

COMPARISON OF COAGULASE TEST AND CLUMPING FACTOR TEST FOR IDENTIFICATION OF *Staphylococcus aureus* FROM MASTITIS CASES

Amira Baihani

ABSTRACT

This research was aimed to show sensitivity of clumping factor test compared to coagulase test for identification of *Staphylococcus aureus* from mastitis cases. Milk samples were collected from sub clinical mastitis cases at the day time. As much 141 samples of milk quarter from 36 cows was taken away from seven location of dairy cattle, and it was tested by using California Mastitis Test. Preparation of pure culture were confirmed by Mannitol Salt Agar, Blood Agar, and coagulase test. Positive coagulase test occurred in 28 isolates (73,68%), whereas for clumping factor occurred in 29 isolates (76,32%). The data were analyzed with the calculation of sensitivity from clumping factor test and chi-square analysis from each test. The clumping factor test showed 66,67% sensitivity for α -hemolysis, 90,90% sensitivity for β -hemolysis, and 33,33% sensitivity for non hemolysis. The capability of identification *Staphylococcus aureus* by clumping factor test is not significant with coagulase test, but clumping factor test may be used as rapid screening test because false-positif and false-negatif may occur, so must be reexamined by coagulase test.

Keywords : clumping factor test, coagulase test, mastitis, *Staphylococcus aureus*.