

CALIFORNIA MASTITIS TEST IN THE DIAGNOSTIC OF SUBCLINICAL MASTITIS

CALIFORNIA MASTITIS TEST NO DIAGNÓSTICO DA MASTITE SUBCLÍNICA

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Milk production in Brazil is undoubtedly one of the most important Brazilian agroindustrial complex. Moves large sums of money, the dairy industry employs millions of the people, having potential to provide the domestic and foreign markets. Besides surpassing year by year the index production. The quality of milk is increasingly demanded by consumers and there are bonus programs for milk with low somatic cell counts, which reveal, indirectly, the udder sanity. Mastitis, the udder inflammation, is the main factor that substantially compromises the milk quality. Several methods can diagnose the incidence of subclinical mastitis in dairy herds. One these methods, the California Mastitis Test (CMT) has as advantages being practical, low cost and the results are immediately available. The CMT method consists of adding the anionic neutral detergent to a milk sample in order to disrupt milk somatic cell membranes and release nucleic material. The viscosity formed by this reaction allows estimating the number of somatic cells (immunity cells) presents in the milk. According to the degree of gelatinization obtained in this reaction, the interpretation of the scores varies from zero, no viscosity, to three crosses, highly viscous. This study was aimed to evaluate the CMT of eight dairy herds of different farms in Sao Paulo state, described by the letters A to H. The scores 1, 2 and 3 were considered positive for subclinical mastitis, while 0 was negative. The results were determined in relative frequency (%) and are summarized in Table 1. It is evident that the herd D is the most affected by subclinical mastitis, because of the greater number of CMT positive (60%). This may be due to the mismanagement and poor conditions of milking. The properties C, F and G require greater attention, as the result of CMT could corroborate the presence of pathogenic microorganisms and infected cows can quickly transmit the infection to the healthy ones. Note that the farms A, B and H are the ones with the largest number of CMT negative, that is, with cows with better conditions of udder sanity. Over all it is found that CMT consists of an effective test for the detection of subclinical mastitis.

Table 1. Relative frequency (%) of positive and negative scores in the California Mastitis Test of the mammary glands of lactating cows from eight dairy farms in the state of São Paulo, in 2013

Properties	CMT Negative	CMT Positive
A	87.93	12.07
B	93.22	6.78
C	75.00	25.00
D	40.00	60.00
E	63.33	36.67
F	78.33	21.67
G	82.45	17.55
H	86.44	13.56

Keywords: California mastitis test, dairy herds, subclinical mastitis.

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