PROFIL PROTEIN DAN DAYA ANTI MIKROBA LENDIR BEKICOT (*Achatina fulica*) TERHADAP *Methicillin Resistan tStaphylococcus aureus* (MRSA)

Diana Anggraeni[1], Sri Darmawati[2], Endang Tri Wahyuni Maharani[3]

1. Program Studi D IV Teknologi Laboratorium Medik Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang
2. Laboratorium Mikrobiologi Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang
3. Laboratorium Kimia Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Muhammadiyah Semarang

ABSTRAK

Lendir bekicot mengandung zat analgesik, antiseptik, dan peptida antimikroba (*Achasin*), komponen-komponen tersebut mempunyai aktivitas animikroba. Tujuan penelitian ini untuk mengetahui daya hambat lendir bekicot dengan konsentrasi 100% terhadap pertumbuhan MRSA dan menganalisis profil protein lendir bekicot. Uji sensitivitas menggunakan metode sumuran dan analisis profil protein menggunakan metode SDS-PAGE 12% yang diwarnai dengan *Coomassie Brillian Blue*. Hasil penelitian menunjukkan bahwa lendir bekicot memiliki kemampuan dalam menghambat pertumbuhan MRSA. Rata-rata diameter zona hambat yang terbentuk sebesar 14,9 mm sedangkan analisa profil protein menunjukkan adanya 4 sub unit protein yang berat molekulnya yaitu 87,59 kDa; 77,66 kDa; 70,97 kDa dan 49,46 kDa.

Kata kunci : Profil protein, daya antimikroba, *Achatina fulica*, *Methicillin Resistant Staphylococcus aureus*

Protein Profile And Anti Microbial Power of Mucus Snail (*Achatina fulica*) Against *Methicillin Resistant Staphylococcus aureus* (MRSA)

Diana Anggraeni[1], Sri Darmawati[2], Endang Tri Wahyuni Maharani[3]

1. Four years Diploma of Medical Laboratory Technology, Nursing and Health Faculty, Muhammadiyah University of Semarang
2. Clinical Microbiology Laboratory, Nursing and Health Faculty, Muhammadiyah University of Semarang
3. Chemistry Laboratory, Mathematics and Science Faculty, Muhammadiyah University of Semarang

ABSTRACT

The snail mucus contained analgesic, antiseptic and antimicrobial peptide (*Achasin*) those components have antimicrobial activity. The objective of this study is to determine the snail mucus inhibition with concentration of 100% on growth of MRSA and to protein profile of snail mucus. The sensitivity using sumuran method and analysis of protein profile using the 12 % SDS-PAGE method colored by *Coomassie Brillian Blue*. The results of the study showed that snail mucus had the ability to inhibit MRSA growth. The diameter of the inhibitory zona formed was 14,9 mm, whereas the protein profile analysis showed the existence of 4 sub units protein whose molecular weight is 87,59 kDa; 77,66 kDa; 70,79 kDa and 46,46 kDa.

Keyword : Protein profil, the power of antimicrobial, *Achatinafulica*, *Methicillin Resistant Staphylococcus aureus*