

## BAB V

### KESIMPULAN DAN SARAN

#### 5.1 Kesimpulan

1. Peningkatan konsentrasi ekstrak kering buah apel (*Malus sylvestris* Mill.) (9,6%, 15% dan 20%) berpengaruh pada aktivitas antibakteri *streptococcus mutans*. Semakin tinggi konsentrasi ekstrak kering buah apel (*Malus sylvestris* Mill.) yang digunakan semakin tinggi juga aktivitas antibakteri terhadap *Streptococcus mutans*.
2. *Konsentrasi* ekstrak kering buah apel (*Malus sylvestris* Mill.) yang memberikan sebagai aktivitas antibakteri *streptococcus mutans* terbaik adalah pada konsentrasi 20% dengan hasil Daya Hambat Pertumbuhan (DHP) yaitu sebesar  $21,58 \pm 0,39$ .
3. Peningkatan konsentrasi *gelling agent* (*xanthan gum*) berpengaruh pada hasil uji mutu fisik (pH, viskositas, daya sebar, daya lekat, kemudahan dikeluarkan dari *tube*, dan konsistensi), efektivitas (uji pembersih dan aktivitas antibakteri), dan keamanan sediaan pasta gigi ekstrak kering buah apel (*Malus sylvestris* Mill.).

#### 5.2 Saran

Pada penelitian selanjutnya disarankan untuk melakukan modifikasi pada formula sediaan pasta gigi bentuk gel dengan menggunakan *Design Expert* , sehingga dihasilkan formula optimum sediaan pasta gigi bentuk gel.

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