PROCEEDINGS

54ª REUNIÃO ANUAL DA SOCIEDADE BRASILEIRA DE ZOOTECNIA

FOZ DO IGUAÇU
2017

A NEW VIEW OF ANIMAL SCIENCE:

CHALLENGES AND PERSPECTIVES

ISSN 1983-4357

WWW.SBZ.ORG.BR/REUNIAO2017

SBZOFICIAL

FOZ DO IGUAÇU - PR

FOTO:
ROBSON FRANZÓI
umviajante.com.br

A NEW VIEW OF ANIMAL SCIENCE: CHALLENGES AND PERSPECTIVES

Proceedings of the 54th Annual Meeting of the Brazilian Society of Animal Science
Foz do Iguaçu – Brazil
July 24 – 28 2017

Edited by
Marina Parapinski
Maryon Strack Dalle Carbonare
Patrick Schmidt

Published by

The Brazilian Society of Animal Science
(*Sociedade Brasileira de Zootecnia - SBZ*)
SHC/Norte CL Quadra 310 Bloco B sala 35 Subsolo
Asa Norte - Brasília/DF
70759-520
www.sbz.org.br

and

The Department of Animal Science
(*Departamento de Zootecnia*)
Universidade Federal do Paraná - UFPR
Curitiba – PR
depzoot@ufpr.br

Layout by Marina Parapinski da Silva (marina.pds@gmail.com)
Cover design by Guilherme Carbonar (http://www.jump.ind.br)

The authors are responsible for the grammatical and textual review of the manuscripts and abstracts.

ISSN 1983 – 4357

54ª. Reunião Anual da Sociedade Brasileira de Zootecnia
24 a 28 de Julho de 2017
Hotel Bourbon Cataratas – Foz do Iguaçu – Brasil
ISSN 1983-4357

Theme 9 | Ruminant nutrition and production

Milk production in grazing beef cattle in Uruguay: influence of cow parity

Iewdiukow, M.*[1,2], Lema, M.[1], Velazco, J. I.[1], Quintans, G.[1]
[1] Instituto Nacional de Investigación Agropecuaria, Treinta y Tres, Uruguay; [2] Facultad de Agronomía, UDELAR, Montevideo, Uruguay
*Email - mariaiewg@gmail.com

Energy requirements of beef cows during lactation are increased due to milk production. There are many factors influencing milk production potential and calves weaning weight and cow parity could be one of those. The aim of this study was to estimate the effect of dam parity on milk production of beef cattle grazing native pastures in Uruguay. Three hundred ninety-seven, Angus and Angus x Hereford, primiparous (3 years old, n = 151) and multiparous (4 to 10 years old, n = 246) cows from different experiments over ten years were analyzed. Cows Live Weight (LW) and Body Condition Score (BCS; scale 1 to 8 u) at calving were 402 ± 4.77 kg and 4.2 ± 0.06 u for primiparous and 430 ± 2.99 kg and 4.1 ± 0.04 u for multiparous cows, (mean ± sem). All cows calved in spring and grazed native pastures at a forage allowance of 8 to 12 kg dry matter per kg of LW. Milk productionwasestimatedwiththefollowingprocedure:at ~6amcowswereseparated from calves and each cow was injected with oxytocin (20 IU) to promote milk letdown. Cows were milked 2 minutes after the injection using a milking machine. In the afternoon, at ~ 14 pm cows were milked again (after oxytocin injection) following the same procedure and milk amount was weighed. In that period calves remained in another paddock separated from their dams. Milk production was assessed monthly until weaning (190 days on average). Milk yield was analyzed with cubic splines with 4 equally spaced knots. The model considers the effect of the dam's parity. No differences in milk production between cows of four to ten years old were evident (P = 0.53) therefore they were grouped for the final analysis. Milk production for the lactation period was 1005 ± 0.71 L and 1030 ± 0.76 L for primiparous and multiparous cows, respectively (P = 0.63). Calves LW at birth was lower (P<0.05) in primiparous (35.4± 0.41 kg) than multiparous cows (36.1 ± 0.33 kg) and at weaning (164.6 ± 2.81 kg and 178.6 ± 1.67 kg for primiparous and multiparous cows, respectively). It is well documented that primiparous cows present lower milk production when compared with multiparous cows, since they have higher energy requirements to fulfill growing needs. No differences in milk production by parity were found in this study even though multiparous weaned heavier calves than primiparous cows. It is hypothesized that other factors could be explaining those differences such as calves vigor, milk fat content and/or grazing behavior.

Keywords: milk production, beef cattle, parity, range conditions