INCIDENCE OF SUBCLINICAL MASTITIS IN MILKING COWS AT VANTHARUMOOLAI, KOMMATHURAI, MAWADI-VEMBU AND KARADIYANARU VETERINARY RANGES OF BATTICALOA DISTRICT

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ABSTRACT

Subclinical mastitis is the most widespread type of the disease in milking cows in worldwide dairy farms. This study was carried out to investigate the prevalence of subclinical mastitis in dairy cows in Vantharumoolai, Kommathurai, Mawadi-Vembu and Karadiyanaru veterinary ranges in Batticaloa District, Sri Lanka and in relation to the major pathogens, risk factors and economic losses. In this study, a total of 100 lactating cows were randomly selected to identify SCM using California Mastitis Test (CMT) from Vantharumoolai, Kommathurai, Mawadi-Vembu and Karadiyanaru veterinary ranges in Batticaloa District. Milk samples were collected aseptically from CMT positive cows and transferred to laboratory in the ice box. Microbiology and biochemical analysis were carried out to isolate pathogens in the milk sample by a standard procedure. Result showed that 22 lactating cows (22%) were positive to CMT, in which 39 (9.75%) quarters showed CMT positive. While 100% of CMT quarters showed a bacterial growth after the cultured. Major microorganisms were such as *Staphylococcus spp.* (90.5 %), *Escherichia coli* (6.0 %) and *Streptococcus spp.* (3.5 %) were isolated from milk sample. Some factors significantly ($p < 0.05$) affected prevalence of SCM.

Prevalence of SCM was high in housing provided in terms of OR 0.211 compared with housing not provided. The hand milking with calf OR value was 0.212 had higher chance of SCM compared with hand milking without calf. The without isolated cows from infected cows OR value 5.105 compared with isolated infected animals from cows. The without washed hands OR value was 0.114 compared with washed hands. As well as the incidence of mastitis had more chance for CMT positive in terms of OR value for incidence of mastitis in the farm was 14.000 times more than

reference with not incidence of mastitis were associated with higher chances of subclinical mastitis in terms of odd ratio.

Finally, it could be concluded that the many factors were significantly influencing the subclinical mastitis in the study area.

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