Isolation and Characterization of Staphylococcus aureus of Milk of Ettawa Crossbred Goat

Abstrak:

Staphylococcus aureus is a main bacteria causing mastitis of Ettawa crossbred goat. The mastitis can raise an economical problem for farmers because of decreasing of milk production. S. aureus in the milk will be spreading rapidly to decompose the milk. The aims of the research were to isolate and characterize S. aureus from milk samples of Ettawa crossbred goat in Bantul, Sleman and Kaligesing. Characterization of S aureus based on the mannitol salt agar (MSA) reactions, clumping factor and coagulation assays, production of hemolysins and pigments, and antibiotic sensitivity tests. From the 52 milk samples of Ettawa crossbred goat could be isolated 12 S. aureus. All 12 isolates fermented mannitol, positive for coagulases, clumping factors, and produced β-hemolysis. S. aureus isolated from Ettawa crossbred goat could produce an orange pigment for 3 isolates, yellow pigmented for 8 isolates and white pigmented for 1 isolate. Based on the sensitivity tests to the antibiotics, revealed that one isolate of S. aureus was resistant to oxytetracycline, ampicilin, erythromycin, and intermediate to gentamycin. Three S. aureus isolates were intermediate to erythromycin. Most of S. aureus were still susceptible to oxytetracycline, tetracycline gentamicin, ampicilin and erythromycin.

Keyword:

Staphylococcus aureus, Ettawa crossbred goat, milk sample