

V. KESIMPULAN DAN SARAN

5.1. Kesimpulan

1. Penambahan ekstrak kelopak bunga rosela dan tepung cangkang telur ayam memberi pengaruh nyata terhadap karakter fisikokimia *smart edible film*, yaitu total antosianin, total fenol, aktivitas antioksidan, kuat tarik, persen pemanjangan, dan laju transmisi uap air, serta kemampuannya sebagai pengemas produk.
2. Penambahan ekstrak kelopak bunga rosela meningkatkan total antosianin, total fenol, dan aktivitas antioksidan *smart edible film*.
3. Penambahan ekstrak kelopak bunga rosela menurunkan nilai kuat tarik *smart edible film*, sedangkan penambahan tepung cangkang telur ayam meningkatkan nilai kuat tarik *smart edible film*.
4. Penambahan ekstrak kelopak bunga rosela meningkatkan persen pemanjangan *smart edible film*, sedangkan penambahan tepung cangkang telur ayam menurunkan persen pemanjangan *smart edible film*.
5. Penambahan ekstrak kelopak bunga rosela meningkatkan nilai laju transmisi uap air (WVTR) *smart edible film*, sedangkan penambahan tepung cangkang telur ayam menurunkan nilai laju transmisi uap air (WVTR) *smart edible film*.
6. *Smart edible film* dengan penambahan ekstrak kelopak bunga rosela dan tepung cangkang telur ayam mengalami penurunan intensitas warna merah seiring dengan bertambahnya waktu penyimpanan. Kualitas sampel daging ayam kukus yang dikemas dengan *smart edible film* lebih baik daripada sampel yang dikemas dengan *edible film* tanpa penambahan bahan aktif.

5.2. Saran

Perlu dilakukan penelitian lebih lanjut mengenai aplikasi *smart edible film* dengan penambahan ekstrak kelopak bunga rosela dan tepung cangkang telur ayam terhadap produk pangan, khususnya produk pangan dengan kadar air tinggi agar *smart edible film* yang diaplikasikan tidak mudah sobek atau berlubang.

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