

**ANTIMICROBIAL RESISTANCE PROFILE OF *Staphylococcus aureus*
ISOLATED FROM DAIRY COW'S MILK IN SURABAYA**

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ABSTRACT

The aim of this research was to show the profile of *S. aureus* bacteria isolated from fresh milk at four dairy farms in Surabaya against antibiotics Oxacillin, Penicillin, Amphotericin, Cefoxitin, and Tetracycline. The study used purposive sampling method. About 40 samples were isolated on *Mannitol Salt Agar* media (MSA) from the result which identified as *Staphylococcus sp* was 23, then the positive result of 23 samples were tested using gram staining, the positive result of 20 sample catalase test, and then 14 (35%) samples showed the positive sample of *S. aureus* on coagulase test. Antibiotic disk used i.e Oxacillin, Penicillin, Amphotericin, Cefoxitin and Tetracycline by using Kirby Bauer method. Inhibition diameter zone measured at millimeter to determine a sensitivity level of antibiotic. The result showed that 14 (100%) samples were resistant to Cefoxitin, 14 (100%) samples were resistant to Penicillin, 12 (85,7%) samples were resistant and 2 (14,3%) samples were sensitive to Amphotericin, 8 (57,2%) of samples were sensitive and 6 (42,8%) was intermediate to Tetracycline, and 9 (64,2%) of samples were resistant and 5 (35,8%) samples were sensitive to Oxacillin.

Key words : Dairy farm, resistant, *S. aureus*, Sensitivity, Antibiotic, Fresh milk.