DAFTAR ISI

DAFTAR TABEL ........................................................................................................ xii

DAFTAR GAMBAR ...................................................................................................... xiii

PENDAHULUAN
Latar Belakang .......................................................................................................... 1
Tujuan ......................................................................................................................... 3
Manfaat ....................................................................................................................... 3

TINJAUAN PUSTAKA
Superovulasi ............................................................................................................... 4
Perkembangan Embrio Praimplantasi ........................................................................ 4
Vitrifikasi .................................................................................................................... 6
Hemi-straw ................................................................................................................... 7
Krioprotektan ............................................................................................................... 8

METODE PENELITIAN
Waktu dan Tempat Penelitian .................................................................................. 10
Bahan Penelitian ......................................................................................................... 10
Metode Penelitian
Superovulasi ............................................................................................................. 10
Koleksi Zigot ............................................................................................................... 11
Vitrifikasi Menggunakan Wadah Hemi-straw ............................................................ 11
Penghangatan (warming) Embrio ............................................................................. 13
Kultur In Vitro ............................................................................................................ 14
Evaluasi Viabilitas ...................................................................................................... 14
Pewarnaan Vital ......................................................................................................... 14
Rancangan Percobaan ............................................................................................... 15
Analisis Data .............................................................................................................. 15

HASIL DAN PEMBAHASAN
Viabilitas berdasarkan morfologi zigot dan blastosis ............................................. 16
Pewarnaan vital pada zigot dan blastosis setelah vitrifikasi ................................... 18
Kelangsungan hidup (survival rate) zigot dan blastosis setelah vitrifikasi............. 20
Kemampuan perkembangan embrio (developmental rate) setelah vitrifikasi ....... 23

SIMPULAN DAN SARAN
Simpulan .................................................................................................................... 30
Saran ............................................................................................................................. 30

DAFTAR PUSTAKA ..................................................................................................... 31
<table>
<thead>
<tr>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   Tahapan dan waktu perkembangan embrio mencit.............................. 6</td>
</tr>
<tr>
<td>2   Kemampuan perkembangan embrio setelah vitrifikasi tunggal dan ganda.............................................................. 20</td>
</tr>
<tr>
<td>3   Laju penurunan perkembangan embrio setelah vitrifikasi............... 24</td>
</tr>
</tbody>
</table>
## DAFTAR GAMBAR

<table>
<thead>
<tr>
<th>Halaman</th>
<th>Gambar</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1  Prosedur vitrifikasi menggunakan wadah <em>hemis-straw</em></td>
</tr>
<tr>
<td>13</td>
<td>2  Prosedur penghangatan (<em>warming</em>) pada medium sukrosa dengan konsentrasi bertahap</td>
</tr>
<tr>
<td>16</td>
<td>3  Morfologi zigot pada proses pembekuan dengan vitrifikasi tunggal</td>
</tr>
<tr>
<td>17</td>
<td>4  Morfologi blastosis pada proses pembekuan dengan vitrifikasi ganda</td>
</tr>
<tr>
<td>19</td>
<td>5  Gambaran embrio setelah vitrifikasi dengan pewarnaan vital <em>Hoechst-propidium iodide</em> (<em>Hoechst-PI</em>)</td>
</tr>
<tr>
<td>26</td>
<td>6  Perkembangan embrio setelah vitrifikasi</td>
</tr>
</tbody>
</table>