



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; SP-11(5): 477-479
© 2022 TPI
www.thepharmajournal.com
Received: 10-03-2022
Accepted: 12-04-2022

U Vinod
Department of Animal Genetics
and Breeding, College of
Veterinary Science,
Sri Venkateswara Veterinary
University, Tirupati,
Andhra Pradesh, India

B Bharath
Assistant Surgeon,
Department of Veterinary,
VD Bhupalapatnam, Kirlampudi
Mandal, East Godavari,
Andhra Pradesh, India

G Sushma G
Department of Animal Genetics
and Breeding, College of
Veterinary Science,
Sri Venkateswara Veterinary
University, Tirupati,
Andhra Pradesh, India

TV Chaitanya Kumar
Department of Veterinary
Biochemistry, College of
Veterinary Science, Sri
Venkateswara Veterinary
University, Tirupati,
Andhra Pradesh, India

Corresponding Author
U Vinod
Department of Animal Genetics
and Breeding, College of
Veterinary Science,
Sri Venkateswara Veterinary
University, Tirupati,
Andhra Pradesh, India

Milking management practices followed by the cattle keepers in North Coastal region of Andhra Pradesh

U Vinod, B Bharath, G Sushma G and TV Chaitanya Kumar

Abstract

Livestock sector is an important source of livelihood in Andhra Pradesh for rural masses and generates regular income to the farmer. Bovine farming is a process to convert available feed and fodder material (input) into milk and other by products (output). The present field survey was conducted with randomly selected milk producers having crossbred cattle through personal interview to study the Milking management practices followed by them in rural areas of Kotabommali Mandal of Srikakulam district in Andhra Pradesh. The study revealed that most of the farmers followed the wet hand milking and few followed the machine milking but not regularly. Maximum number of farmers adopted knuckling method at the starting of milking operations followed by stripping at the end of milking process. Nobody is carrying out dipping of teats with antiseptic solution. Cleaning of milk utensils was done with disinfectant by majority of the farmers. Before milking, majority of respondents washed their hands with water and 100% of the farmers cleaned the udder only.

Keywords: Cattle, dipping, knuckling, stripping and udder

Introduction

Dairy assumes a dynamic job in India's agro based economy. Our nations dairy industry is the quickest growing one on the planet. Dairy sector is primary source of income for people in India. India possesses first rank in milk production with 23 percent of the world total milk production although per capita milk production is low compared to other countries. Andhra Pradesh state ranks fifth in milk production (7.69%) in the country. Cattle milk is the major marketable surplus milk of the state and contributes to major share of milk production. There is an immense scope to upgrade the quality of dairy production in the state of Andhra Pradesh through appropriate managerial interventions. Milk production of animal depends upon various management practices adopted by farmers. Milking management has crucial role in routine dairy farm activity. Dairy farmers get good benefits by producing clean milk. Milk quality and quantity can be improved by proper milking practices. Production of good quality milk-based products need production of clean and hygienic raw milk. To achieve this objective, the factors contributing to hygienic conditions and good animal husbandry practices at village level needs to be assessed particularly Quality management awareness about milk at the producer level to enhance clean milk production and in turn leads to rural prosperity. By keeping in this view, the study was carried out to collect the milking management practices by the commercial dairy farmers in Srikakulam district of North Coastal region of Andhra Pradesh.

Materials and Methods

A field survey was conducted in the Kotabommali Mandal of Srikakulam district of Andhra Pradesh. A total of 75 cattle farmers were identified and selected randomly from five random villages. Data pertaining to milking management practices followed by the cattle milk producers was collected by personal interview. The data were subjected to basic statistical analysis as per Snedecor and Cochran (1989).

Results and Discussion

It was observed that 93.33 percent of respondents followed hand milking and only few (6.67%) of the respondent having large herd size adopted machine method of milking Table 1.

Table 1: Milking management practices adopted by the buffalo milk producers in Kotabommali Mandal of Srikakulam district

Particulars	Frequency (no of farmers/respondents)	Percentage (%)
Purpose of keeping cattle		
For milking and its products	75	100
For cattle by products	0	0
Others	0	0
Method of milking		
Hand method	70	93.33
Machine method	5	6.67
Type of milking		
Wet hand milking	71	94.67
Dry hand milking	4	5.33
Method of hand milking		
Stripping	8	66.67
Full hand	17	22.67
Knuckling	50	10.66
Labour for milking		
Hired labour	4	5.33
Family labour	71	94.67
Teat dips		
Followed	0	0
Not followed	75	100
Straining of milk		
Practiced	10	13.33
Not practiced	65	86.67
Washing of milk man hand		
Washed	70	93.33
Not washed	5	6.67
Cleaning of animal before milking		
Entire animal	0	0
Only back area	0	0
Udder area only	75	100
Cleaning of milk utensils		
Once in a day	0	0
Twice in a day	75	75
Cleaning of milking utensils		
Only water	15	20
Disinfectant used	35	46.67
Ash used	25	33.33
Calf suckling pattern		
One teat	60	80
Two teats	15	20
Three teats	0	0
Four teats	0	0

It might not be easier for lower herd size farmers to procure milking machines as machines are costlier. These results were in accordance with the findings of Bimal *et al.* (2013)^[1] who observed that 8.33% of farmers were using machine milking in the Kottayam district of Kerala state where the literacy rate is high and are against the findings of Patbandha *et al.* (2014)^[5]. Majority of the farmers adopted wet hand milking in rural (94.67%) areas of study. These findings were in agreement with Patbandha *et al.* (2014)^[5], Sabapara *et al.* (2015)^[9] and Varma *et al.* (2021)^[11]. Though it is considered hygienic and scientific, minimum percent (22.67%) of farmers adopted full hand method of milking and but most of them followed the knuckling method (66.67%) as it is comfortable to the milkers. These results indicated that farmers were less aware about the scientific method of milking. These findings were in agreement with Kishore *et al.* (2013)^[4], Patbandha *et al.* (2014)^[5], Rathore *et al.* (2010)^[8], Sabapara *et al.* (2015)^[9] and Varma *et al.* (2021)^[11]. However, Jacob and Anu (2013)^[3] reported that 93% were practicing full hand method of

milking in their study which indicated good knowledge of scientific milking. Most of the farmers used family labour (94.67%) in their cattle farming. The findings of Jacob and Anu (2013)^[3], Patbandha *et al.* (2014)^[5] and Varma *et al.* (2021)^[11] were in agreement with the results of the present study as none of the farmers practiced the teat dip before or after the milking as they are unaware or less aware of clean milk production and reduced microbial transmission to animals. The current results are in accordance with results of Patbandha *et al.* (2014)^[5] and Varma *et al.* (2021)^[11] aspects of cleaning of milk man hands but Rathore *et al.* (2010)^[8], Sabapara *et al.* (2015)^[9] and Shitole *et al.* (2009)^[10] reported that 93.33% of farmers cleaned the hands before the milking. It was observed that all the farmers (100%) clean the udder only before the milking. These findings are in against to the findings of Gupta *et al.* (2008)^[2], Rathore *et al.* (2010)^[8], Shitole *et al.* (2009)^[10] and Varma *et al.* (2021)^[11]. It was observed that most of the farmers (46.67%) use disinfectant only to clean the utensils and remaining farmers used ash (33.33%) and water (20%), but these findings were contrary to the findings of Rathore *et al.* (2010)^[8] who reported that majority (56.50%) of the cattle keepers used sand and clean water for cleaning of milking utensils followed by ash and water (40.75%) and cleaning agent and water (2.75%). It was observed that majority of the farmers clean the shed twice a day (100%) that to during morning and evening time and these results are in against with the Gupta *et al.* (2008)^[2] and Varma *et al.* (2021)^[11] whose reports revealed that farmers follow cleaning sheds once a day.

Conclusion

Majority of farmers practiced wet hand milking and very few of the farmer practiced machine milking. Maximum number of farmers adopted knuckling method of milking at starting of milking operations followed by stripping at the end of milking. None of the respondents practiced dipping of teats in antiseptic solution. Cleaning of milk utensils and washing of hands of milk man was done with disinfectant was practiced by the majority of milk producers in the study area. Most of the farmers were cleaning only udder of the animal. Mostly all the farmers were cleaning the animal sheds twice a day.

References

1. Bimal Bashir P, Vinod Kumar G. Milking Management Practices Followed In Selected Areas of the Kottayam District of Kerala State, Journal of Life Science. 2013;5(1):53-55.
2. Gupta DC, Suresh A, Mann JS. Management practices and productivity status of cattle and buffaloes in Rajasthan, Indian Journal of Animal Science. 2008;78(7):769-774.
3. Jacob Shibu K, Anu George. Analysis of the clean milk production practices of dairy farmers of Kerala, Indian Journal of Applied Research. 2013;3(7):604-606.
4. Kishore K, Mahender M, Harikrishna Ch. A study on buffalo management practices in khammam district of Andhra Pradesh, Buffalo bulletin. 2013;32(2):97-119.
5. Patbandha TK, Marandi S, Pathak R, Ahlawat AR. A study on milking management practices opted by dairy farmers for clean milk production in south saurashtra agro climatic region of Gujarat, Journal of Interacademia. 2014;18(4):589-596.
6. Milking Management Practices by Crossbred Milk Producers 1319.

7. Rajiv Deoras, Nema RK, Tiwari SP, Mohan Singh. Feeding and housing management practices of dairy animals in Rajnandgaon of Chhattisgarh plain, Indian Journal of Animal Sciences. 2004;74(3):303-306.
8. Rathore RS, Rajbir Singh, Kachwaha RN, Ravinder Kumar. Existing management practices followed by the cattle keepers in Churu district of Rajasthan, Indian Journal of Animal Sciences. 2010;80(8):798-805.
9. Sabapara GP, Fulsoundar AB, Kharadi VB. Milking and health care practices followed by dairy animal owners in rural areas of Surat district.
10. Shitole DP, Deshmukh BR, Kashid UB, Chavan RR. Studies on management practices of buffaloes in Parbhani district, Indian Journal of Animal Research. 2009;43(4):251-254.
11. Varma CG, Teja A, Sai Praveen C and Swathi Y. Milking management practices in buffalos of north costal Andhra Pradesh, The Pharma Innovation Journal. 2021;10(5):66-68.