ABSTRAK

INTERAKSI AIR PERASAN BAWANG PUTIH (Allium sativum) DENGAN GENTAMISIN DALAM MENGHAMBAT PERTUMBUHAN Pseudomonas aeruginosa SEBAGAI BAKTERI PENYEBAB INFEKSI NOSOKOMIAL PADA LUKA BAKAR in vitro


Latar belakang Infeksi merupakan komplikasi mayor dari luka bakar dan menjadi penyebab 50-75% dari kematian di rumah sakit dan Pseudomonas aeruginosa merupakan bakteri penyebab infeksi tersering. Banyak dari obat-obatan sintetik memiliki masalah antara lain alergi dan resistensi. Hal ini memaksa para peneliti untuk mencari obat alternatif. Lebih dari 80% penduduk dunia bergantung pada pengobatan tradisional dan yang sering digunakan adalah bawang putih.

Tujuan penelitian untuk mengetahui interaksi air perasan bawang putih (Allium sativum) sebagai antimikroba dengan gentamisin terhadap pertumbuhan Pseudomonas aeruginosa.

Metode penelitian ini bersifat eksperimental laboratorik. Metode penelitian yang digunakan adalah difusi cakram dengan melakukan pengamatan zona inhibisi yang terbentuk pada tempat pertemuan cakram gentamisin dan air perasan bawang putih.

Hasil penelitian menunjukkan zona inhibisi yang terbentuk pada air perasan bawang putih adalah 9,2 mm (dosis MIC 6,25%), pada gentamisin (Dosis MIC 15,625 μg/ml) adalah 7,8 mm, dan pada kombinasinya tidak berpengaruh satu sama lain.

Kesimpulan interaksi air perasan bawang putih dengan gentamisin terhadap Pseudomonas aeruginosa bersifat indiferen dengan zona interaksinya tidak bertambah atau berkurang.

Kata kunci : Bawang putih, Gentamisin, Pseudomonas aeruginosa
ABSTRACT

INTERACTION GARLIC JUICE (Allium sativum) AND GENTAMICIN AGAINST THE GROWTH of Pseudomonas aeruginosa AS A BACTERIA CAUSE NOSOCOMIAL INFECTION IN BURN WOUND in vitro

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Background Infection is the major complication of burns and the cause of 50-75% of deaths in hospital and Pseudomonas aeruginosa is the most common bacteria cause infection. Many of these synthetic drugs have problems such as allergies and resistant. This forced the researchers to seek alternative medicine. More than 80% of the world’s population relies on traditional medicine and is often used is the garlic.

Objective to find out the interaction of garlic juice (Allium sativum) as an antimicrobial with gentamicin against the growth of Pseudomonas aeruginosa.

Method this study is experimental laboratory. This study was used disc diffusion with observation zones of inhibition formed as a meeting place disc of gentamicin and garlic juice.

Results showed zones of inhibition formed on garlic juice was 9.2 mm (MIC dose 6,25%), the gentamicin was 7.8 mm (MIC dose 15,625 μg/ml), and the combination doesn’t have effect each other.

Conclusion garlic juice interaction with gentamicin against Pseudomonas aeruginosa is indifference, which zone of interaction neither bigger nor lesser.

Key words: Garlic, gentamicin, Pseudomonas aeruginosa
DAFTAR ISI

JUDUL ................................................................................................................................. i
LEMBAR PERSETUJUAN ....................................................................................................... ii
SURAT PERNYATAAN ........................................................................................................ iii
ABSTRAK .............................................................................................................................. iv
ABSTRACT ............................................................................................................................. v
KATA PENGANTAR ............................................................................................................... vi
DAFTAR ISI ............................................................................................................................ viii
DAFTAR TABEL ...................................................................................................................... xi
DAFTAR GAMBAR .................................................................................................................. xii
DAFTAR LAMPIRAN .............................................................................................................. xiii

BAB I PENDAHULUAN ......................................................................................................... 1
1.1 Latar Belakang ................................................................................................................ 1
1.2 Identifikasi Masalah ....................................................................................................... 2
1.3 Maksud dan Tujuan ...................................................................................................... 3
1.4 Manfaat Karya Tulis Ilmiah ........................................................................................ 3
1.5 Kerangka Pemikiran .................................................................................................... 3
1.6 Metodologi Penelitian ................................................................................................. 4
1.7 Lokasi dan Waktu Penelitian ....................................................................................... 4

BAB II TINJAUAN PUSTAKA ............................................................................................... 5
2.1 Infeksi Yang Terjadi Pada Luka Bakar ....................................................................... 5
2.1.1 Patogenesis .............................................................................................................. 5
2.1.2 Pembentukan Biofilm ............................................................................................. 6
2.1.3 Mikroba Penyebab .................................................................................................. 7
2.1.4 Pencegahan Infeksi Pada Luka Bakar ................................................................. 8
2.1.5 Terapi Antimikroba Topikal ............................................................................... 9
2.1.5.1 Perak Nitrat ..................................................................................................... 9
2.1.5.2 Silver Sulfadiazine ......................................................................................... 10
2.1.5.3 Mafenid Asetat ............................................................................................. 10
2.1.5.4 Antimikroba Topikal Lain ........................................................................... 11
2.2 Pseudomonas aeruginosa .............................................................................................. 11
2.2.1 Morfologi dan Identifikasi .................................................................................... 11
2.2.1.1 Ciri Khas Organisme ................................................................................... 11
2.2.1.2 Biakan .......................................................................................................... 11
2.2.1.3 Sifat Pertumbuhan ....................................................................................... 12
2.2.1.4 Struktur Antigenik dan Racun ..................................................................... 13
2.2.2 Patogenesis .............................................................................................................. 13
2.2.3 Temuan Klinik ......................................................................................................... 14
2.2.4 Uji Diagnostik Laboratorium ............................................................................... 14
2.2.4.1 Spesimen ....................................................................................................... 14
2.2.4.2 Sediaan Apus ............................................................................................... 14
2.2.4.3 Biakan .......................................................................................................... 15
2.2.5 Pengobatan ................................................................. 15
2.3 Antimikroba ................................................................. 15
   2.3.1 Inhibisi Sintesis Dinding Sel .................................. 15
   2.3.2 Inhibisi Fungsi Membran Sel .................................. 15
   2.3.3 Inhibisi Sintesis Protein ........................................ 15
      2.3.3.1 Gentamisin .................................................. 16
   2.3.4 Inhibisi Sintesis Asam Nukleat ............................... 18
2.4 Bawang Putih (*Allium sativum*) .................................. 18
   2.4.1 Morfologi ............................................................ 18
   2.4.2 Taksonomi ........................................................... 19
   2.4.3 Kandungan Umum ................................................ 19
   2.4.4 Kandungan Kimia ................................................ 19
   2.4.5 Kegunaan Umum .................................................. 21
   2.4.6 Efek Antimikroba ................................................ 21
      2.4.7 Efek Antibakteri ................................................ 21
2.5 Mekanisme Resistensi ................................................ 22
2.6 Kombinasi Antimikroba ................................................. 22
   2.6.1 Indikasi ............................................................... 22
   2.6.2 Kerugian ............................................................. 23
   2.6.3 Mekanisme ........................................................... 23
2.7 Uji Antimikroba .......................................................... 24
   2.7.1 Metode Dilusi ...................................................... 24
   2.7.2 Metode Difusi ...................................................... 25

BAB III BAHAN DAN METODE PENELITIAN
3.1 Bahan / Subjek Penelitian ............................................. 26
   3.1.1 Bahan Penelitian ................................................. 26
   3.1.2 Subjek Penelitian ................................................ 27
   3.1.3 Tempat dan Waktu Penelitian .................................. 27
3.2 Metode Penelitian .......................................................... 27
   3.2.1 Desain Penelitian ................................................ 27
   3.2.2 Variabel Penelitian .............................................. 28
   3.2.3 Prosedur Kerja ..................................................... 28
      3.2.3.1 Persiapan Mikroorganisme Uji .......................... 28
      3.2.3.2 Sterilisasi Alat .............................................. 29
      3.2.3.3 Persiapan Bahan Uji ...................................... 30
      3.2.3.4 Persiapan Media Agar .................................... 30
   3.2.4 Metode Analisis ................................................... 30
      3.2.4.1 Pembuatan Suspensi Mikroorganisme ................. 30
      3.2.4.2 Penentuan MIC ............................................. 31
      3.2.4.3 Penentuan MBC ............................................ 31
      3.2.4.4 Penentuan Tes Sensitivitas Antibiotik ............... 32
      3.2.4.5 Pengamatan dan Pencatatan Hasil Penelitian ....... 32

BAB IV HASIL DAN PEMBAHASAN
4.1 Hasil Penelitian .......................................................... 33
4.1.1 Pengamatan Uji Aktivitas .......................................................... 33
4.1.2 Pengamatan Uji Sensitivitas ................................................... 34
4.1.3 Hasil Interaksi ........................................................................ 34
4.2 Pembahasan .................................................................................. 35

BAB V SIMPULAN DAN SARAN
5.1 Simpulan ....................................................................................... 37
5.2 Saran ............................................................................................ 37

DAFTAR PUSTAKA ............................................................................. 38
DAFTAR LAMPIRAN .......................................................................... 40
RIWAYAT HIDUP ................................................................................ 43
DAFTAR TABEL

<table>
<thead>
<tr>
<th>Tabel</th>
<th>Deskripsi</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Kadar Tiap Tabung yang Diuji MIC dan MBC</td>
<td>33</td>
</tr>
<tr>
<td>4.2</td>
<td>Hasil Pengamatan MIC dan MBC</td>
<td>34</td>
</tr>
<tr>
<td>4.3</td>
<td>Pengukuran Zona Inhibisi</td>
<td>34</td>
</tr>
</tbody>
</table>
DAFTAR GAMBAR

<table>
<thead>
<tr>
<th>Gambar</th>
<th>Judul</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Koloni <em>Pseudomonas aeruginosa</em></td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Tes Biokimiawi</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Pengukuran MIC</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Pengamatan Hasil MIC</td>
<td>41</td>
</tr>
<tr>
<td>5</td>
<td>Pengamatan Hasil MBC</td>
<td>41</td>
</tr>
<tr>
<td>6</td>
<td>Zona Inhibisi pada Air Perasan Bawang Putih</td>
<td>42</td>
</tr>
<tr>
<td>7</td>
<td>Zona Inhibisi pada Gentamisin</td>
<td>42</td>
</tr>
<tr>
<td>8</td>
<td>Interaksi Air Perasan Bawang Putih dengan Gentamisin</td>
<td>42</td>
</tr>
</tbody>
</table>
# DAFTAR LAMPIRAN

<table>
<thead>
<tr>
<th>Lampiran</th>
<th>Deskripsi</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lampiran 1</td>
<td>Foto Identifikasi Mikroba</td>
<td>40</td>
</tr>
<tr>
<td>Lampiran 2</td>
<td>Foto Uji Aktivitas</td>
<td>41</td>
</tr>
<tr>
<td>Lampiran 3</td>
<td>Foto Hasil Percobaan</td>
<td>42</td>
</tr>
</tbody>
</table>