Udder and Teat Characteristics of Surti Buffaloes Maintained Under Farm and Field Conditions

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

MATERIALS AND METHODS
The data for this study were recorded on 80 Surti buffaloes maintained at Livestock Research Station, Vallabhnagar, and 260 Surti buffaloes maintained by farmers in the field. Buffaloes in advance pregnancy (≥7 months) and those calved recently (up to 1 months) were not included in the study. Eighty farm and 260 field surti buffaloes were evaluated for udder and teat characters during different lactation.

RESULTS AND DISCUSSION
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 was very low after first lactation but after three lactation the udder had 3-4 folds on the rear side.

Comparative udder and teat characteristics of Surti buffaloes maintained both at farm and field are presented in Table 1. About 81 per cent of buffaloes at the farm has straight milk vein. Out of which 60.0 per cent were classified as medium and 21.3 per cent as small milk vein. In all 18.7 per cent buffaloes at the farm had large milk vein and convoluted. On the other hand, the Surti buffaloes maintained by the farmers had 6.92 per cent large and convoluted milk vein. Saini and Gill (1988) observed about 85.9 per cent of the buffaloes had straight milk-vein, where as 4.3 and 9.8 per cent 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 calver 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 per cent 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 per cent. The results also indicated
Table –1 Comparative udder and teat characteristics of Surti- type buffaloes maintained at farm and field

<table>
<thead>
<tr>
<th>Lactation</th>
<th>No. of observation</th>
<th>Milk vein</th>
<th>Udder shape</th>
<th>Teat shape</th>
<th>Teat Tip</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large</td>
<td>Medium</td>
<td>Small</td>
<td>Bowl</td>
<td>Round</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Pooled</td>
<td>Farm</td>
<td>80</td>
<td>15 (18.7)</td>
<td>48 (60.0)</td>
<td>17 (21.3)</td>
</tr>
<tr>
<td>Field</td>
<td>ST</td>
<td>127</td>
<td>10 (7.9)</td>
<td>86 (67.7)</td>
<td>31 (24.4)</td>
</tr>
<tr>
<td>Pooled</td>
<td>Field</td>
<td>133</td>
<td>7 (5.3)</td>
<td>83 (62.4)</td>
<td>43 (32.3)</td>
</tr>
<tr>
<td>Field</td>
<td>ST</td>
<td>260</td>
<td>18 (6.9)</td>
<td>169 (65.0)</td>
<td>73 (28.1)</td>
</tr>
</tbody>
</table>

Figures in parenthesis indicates percentage
S= Surti
ST= Surti type
that animals with pendulous udder increased with increase in lactation number. Saini and Gill (1988) observed 76.6, 14.3, 1.6 and 7.4 per cent 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 10.0, respectively in farm buffaloes whereas it was 83.4, 15, 0.8 per cent in Surti and 97.7, 2.3, 0.0 and 0.0 per cent 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.

**CONCLUSION**

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.

**REFERENCES**


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