

## DAFTAR ISI

|                                                                                                           |                              |
|-----------------------------------------------------------------------------------------------------------|------------------------------|
| LEMBAR PERSETUJUAN .....                                                                                  | Error! Bookmark not defined. |
| LEMBAR PENGESAHAN .....                                                                                   | Error! Bookmark not defined. |
| LEMBAR PERNYATAAN .....                                                                                   | Error! Bookmark not defined. |
| KATA PENGANTAR.....                                                                                       | Error! Bookmark not defined. |
| ABSTRAK .....                                                                                             | Error! Bookmark not defined. |
| ABSTRACT .....                                                                                            | Error! Bookmark not defined. |
| DAFTAR ISI.....                                                                                           | viii                         |
| DAFTAR TABEL .....                                                                                        | xi                           |
| DAFTAR GAMBAR .....                                                                                       | xii                          |
| DAFTAR LAMPIRAN .....                                                                                     | 13                           |
| BAB I PENDAHULUAN.....                                                                                    | Error! Bookmark not defined. |
| 1.1 Latar Belakang .....                                                                                  | Error! Bookmark not defined. |
| 1.2 Rumusan Masalah .....                                                                                 | Error! Bookmark not defined. |
| 1.3 Tujuan Penelitian.....                                                                                | Error! Bookmark not defined. |
| 1.4 Manfaat Penelitian .....                                                                              | Error! Bookmark not defined. |
| BAB II TINJAUAN PUSTAKA .....                                                                             | Error! Bookmark not defined. |
| 2.1 Antidiabetes.....                                                                                     | Error! Bookmark not defined. |
| 2.1.1 Definisi Diabetes Mellitus.....                                                                     | Error! Bookmark not defined. |
| 2.1.2 Patofisiologi .....                                                                                 | Error! Bookmark not defined. |
| 2.1.3 Enzim $\alpha$ -Glukosidase .....                                                                   | Error! Bookmark not defined. |
| 2.2 Jahe Merah ( <i>Zingiber officinale</i> var. <i>rubrum</i> ).....                                     | Error! Bookmark not defined. |
| 2.2.1 Morfologi dan Klasifikasi Tanaman Jahe Merah ( <i>Zingiber officinale</i> var. <i>rubrum</i> )..... | Error! Bookmark not defined. |
| 2.2.2 Kandungan Kimia Jahe Merah.....                                                                     | Error! Bookmark not defined. |
| 2.2.3 Aktivitas Farmakologi.....                                                                          | Error! Bookmark not defined. |
| 2.3 <i>Self Nano Emulsifying Drug Delivery System</i> (SNEDDS).....                                       | Error! Bookmark not defined. |
| 2.3.1 Definisi.....                                                                                       | Error! Bookmark not defined. |

|                                                      |                              |
|------------------------------------------------------|------------------------------|
| 2.3.2 Prinsip Pembentukan Nanoemulsi pada SNEDDS     | Error! Bookmark not defined. |
| 2.3.3 Keunggulan SNEDDS                              | Error! Bookmark not defined. |
| 2.3.4 Kelemahan SNEDDS                               | Error! Bookmark not defined. |
| 2.4 Evaluasi dan Pengujian SNEDDS                    | Error! Bookmark not defined. |
| 2.4.1 Uji % Transmittan                              | Error! Bookmark not defined. |
| 2.4.2 Particle Size Determination (PSA)              | Error! Bookmark not defined. |
| 2.4.3 Fourier transformed infrared (FTIR)            | Error! Bookmark not defined. |
| 2.5 Hasil Penelitian yang Relevan                    | Error! Bookmark not defined. |
| 2.6 Kerangka Konsep                                  | Error! Bookmark not defined. |
| <b>BAB III METODE PENELITIAN</b>                     | Error! Bookmark not defined. |
| 3.1 Jenis dan Rancangan Penelitian                   | Error! Bookmark not defined. |
| 3.2 Variabel Penelitian                              | Error! Bookmark not defined. |
| 3.3 Definisi Operasional Variabel                    | Error! Bookmark not defined. |
| 3.4 Bahan dan Alat                                   | Error! Bookmark not defined. |
| 3.4.1 Bahan                                          | Error! Bookmark not defined. |
| 3.4.2 Alat                                           | Error! Bookmark not defined. |
| 3.5 Prosedur Riset                                   | Error! Bookmark not defined. |
| 3.5.1 Tahap Persiapan Sampel Penelitian              | Error! Bookmark not defined. |
| 3.5.2 Tahap Formulasi Sediaan SNEDDS                 | Error! Bookmark not defined. |
| 3.5.3 Tahap Pengujian Sediaan SNEDDS                 | Error! Bookmark not defined. |
| 3.6 Analisis Data                                    | Error! Bookmark not defined. |
| <b>BAB IV HASIL DAN PEMBAHASAN</b>                   | Error! Bookmark not defined. |
| 4.1 Sampel Ekstrak Rimpang Jahe Merah                | Error! Bookmark not defined. |
| 4.2 Uji Kelarutan dari berbagai Eksipien             | Error! Bookmark not defined. |
| 4.3 Uji Fisik Sediaan                                | Error! Bookmark not defined. |
| 4.4 Uji Karakteristik Sediaan SNEDDS menggunakan PSA | Error! Bookmark not defined. |
| 4.5 Uji FTIR                                         | Error! Bookmark not defined. |
| 4.6 Hasil Uji Penghambatan $\alpha$ -Glukosidase     | Error! Bookmark not defined. |
| <b>BAB V KESIMPULAN DAN SARAN</b>                    | Error! Bookmark not defined. |

5.1 Kesimpulan .....**Error! Bookmark not defined.**  
5.2 Saran.....**Error! Bookmark not defined.**  
**DAFTAR PUSTAKA.....Error! Bookmark not defined.**  
**LAMPIRAN.....Error! Bookmark not defined.**  
**DAFTAR RIWAYAT HIDUP .....Error! Bookmark not defined.**



## DAFTAR TABEL

**Tabel 2. 1** Hasil Penelitian yang Relevan .....**Error! Bookmark not defined.**

**Tabel 3. 1** Definisi Operasional Variabel.....**Error! Bookmark not defined.**

**Tabel 4. 1** Hasil Pengujian Formula SNEDDS.....**Error! Bookmark not defined.**

**Tabel 4. 2** Hasil Uji Karakteristik Sediaan SNEDDS**Error! Bookmark not defined.**

**Tabel 4. 3** Hasil Uji Penghambatan  $\alpha$ -Glukosidase Acarbose**Error! Bookmark not defined.**

**Tabel 4. 4** Hasil Uji Penghambatan  $\alpha$ -Glukosidase Ekstrak Jahe Merah ..... **Error! Bookmark not defined.**



## DAFTAR GAMBAR

- Gambar 2. 1** Kerangka Konsep.....**Error! Bookmark not defined.**  
**Gambar 3. 1** Diagram Tahapan Riset.....**Error! Bookmark not defined.**  
**Gambar 4. 1** Hasil Uji FTIR .....**Error! Bookmark not defined.**



## DAFTAR LAMPIRAN

|                                                 |                                     |
|-------------------------------------------------|-------------------------------------|
| <b>Lampiran 1.</b> COA Ekstrak Jahe Merah ..... | <b>Error! Bookmark not defined.</b> |
| <b>Lampiran 2.</b> Poster PKM.....              | <b>Error! Bookmark not defined.</b> |
| <b>Lampiran 3.</b> Hasil Turnitin.....          | 44                                  |
| <b>Lampiran 4.</b> Dokumentasi Pengujian.....   | 45                                  |
| <b>Lampiran 5.</b> Penggunaan Dana.....         | <b>Error!</b>                       |
| <b>Bookmark not defined.</b>                    |                                     |

