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Udder and teat characteristics of Surti buffaloes maintained under farm and field conditions

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Abstract

The percentage of buffaloes with round, pointed and flat teat tip was 33.7, 51.3 and 15.0 at the farm, whereas it was 93.7, 6.0 and 0.0 in Surti and 94.7, 4.6 and 0.7 in Surti-type buffaloes at farmers herd.

The observations on udder shape of dry buffaloes indicated that the shrinkage of udder was very low in buffaloes which had completed Just first lactation. The comparative shrinkage in subsequent lactations. The animals which had completed 3 or more lactations, had udders with 3-4 folds on the rear side. In most of the cases, the front attachment was showing the dry udder up to six months of pregnancy in non-lactating buffaloes, no variable change was observed with respect to udder development except few animals.

Keywords: characteristics, Surti buffaloes, under farm, field conditions

Introduction

The information with respect to udder and teat characteristics of Surti buffaloes maintained under farm and field conditions are scanty. Therefore, an attempt have really been made for evaluating and documenting Surti buffaloes for udder and teat characteristics during different lactations, maintained both under farm and field conditions.

Data for this study were recorded on 80 Surti buffaloes maintained at Livestock Research Station, Vallabh Nagar, and 260 Surti buffaloes maintained by farmers. Buffaloes in advance pregnancy (≥ 7 months) and those calved recently (upto 1 months) were not included in the study.

Result and Discussion

Comparative udder and teat characteristics of Surti buffaloes maintained both at farm and field are presented in Table 1. About 81% of buffaloes at the farm has straight milk vein. Out of which 60.0% were classified as medium and 21.3% as small milk vein. In all 18.7% buffaloes at the farm had large milk vein and convoluted. On the other hand, the Surti buffaloes maintained by the farmers had 6.92% large and convoluted milk vein. Saini and Gill (1988) [2] observed about 85.9% of the buffaloes had straight milk-vein, where as 4.3 and 9.8% of the buffaloes had convoluted and non-apparent milk-vein respectively in Murrah buffaloes. The frequency of buffaloes according to size of milk-vein across

different lactations indicated that all the first and second calvers had low to medium size milk-vein sometimes non-apparent, which is in evidence to low milk production during I and II lactations as compared to subsequent lactations. A well developed milk-vein reflects better production potential, which was observed for III and latter lactations in Surti and Surti type buffaloes maintained both at farm and field. In general, it may be concluded that milk-vein in buffaloes was not as prominent as in cattle.

At farm 98.7% of the animals has bowl type udder. The respective values for Surti and Surti-type buffaloes maintained by the farmers were 78.7 and 88.7%. The results also indicated that animals with pendulous udder increased with increase in lactation number (Table 2). Saini and Gill (1988) [2] observed 76.6, 14.3, 1.6 and 7.4% Murrah buffaloes had bowl, round, goat and flat type udder respectively.

The percentage of buffaloes with cylindrical, funnel, pear and bottle shaped teats was 67.6, 11.2 and 10% respectively in farm buffaloes whereas it was 83.4, 15, 0.8% in Surti and 97.7, 2.3, 0.0 and 0.0% Surti-type buffaloes maintained by the farmers. The percentage of buffaloes with cylindrical, funnel, bottle and pear shaped teats as 71.5, 24.2, 4.0 and 0.4% respectively was also reported by Saini and Gill, 1988 [2].

Table 1: Comparative udder and teat characteristics of Surti- type buffaloes maintained at farm and field

Lactation	No. of observation	Milk vein			Udder shape				Teat shape				Teat Tip			
		Large	Medium	Small	Bowl	Round	Goat type	Pendulous	Cylindricle	Funnel shaped	Pear shaped	Bottle shaped	Pointed	Round	Flat	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Farm	13	-	9 (69.2)	4 (30.8)	13 (100)	--	-	--	8 (61.5)	4 (30.38)	1 (7.7)	--	8 (61.5)	4 (30.8)	1 (7.7)
	Field S*	56	-	37 (66.1)	19 (33.1)	46 (82.1)	9 (16.1)	--	1 (1.8)	51 (91.1)	5 (8.9)	-	--	56 (100.0)	--	--
	ST**	52	-	21 (40.1)	31 (59.6)	47 (90.0)	4 (7.7)	--	1 (2)	52 (100)	--	-	--	49 (94.2)	3 (5.8)	--
II	Farm	17	-	9 (53.4)	8 (23.0)	17 (100.0)	--	--	--	11 (64.6)	2 (11.8)	2 (11.8)	2 (11.8)	9 (53.0)	3 (5.8)	--
	Field S	26	-	20 (77.0)	6 (23.0)	24 (92.4)	1 (3.8)	--	1 (3.8)	19 (73.1)	2 (23.1)	--	1 (3.8)	26 (100.0)	--	--
	ST	47	-	39 (83.0)	8 (17.0)	43 (91.5)	4 (8.5)	--	--	46 (97.9)	1 (2.1)	--	--	46 (97.9)	--	1 (2.1)
III	Farm	16	4 (25.0)	8 (50.0)	4 (25.0)	16 (100.0)	--	--	--	10 (62.5)	1 (16.25)	2 (12.5)	3 (18.75)	2 (12.5)	11 (68.75)	3 (18.75)
	Field S	22	3 (13.6)	15 (18.2)	4 (18.2)	17 (77.3)	3 (13.6)	--	2 (9.1)	18 (81.9)	3 (13.6)	1 (4.5)	--	19 (86.4)	3 (13.6)	--
	ST	16	2 (12.5)	12 (75.0)	12 (12.5)	14 (87.5)	1 (6.25)	1 (6.25)	--	15 (93.75)	1 (6.25)	--	--	16 (100.0)	--	--

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
IV	Farm	4	2 (50.0)	2 (50.0)	--	4 (18.0)	--	--	--	1 (25.0)	--	1 (25.0)	2 (50.0)	--	3 (75.0)	1 (25.0)
	Field S	8	2 (25.0)	5 (62.5)	1 (12.5)	5 (62.5)	2 (25.0)	1 (12.5)	--	7 (87.5)	1 (12.5)	--	--	8 (100.0)	--	--
	ST	9	2 (22.2)	6 (66.7)	1 (11.1)	9 (100.0)	--	--	--	9 (100.0)	--	--	--	4 (22.2)	--	--
V	Farm	18	6 (33.3)	18 (66.7)	--	17 (94.4)	--	--	1 (5.6)	13 (72.3)	2 (11.1)	2 (11.1)	1 (5.6)	7 (77.8)	10 (55.6)	4 (22.2)
	Field S	8	3 (37.5)	5 (62.5)	--	8 (100.0)	--	--	--	5 (62.5)	3 (37.5)	--	--	7 (77.8)	2 (22.2)	--
	ST	9	3 (33.3)	5 (55.6)	1 (11.1)	5 (55.6)	2 (22.2)	--	2 (22.2)	8 (88.9)	1 (11.1)	--	--	4 (33.3)	2 (22.2)	--
VI & above	Farm	12	3 (25.0)	8 (6.7)	1(8.3)	12 (100.0)	--	--	--	11 (91.7)	--	1 (8.3)	--	4 (57.2)	8 (66.7)	--
	Field S	7 (42.6)	3 (42.8)	3 (42.8)	1 (14.4)	--	3 (42.8)	--	4 (57.2)	6 (85.6)	1 (14.4)	--	--	--	3 (42.8)	--
	ST	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pooled	Farm	80	15 (18.7)	48 (60.0)	17 (21.3)	79 (98.7)	--	--	1 (1.3)	54 (67.6)	9 (11.2)	9 (11.2)	8 (10.0)	27 (33.7)	41 (51.3)	12 (15.0)
	Field S	127	10 (7.9)	86 (67.7)	31 (24.4)	100 (78.7)	18 (14.2)	1 (0.8)	8 (6.3)	106 (83.4)	19 (15.0)	1 (0.8)	1 (0.8)	119 (93.7)	8 (6.3)	--
	ST	133	7 (5.3)	83 (62.4)	43 (32.3)	118 (88.7)	11 (8.3)	1 (0.7)	3 (2.3)	130 (97.7)	03 (2.3)	--	--	126 (94.7)	6 (4.6)	1 (90.7)
Pooled field	Field	260	18 (6.9)	169 (65.0)	73 (28.1)	218 (84.0)	29 (11.1)	3 (1.1)	10 (3.8)	237 (91.1)	21 (8.1)	1 (0.4)	1 (0.4)	244 (93.9)	13 (5.0)	3 (1.1)

Figures in parenthesis indicates percentage

S= Surti

ST= Surti type

Summary

Eighty farm and 260 field surti buffaloes were evaluated for udder and teat characters during different lactation. The majority of surti buffaloes had straight as well as medium and small milk vein, bowl type udder, cylindrical teats, pointed teat tip. The shrinkage of udder has very low after first lactation but after three lactation the udder had 3-4 folds on the rear side.

References

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2. Saini AL, Gill RS. Milk production in relation to variation in size and shape of udder and teats in Murrah buffaloes. Proceeding of II world buffalo congress. 1988; II:70-75.