V.
KESIMPULAN DAN SARAN

5.1. Kesimpulan

1. Perbedaan jenis enkapsulan berpengaruh nyata terhadap kadar air, pH, dan warna bubuk jambu biji merah.
2. Perbedaan konsentrasi yang tersarang dalam jenis enkapsulan Na-CMC dan maltodekstrin berpengaruh terhadap sifat fisikokimia bubuk jambu biji merah.
3. Semakin tinggi konsentrasi enkapsulan, kadar air bubuk jambu biji merah semakin menurun (Na CMC 2,81% - 2,14%; Maltodekstrin 3,33% - 2,59%)
4. Semakin tinggi konsentrasi enkapsulan, tingkat higroskopis bubuk jambu biji merah semakin menurun (Na-CMC 15,93% - 13,42%; Maltodekstrin 16,69% - 13,28%)
5. Semakin tinggi konsentrasi enkapsulan, total fenol bubuk jambu biji merah semakin menurun (Na-CMC 5318,38 – 1903,68 mg/kg; Maltodekstrin 5331,62 – 1908,09 mg/kg)
6. Semakin tinggi konsentrasi enkapsulan, aktivitas antioksidan bubuk jambu biji merah semakin menurun (Na-CMC 86,56% - 59,12%; Maltodekstrin 86,74% - 59,30%)
7. Semakin tinggi konsentrasi enkapsulan, nilai *lightness*, nilai *redness*, nilai *chroma* semakin meningkat. Nilai *yellowness* dan nilai *hue* mengalami penurunan.
8. Semakin tinggi konsentrasi enkapsulan, pH bubuk jambu biji merah semakin meningkat (Na-CMC 5,96 – 6,27; Maltodekstrin 5,55 – 5,89)

5.2. Saran

1. Perlu dilakukan uji lebih lanjut mengenai *control release* dari bubuk jambu biji merah untuk mengetahui waktu dan jumlah komponen bioaktif yang dapat

dilepaskan oleh sistem enkapsulasi Na-CMC dan maltodekstrin.

2. Perlu dilakukan uji lebih lanjut untuk aplikasi bubuk jambu biji merah pada berbagai produk olahan pangan sehingga dapat diketahui karakteristik produk yang ditambahkan dengan bubuk jambu biji merah.

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