

BAB V

KESIMPULAN & SARAN

Pada penelitian ini, didapatkan beberapa kesimpulan yakni:

1. Reaksi oktenilisasi pati dengan menggunakan OSA berhasil dilakukan dengan bukti analisa FTIR pada panjang gelombang 1725 cm^{-1} (C=O) dan 1570 cm^{-1} (COO⁻).
2. Analisa *water holding capacity* yang dihasilkan pada penelitian ini mengalami peningkatan jika dibandingkan dengan pati *native* yakni dari 82,5795 % menjadi 146,35 % pada pH optimum dan variasi OSA 3 %.
3. Analisa viskositas yang dihasilkan pada penelitian ini mengalami peningkatan jika dibandingkan dengan pati *native* yakni dari 1,5 mPa.s menjadi 3 mPa.s pada pH optimum dan variasi OSA 3 %.
4. Analisa *solubility* yang dihasilkan pada penelitian ini mengalami peningkatan jika dibandingkan dengan pati *native* yakni dari 14,4 % menjadi 24,2024 % pada pH optimum dan variasi OSA 3 %.
5. Analisa *swelling power* yang dihasilkan pada penelitian ini mengalami peningkatan jika dibandingkan dengan pati *native* yakni dari 23,83 % menjadi 42,1587 % pada pH optimum dan variasi OSA 3 %.
6. Analisa *freeze thaw stability* yang dihasilkan pada penelitian ini mengalami peningkatan jika dibandingkan dengan pati *native* yakni dari 76,8416 % menjadi 87,8363 % pada pH optimum dan variasi OSA 3 %.

Selain itu, terdapat beberapa saran yang dapat diberikan oleh penulis untuk peneliti berikutnya yakni:

1. Dapat dilakukan analisa DS dengan menggunakan NaOH dengan konsentrasi yang lebih kecil dan sampel dengan konsentrasi yang lebih kecil
2. Dalam menentukan titik leleh, dapat digunakan alat DSC dengan kriteria tertentu karena diperlukan media air dalam analisisnya
3. Dapat dilakukan analisa lebih lanjut seperti *emulsifying activity* dan *emulsifying stability*

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