BACTERIOLOGICAL DIAGNOSTIC TOOL IN COW MASTITIS

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Summary. Culturing of milk samples from subclinical and clinical mastitis gives some information on the causal agent. We have taken 176 samples of milk for bacteriological examination. Drops of milk are spread on an aesculin bloodagar, an aesculin bloodagar stamped with a cross of ß toxin from *S. aureus* (to detect CAMP reaction),and an aesculin bloodagar with 0,1 IU. These tests are carried out, concerning the penicillin sensitivity of *S. aureus.* A „SELMA" plate was developed to simplify the identification of mastitis pathogens. A Petri dish is divided into three areas containing different agar media.

5% KOH can be used to differentiate between gram-positive and gram-negative bacteria, 3% H_2O_2 can be used to differentiate between *Staphylococci* and *Streptococci.* Sensitivity to relevant antibiotics is tested by the method described by Rosco. California Mastitis test is a sensitive indication of the presence of inflammation in the udder and the cell content in the milk sample.

After completing our experiments on cows we established that the most frequent cause of mastitis is S. *aureus. S. aureus* is highly sensitive to antibiotics laevomycetinum and tetracyclinum.