

## **BAB 5**

### **KESIMPULAN DAN SARAN**

#### **5.1 Kesimpulan**

Berdasarkan hasil pembahasan penelitian yang telah dilakukan dapat disimpulkan:

1. Enzim selulase mampu menghidrolisis selulosa penyusun eceng gondok menjadi mikrokristalin selulosa.
2. Karakter dari selulosa eceng gondok yang telah dihidrolisis tidak sesuai dengan standar Avicel PH101 pada uji pH, spektrum IR, difraktogram, dan morfologi SEM.

#### **5.2 Saran**

Berdasarkan hasil pembahasan penelitian yang dilakukan dapat disarankan:

1. Dilakukan optimasi terhadap pemakaian NaOH sebagai bahan dalam metode delignifikasi.
2. Dilakukan optimasi terhadap konsentrasi enzim dan waktu hidrolisis enzim.
3. Dilakukan analisa terhadap selulosa lebih lanjut menggunakan uji NMR.
4. Dilakukan uji dengan menggunakan standar kualitas pro-analisa.
5. Dilakukan karakterisasi lebih lanjut secara fisikokimiawi meliputi kompaktibilitas dan kompresibilitas dari serbuk selulosa eceng gondok.

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