Identification of Staphylococcus aureus Which Causes Mastitis with Mannitol Test and Detection of Acetoin Product in Dairy Cattle at The Farm Area of Suka Makmur Dairy Cooperative Grati Pasuruan

Abstrak:
The aims of the study were to identify Staphylococcus aureus which causes mastitis in dairy cattle at the farm area of Suka Makmur Dairy Cooperative by detecting the acetoin production with Voges-Proskauer Test comparing with mannitol fermentation test using Mannitol Salt Agar. The non probability sampling was used on this research. Milk samples had been taken as much as 5-10 ml from each quarter of dairy cattle which shown positive according to California Mastitis Test. Two hundred bovine milk samples were cultured on Blood Agar and MacConkey Agar from which 100 (50%) strains were identified as Staphylococcus sp. and 26 (13%) were identified as coagulase positive staphylococcus; which were suspected as Staphylococcus aureus, whereas 25 strains of them showed the positive result of Voges-Proskauer Test and 24 strains showed the positive result of mannitol fermentation on Mannitol Salt Agar cultured. The results of the two methods were compared with Nonparametric Tests among which Chi-square Test were used. The result showed that there was no difference between the result of Voges-Proskauer Test and Mannitol Salt Agar cultured, so that Voges-Proskauer Test is able to replace Mannitol Salt Agar cultured as the common identification method for Staphylococcus aureus.

Keyword:

Daftar Pustaka:
Beishir, L. Microbiology in Practice: A Self- Instructional Laboratory Course HarperCollins Publishers Inc. 1991 New York