

ISOLATION OF METHICILLIN-RESISTANT *Staphylococcus aureus* (MRSA) IN DOG NASAL SWAB WITH OXACILLIN SCREEN AGAR CONFIRMATION TEST

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ABSTRACT

This study aims to isolate, identify and confirm the presence or existence of Methicillin-Resistant *Staphylococcus aureus* (MRSA) in dog nasal swab samples. The research was conducted at Laboratory of Veterinary Bacteriology and Mycology, and Laboratory of Veterinary Public Health, Airlangga University from September until November 2013. Samples were taken randomly from 30 dogs in Surabaya. The research showed 16 (53%) specimens growth in MSA (fermented mannitol). Gram staining and microscopic examination resulted 12 (40%) specimens colonies identified as coccus and 4 (13%) specimens were bacil shapes colonies. The result of hemolysis test using Blood Agar Medium; 3 (10%) specimens were beta hemolysis (specimens number 9, 12 and 15). This three samples were tested with antibiotics and susceptibility testing Kirby-Bauer Disk diffusion method. All samples were resistant to erythromycin (100%), penicillin (100%) and methicillin (100%). The research was completely confirmed the growth of MRSA from specimens number 9 and 12 in oxacillin screen agar medium, named Poci (5 months) and Moli (5 years). Both are dogs from different breeder in Kutisari, South Surabaya.

Key words: MRSA, Oxacillin Screen Agar, dog.