

V. KESIMPULAN DAN SARAN

5.1. Kesimpulan

1. Penambahan ekstrak bunga telang dan tepung cangkang telur pada *smart edible packaging* berpengaruh nyata terhadap *water vapor transmission rate* (WVTR), *tensile strength*, *elongation break*, dan aktivitas antioksidan.
2. Penambahan tepung cangkang telur tidak memberikan pengaruh terhadap total fenol dan antosianin
3. Penambahan ekstrak bunga telang dan tepung cangkang telur pada *smart edible packaging* meningkatkan nilai *water vapor transmission rate* (WVTR) (73,5433-129,0647g/m²/24jam), *elongation break* (5,710- 70,557%), total fenol (1327,2289–1916,3855 mg GAE/100 g sampel), kadar total antosianin (7,5479-10,1863 mg cy-3-glu-eq/100 g sampel), dan aktivitas antioksidan (4,1277- 88,9775%).
4. Penambahan ekstrak bunga telang dan tepung cangkang telur pada *smart edible packaging* menurunkan nilai *tensile strength* (9,9953-1,9878 N/mm²).
5. *Smart edible packaging* dengan penambahan bahan aktif (ekstrak bunga telang dan tepung cangkang telur) efektif dalam mempertahankan kondisi daging ayam dibandingkan dengan kontrol.
6. Terjadi perubahan pada warna *smart edible packaging* (biru menjadi biru kehijauan), warna (putih menjadi coklat), aroma (tidak sedap), dan pH (peningkatan pH 6,15-7,87) daging selama periode tiga hari penyimpanan.

5.2. Saran

Perlu dilakukan penelitian lebih lanjut mengenai bahan tambahan yang mampu meningkatkan ketahanan *smart edible packaging* terhadap air sehingga dapat diaplikasikan secara langsung pada produk yang memiliki kadar air yang tinggi.

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