

## **BAB V**

### **KESIMPULAN DAN SARAN**

#### **5.1. Kesimpulan**

1. Ada pengaruh penambahan berbagai konsentrasi air perasan lemon terhadap aktivitas antidiabetik dalam menghambat enzim  $\alpha$ -amilase dan enzim  $\alpha$ -glukosidase pada minuman beluntas lemon.
2. Hasil menunjukkan bahwa penambahan air perasan lemon yang paling tinggi kemampuannya dalam menghambat enzim  $\alpha$ -amilase pada konsentrasi 1% yaitu sebesar  $-26,51 \pm 4,55\%$  dan kemampuannya dalam menghambat enzim  $\alpha$ -glukosidase pada konsentrasi 5% sebesar  $-69,64 \pm 7,14\%$ , dengan total fenol sebesar  $90,00 \pm 5,72$  mg GAE/L, total flavonoid sebesar  $-36,25 \pm 7,63$  mg CE/L, dan kandungan senyawa fitokimia pada minuman beluntas lemon meliputi alkaloid, fenolik, flavonoid, saponin, tanin, dan kardiak glikosida.

#### **5.2. Saran**

Perlu dilakukan penelitian lebih lanjut mengenai jumlah total fenol *free* dan *bonding* yang berperan dalam kemampuannya menghambat enzim  $\alpha$ -amilase dan  $\alpha$ -glukosidase, dapat menentukan adanya mekanisme lain dalam penghambatan enzim  $\alpha$ -amilase dan  $\alpha$ -glukosidase pada minuman beluntas lemon, dan lemon masih belum bisa menghambat aktivitas enzim  $\alpha$ -amilase dan  $\alpha$ -glukosidase.

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