

BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Berdasarkan dari penelitian yang sudah dilakukan, dapat disimpulkan beberapa hal, sebagai berikut:

1. Rasio reagen asetat anhidrida/berat pati mempengaruhi nilai derajat substitusi pati, dengan semakin tinggi rasio maka nilai derajat substitusi akan semakin tinggi
2. Waktu reaksi 60 menit menghasilkan pati asetat dengan nilai derajat substitusi tertinggi
3. Sintesis pati asetat dengan rasio reagen asetat anhidrida/berat pati 5%-15% dan nilai pH reaksi 7-9 akan menghasilkan pati asetat dengan nilai derajat substitusi 0,0228-0,0692
4. Asetilasi pati akan meningkatkan kelarutan pati dalam air panas, kemampuan mengembang pati, kejernihan pasta pati, *water holding capacity*, dan *oil binding capacity*
5. Kondisi reaksi terbaik pada sintesis pati gandum asetat diperoleh pada rasio reagen asetat anhidrida/berat pati 15% dan nilai pH reaksi 8
6. Pati gandum asetat yang telah disintesis dapat digunakan sebagai *food thickener*

5.2. Saran

Berdasarkan dari penelitian yang sudah dilakukan, dapat diberikan beberapa saran untuk penelitian selanjutnya, yaitu:

1. Melakukan analisis proksimat sesuai dengan pati yang dipakai, agar data proksimat yang diperoleh lebih relevan
2. Melakukan variasi konsentrasi asetat anhidrida dan lama reaksi yang lebih beragam untuk mengetahui sifat kimia dan fungsional pati dengan lebih menyeluruh
3. Melakukan analisis viskositas dan *freeze-thaw stability* untuk mengetahui lebih lanjut tentang kemampuan pati gandum asetat sebagai *food thickener*
4. Melakukan uji organoleptik untuk mengetahui pengaruh asetilasi terhadap rasa yang diterima manusia

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