

ABSTRACT

The research aimed to study Avertroa bilimbi L extract immersed in edible coating, i.e. chitosan to prevent microbial attack on tomatoes. The extract was obtained from leaves of Avertroa bilimbi L using maseration method. The experiment was designed with Completely Randomized Design using three treatments as follows: (1) Chitosan as edible coating, (2) Extract of Avertroa bilimbi L as antimicrobial smeared onto tomatoes, and (3) Chitosan mixed with extract of Avertroa bilimbi L and used as edible coating. Analysis used to test the quality of tomatoes were: hardness, weight loss, colour, titrable acid, acorbic acid, sugar and microbial attack. Result showed that chitosan mixed with extract of Avertroa bilimbi L and used as edible coating gave the best result in maintaining quality of tomatoes based on analysis on hardness, weight loss, colour, titrable acid; acorbic acid and sugar. Extract of Avertroa bilimbi L was succeed in prolong the shelf life on tomatoes into 25 days and prevented microbial attack.

Key Words: *Edible coating, Kitosan, Avertroa blimbi, Shelf Life, Tomatoes.*