

BAB V

KESIMPULAN DAN SARAN



5.1. Kesimpulan

1. Semakin besar rasio reagen STPP/pati dan temperatur pemanasan, maka kadar gugus fosfat dan nilai derajat substitusi pun akan semakin besar.
2. Pembuatan pati fosfat dengan rasio reagen STPP/pati antara 0,5 – 1,5 dan temperatur pemanasan antara 120°C - 140°C menghasilkan pati fosfat dengan rentang kandungan gugus fosfor antara 0,0245% - 0,129 %-P dan rentang nilai DS antara 0,0013 - 0,0068.
3. Kandungan gugus fosfat pada pati dalam seluruh hasil percobaan yang menggunakan reagen STPP telah memenuhi standar yang ditetapkan oleh FCC ($\leq 0,4\%$).
4. Fosforilasi pati aren secara fosforilasi dapat meningkatkan sifat fungsional pati (kejernihan pasta, kelarutan, kekuatan mengembang, dan daya serap air dan minyak).

5.2. Saran

1. Sebaiknya dilakukan analisis lebih lanjut mengenai profil viskositas dari produk pengental makanan yang dihasilkan dan bentuk granula pati sebelum dan sesudah modifikasi.
2. Untuk penelitian selanjutnya, sebaiknya dilakukan pengamatan terhadap variabel lain seperti pH reaksi, waktu reaksi, atau jumlah Na_2SO_4 yang mungkin dapat berpengaruh pada nilai DS pati fosfat.



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