

BAB V

KESIMPULAN

V.1 Kesimpulan

Pada penelitian yang telah dilakukan, diketahui bahwa SCOBY sendiri tidak memiliki sifat antibakteri. Oleh karena itu dilakukan beberapa modifikasi kepada SCOBY yaitu dengan mengkompositkan SCOBY dengan $\text{Fe}_3\text{O}_4/\text{ZIF-8}$ sehingga menjadi komposit SCOBY/ $\text{Fe}_3\text{O}_4/\text{ZIF-8}$. Komposit ini divariasikan dengan waktu perendaman dan %berat dari Fe_3O_4 . Dari hasil yang telah didapatkan, Fe_3O_4 dengan variasi 3 %berat dengan perendaman selama 120 menit memiliki zona inhibisi yang terbaik daripada variasi 1 & 5 %berat. Pada uji antibakteri yang telah dilakukan didapatkan bahwa zona inhibisi yang dilakukan terhadap bakteri *E. coli* lebih besar yang menunjukkan *S. aureus* merupakan bakteri yang lebih resisten terhadap antibakteri.

V.2 Saran

Saran yang dapat dilakukan adalah dalam mengkultur membran SCOBY dalam tabung reaksi, lebih baik mengkultur dalam jumlah tabung yang banyak dikarenakan SCOBY yang tumbuh dalam tabung, bentuknya banyak yang tidak seragam sehingga harus mengkultur ulang untuk mengumpulkan SCOBY dengan bentuk yang seragam. Kemudian dikarenakan dalam uji antibakteri dengan metode disc diffusion sudah menunjukkan efek antibakteri, sebaiknya dilakukan uji antibakteri dengan metode CFU (Colon Forming Unit) agar mendapatkan hasil yang lebih akurat.

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