



The Resistance Patterns of Bacteria *Staphylococcus Aureus* against Various Antibiotics

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Abstract : Mastitis is a disease in cattle that is highly infectious, characterized by inflammation of the udder gland and can cause economic losses extremely high either decrease in the quality or quantity of milk. Mastitis incidence in Indonesia is largely a subclinical mastitis caused by *Staphylococcus aureus* bacteria. Currently the treatment of mastitis less effective because antibiotics are used less specific and not in accordance with causing bacteria. The aim of research to determine the resistance patterns of bacteria *Staphylococcus aureus* as a cause mastitis against various antibiotics. The sample used for the research were 22 isolates of *Staphylococcus aureus* originating from cows with subclinical mastitis that had been characterized from a dairy farm. Furthermore test of the sensitivity of bacteria to various antibiotics such as penicillin G, streptomycin, Amoxicillin, Tetracycline, Gentamycin, Chloramphenicol, Methicillin, Ciprofloxacin, Erythromycin and Trimethoprim+Sulfamethoxazole using the Kirby-Bauer disk diffusion by measuring the diameter of inhibition zone. The results showed that *Staphylococcus aureus* isolates were resistant to antibiotics penicillin G, Amoxicillin, and Methicillin with the percentage of consecutive 14 isolates (63.6%), 18 isolates (81.8%), and 17 isolates (77.3%) while still as much as 100% sensitive to Streptomycin, Tetracycline, Gentamycin, Chloramphenicol, Ciprofloxacin, Erythromycin and Trimethoprim + Sulfamethoxazole. Conclusion that *Staphylococcus aureus* is still sensitive to non-beta-lactam group of antibiotics.

Keywords : Coccus Bacteria, mastitis, antibiotics, resistant.