Prevalence of subclinical mastitis in cows in Karanja tahsil of Wardha district

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Abstract
The subclinical mastitis mostly remains undetected due to absence of apparent changes in udder or in mammary gland. In this study total 100 cows were studied on the basis of examination of udder and grading of Modified California Mastitis Test (MCMT) and observed that out of 100 cows 38% cows were affected by subclinical mastitis, total 400 quarters were examined out of that 12 (17.14%) right fore, 20 (28.57%) right hind, 14 (20%) left fore and 24 (34.28%) left hind quarters were found positive for subclinical mastitis and in quarter wise analysis out of 400 quarters 70 (17.50%) quarters were found positive.

Keywords: Subclinical mastitis, Karanja tahsil, Wardha district

Introduction
Mastitis is the universally considered the most wide spread and costly disease of the dairy industry. It can be defined as an inflammation of mammary gland irrespective of causes. Generally it is of polymicrobial origin and is charactererized by physical, chemical as well as biological changes in milk and pathological changes in glandular tissues. Subclinical mastitis could be determined only by some special detection tests due to non-availability of gross inflammatory changes in the udder. Subclinical form of mastitis physically unnoticed but the most dangerous form of disease as it is responsible for a greater loss to dairy industry.

Material and Method
The objectives of this study are to study the prevalence of subclinical mastitis in cows in Karanja tahsil of Wardha district and to compare the efficiency of common field test used for detection of subclinical mastitis.

The experiment was carried out in five villages of Karanja tahsil, namely Bori, Belgaon, Kannamwar Gram, Pimpari and Savali district Wardha, during the year 2010-2011. Total 100 cows, 20 cows from each village were selected on the basis of examination of udder and grading of Modified California Mastitis Test (MCMT) as per method of schalm and Noorlandure (1957) [1], and Bhatnagar and Malhotra (1969) [2], and by using electronic instrument ‘Draminski Electronic Mastitis Detector’ Milk samples from all four quarters were collected separately at the time of milking in morning.

Result and Discussion

Table 1: Incidence of subclinical mastitis in relations distribution among quarters (%)

<table>
<thead>
<tr>
<th>Cows</th>
<th>Quarters</th>
<th>Tested</th>
<th>Positive</th>
<th>Tested</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>RF</td>
<td>400</td>
<td>70</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>38%</td>
<td>17.50%</td>
<td>17.14%</td>
<td>28.5%</td>
</tr>
</tbody>
</table>

From table 1, total 100 cows (400 quarters) were screened against subclinical mastitis out of that 38 (38%) cows were affected by subclinical mastitis. Out of 400 quarters, 70 quarters (17.50%) showed positive reaction tested by Modified California Mastitis Test (MCMT).

In this study, total 400 quarters were examined out of that 12 (17.14%) right fore, 20 (28.57%) right hind, 14 (20%) left fore and 24 (34.28%) left hind quarters were found positive for subclinical mastitis.
Table 2: Incidence of subclinical mastitis in relations distribution among quarters (%)

<table>
<thead>
<tr>
<th>No. of quarters tested</th>
<th>No. of normal quarters</th>
<th>No. of affected quarters</th>
<th>Prevalence percentage quarter wise</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>330 (82.50%)</td>
<td>70 (17.50%)</td>
<td>17.50</td>
</tr>
</tbody>
</table>

In table 2, total 400 quarters were examined out of that 70 (17.50%) quarters were found positive i.e. affected quarters and remaining 330 (82.50%) shown negative test i.e. normal quarters. The prevalence of SCM was found in 38 (38%) cows out of 100 cows.

References