

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

1. Derajat substitusi pati garut OSA meningkat seiring dengan peningkatan rasio OSA:pati.
2. Derajat substitusi pati garut OSA meningkat seiring dengan peningkatan temperatur reaksi.
3. Modifikasi pati garut dengan OSA menghasilkan pati garut OSA dengan rentang DS yang masih memenuhi standar FDA untuk penggunaan pada industri pangan. Pati garut OSA memiliki kemampuan mengemulsi yang baik dan dapat berfungsi sebagai *emulsion stabilizer* yang memberikan hasil positif pada mayonaise.

5.2 Saran

1. Melakukan modifikasi fisik dapat meningkatkan DS dan memperluas penggunaan pati garut OSA pada industri lainnya seperti kosmetik.
2. Melakukan analisis DS dengan metode *Nuclear Magnetic Resonance* (NMR) yang dapat memberikan hasil DS yang lebih akurat.
3. Melakukan analisis yang lebih mendalam (*particle size analyzer*, analisis viskositas dengan rheometer dan *light scattering*) pada emulsi yang dibentuk oleh pati garut termodifikasi OSA.

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