval (CI) and the effect of calving year, calving season, parity and interactions on the calving interval, and Duncan test was used to compare means by SPSS program. The overall mean for (CI) was  $459.12 \pm 4.90$  days, and affected significantly ( $0.001 > P$ ) by calving year, but there was no significant effect for calving season, parity and interactions between studied factors on the calving interval. These results suggested that better management, and applying more efficient administration practices as well as to improving the feeding status may reduce calving interval to typical period of 365 days and increase reproductive and economic efficiency of dairy cattle at Kharabo station.

**Key words:** Calving Interval, Calving year, Calving season, Parity, Holstein Friesian cattle, Syria.

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Lopez-Gatius)  
(2005 Risco De-vries) (2003  
(2000 Royal)  
. (2007 Chagas)  
(2002 Olori)  
. (2006 Hare)  
Olori)  
(2008 Fiedlerova) (2002  
(1981 Shanks)  
. (1984 Burnside)  
(2004 .(1979 Olds)  
Oseni)  
(2005 Miscevic Lazarevic  
. (2004 Oseni)  
. (2000 Ojango)  
13 (2002 Azizunnesa  
Hafez Jainudeen 15  
365 (2001)  
Bergfeld)  
(2002 Klunker  
4  
(1990 Boichard) 20 (1999 Stott)  
. (2001 Veerkamp) 1.8

2007 1982

553

.2007-1982

Excel

General Linear Model

SPSS

Duncan

$$Y_{ijklm} = \mu + C_i + S_j + P_k + (C \times S)_{ij} + (C \times P)_{ik} + (S \times P)_{jk} + (C \times S \times P)_{ijk} + E_{ijklm}$$

.	.	.	:	$Y_{ijklm}$
.	.	.	:	$\mu$
.	.(26-1=i)	.	:	$C_i$
.	.(4-1=j)	.	:	$S_j$
.(		)	:	$j_1$
	.(	)	:	$j_2$
	.(	)	:	$j_3$
.(		)	:	$j_4$
	.(5-1=k)	.	:	$P_k$
.	.	.	:	$(C \times S)_{ij}$
.	.	.	:	$(C \times P)_{ik}$
.	.	.	:	$(S \times P)_{jk}$
.	.	.	:	$(C \times S \times P)_{ijk}$
.	.	.	:	$E_{ijklm}$

4.90±459.12

1985 Stevenson Call) 365  
 (1975) Spalding (1996 McDaniel Makuza  
 (2007) Ajili ( 360)  
 Salah ( 96.93±427.01)  
 ( 5.8±414.5) (1990) Mogawer  
 ( 1.89±425.7) (1997)  
 Sattar .( 442) (1985)  
 ( 8.28±505.02) (2005)  
 (2007) Kifaro Asimwe  
 Llatsia ( 2.4±480.4)  
 ( 468)

Goshu 173.17 ( )  
 (2007)  
 (1)

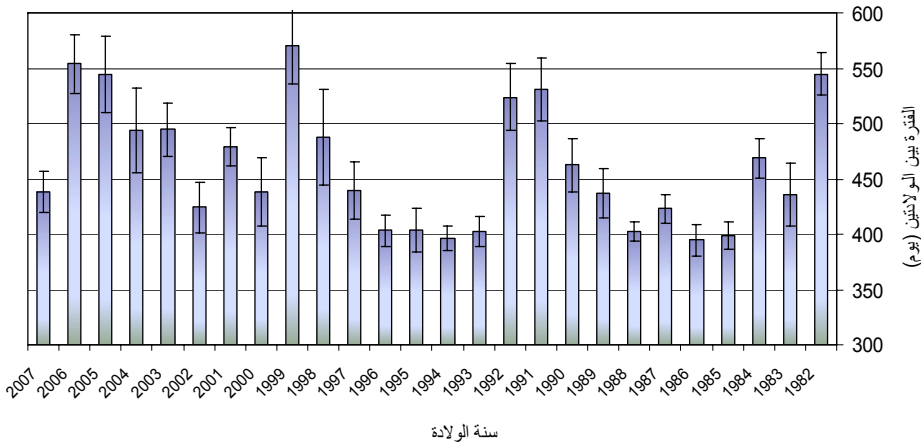
44569.14***	25	
3629.62	3	
5131.31	4	
10370.96	71	
10740.09	80	
14116.81	12	
11884.05	82	
9391.59	274	

(0.001>p)

\*\*\*

(0.001 > P) (1 )  
 13.95±394.50 1999 34.94±570.39 1986  
 (1 ) 4.90±459.12

Ottavia  
 (1991) Rege (1989)  
 (2009) Mseleko Chenyambuga  
 × )  
 (Boran  
 (1997) Mulangila  
 (2005) Miscevic Lazarevic  
 .(2006 Hickson)  
 (2005) Kenan  
 Younas  
 Balochistan (2008)  
 (2007 Refsdal) 12.6 12.4  
 .2005-1985



(1)

(2 ) 4.90±459.12  
 (1997)  
 (1996) Jahageerdar

(2001) Yohannes  
 (1981) Asella  
 (1992) Ray

(2001) Hernandez-Reyes  
 Yucatan

(1992) Silva  
 ( ) 13

± (2)

( )	( )	( )	( )		
826	317	15.34	9.35±460.19 <sup>a</sup>	150	
841	315	14.85	9.58±445.46 <sup>a</sup>	140	
853	318	15.27	10.98±458.23 <sup>a</sup>	122	
803	314	15.74	9.47±472.31 <sup>a</sup>	141	
472.31	445.46	15.30	4.90±459.12		

12.07±447.79

8.37±466.97

(3 ) 4.90±459.12

(2009) Ansari-Lari  
 Foote (1992)  
 (1960)

(1989) Nieuwhof  
 411 401

(2006) Amimo

(1998) Yousif (2004 Chagunda)

(1986) Nkhonjera Agyemang

± (3)

( )	( )	( )	( )		
853	315	15.57	8.37±466.97 <sup>a</sup>	199	<b>1</b>
805	322	15.48	9.22±464.38 <sup>a</sup>	136	<b>2</b>
835	314	14.98	12.07±449.50 <sup>a</sup>	98	<b>3</b>
803	317	14.93	14.36±447.79 <sup>a</sup>	58	<b>4</b>
815	315	14.94	15.57±448.19 <sup>a</sup>	62	<b>5</b>
466.97	447.79	15.30	4.90±459.12		



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 .(1981) .
- (1997) .  
 .23-13 :13 .  
 .(1985) .
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