



Production Performance of Murrah Buffaloes under Organized Dairy Farm Production System in West Godavari District of Andhra Pradesh

KEYWORDS

Murrah Buffalo, Lactation Milk Yield, Lactation Length, Peak Yield

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ABSTRACT Production performance of Murrah buffaloes maintained under Organized dairy farm production system was studied by analyzing 395 lactation records collected over a period of 10 years (2001-2011) from Buffalo Research Station, V R Gudem, West Godavari District of Andhra Pradesh. The Mean Lactation Milk Yield (MKMY), Mean Lactation Length (MLL), Mean 305-Day Milk Yield (M305-DMY) and Mean Peak Yields (MPY) observed were 2270.13±75.74Kg, 299.91±5.01, 2305.9±65.75kg and 13±1.13kg respectively. It was found that the Murrah buffaloes performed well under hot semi-arid and humid climatic conditions existed in the study area.

Introduction

Murrah buffalo is the most important and well known water buffalo breed in the world (8). It was considered to be the highest milk producer in the world among all the breeds of buffaloes and recording a lactation milk yield of 1360 to 2270 kg per lactation (10). This breed was used in coastal Andhra Pradesh to upgrade local nondescript buffaloes and produced a crossbred Godavari buffalo (5) The objective of the present study was to find out the status of lactation parameters by analyzing lactation data of 10 years from 2001 to 2011 generated in the Buffalo Research Station VR Gudem in West Godavari District of Andhra Pradesh.

Materials and Methods:

The data were collected from the annual reports since 2001-02 to 2010-11 and analysed statistically (9) and by using MS office Excel 2003 Version. The Production parameters studied were Lactation Milk Yield, Lactation Length, 305-Days Milk Yield and Peak Yield. A total of 395 lactation records were analysed. The buffaloes were maintained on standard feeding conditions and fed concentrate mixture @ 5kg per day per animal, Green fodder APBN-2 and Guinea grass varieties @ 25kg per day per animal and paddy straw @ 6kg per day per animal. The climate was hot semi-arid and humid in nature with temperatures ranging from 28-42°C and Relative Humidity 65-85%.

Results and Discussion

The data on Lactational performance of Murrah buffaloes were presented in table 1. The Mean Lactation Milk Yield obtained was 2270.13±75.74kg which is well within the permissible range for Murrah breed and on par with the findings of previous research on Murrah herd lactational performance of 1635±23kg and 1865.8kg (5), 1704kg (12), 1500-2500kg (2), 1828kg (6) and first lactation milk yield of 1635±23kg (7). The mean Lactation Length in the present study was 299.91±5.01 days which was also on a par with the previous findings such as 300 days (1, 6) where as a lactation length of 319 to 331 days (5) were found which were higher than the lactation length obtained in the present study. Environmental conditions might be the reason for this. The optimum lactation length of 262-295 days was recorded by TNAU, Agri tech Portal (11). where as in other research stations in India the Lactation Length was 266 to 363 days (12). As regards 305-Days milk yield the mean 305-day milk yield in the present study was 2305.9±65.75 kg which was slightly higher than previous observations of 2101.1 (5), 2000kg (3), 1800kg (8). In the present study the Peak yield observed was 13±1.13kg which is similar to previous workers observations of 14-15 kg (2) and 10.3kg (4)

Acknowledgements:

The author acknowledges the authorities of Sri Venkateswara Veterinary University for utilizing the data.

This research article should be included under the subject Animal Husbandry & Veterinary Science category.

Table:1 Lactational Performance of Murrah buffaloes over a period of 10 years since 2001 to 2011 in the Organized Dairy Farm Production System.

Year	Mean Lactation Milk Yield (Kg)	Mean Lactation Length (Days)	Mean 305-Day Milk Yield (Kg)	Mean Peak Yield (Kg/Day)
2001-02	2040.49±8.21 (30)	307.00±9.46 (30)	2047.00±00.00 (30)	17.0 (30)
2002-03	1884.36±29.73 (77)	274.45±9.00 (77)	2089.65±80.00 (77)	17.0 (77)
2003-04	2126.84±89.00 (38)	288.72±10.90 (38)	2576.27±59.00 (38)	16.3 (38)
2004-05	2540.35±59.00 (44)	305.10±11.23 (44)	2540.00±59.00 (44)	17.5 (44)
2005-06	2512.00±90.39 (41)	322.00±10.35 (41)	2451.00±75.00 (41)	14.8 (41)
2006-07	2337.38±93.53 (39)	292.61±1.68 (39)	2404.28±73.76 (39)	14.9 (39)
2007-08	2636.54±98.40 (37)	326.56±8.92 (37)	2456.85±91.30 (37)	14.3 (37)
2008-09	2263.57±119.58 (17)	297.58±9.51 (17)	2314.13±89.00 (17)	8.1 (17)
2009-10	2245.28±107.69 (41)	297.58±9.67 (41)	2072.35±101.12 (41)	12.1 (41)
2010-11	2107.54±112.61 (31)	287.51±9.61 (31)	2107.54±112.61 (31)	7.7 (31)
Overall	2270.13±75.74 (395)	299.91±5.01 (395)	2305.90±65.75 (395)	13.97±1.13 (395)

The figures in the parentheses indicate number of observations.

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