

EFFECTS OF POST-HARVEST DIPPING IN HYPOCHLORITE
SOLUTION ON THE CHEMICAL AND PHYSICAL QUALITY OF TOMATO FRUITS

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**EFFECTS OF POSTHARVEST DIPPING IN HYPOCHLORITE SOLUTION
ON THE SHELF-LIFE OF TOMATO FRUITS**

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**This project is submitted in partial fulfillment of the requirement of the degree
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ABSTRACT

Experiments were conducted to investigate the effect of concentration (0%, 0.5%, 1.0%, 2.0%) of sodium hypochlorite treatment on subsequent firmness and against microbial infestation on surface of tomato (*Lycopersicon esculentum*). After 9 days of storage in ambient temperature data showed the firmness of tomato that had been treated with 0.5% of sodium hypochlorite is greater compare to other treatments but insignificance. Result of this study, indicated that the firmness of tomato increase during aging. While, for sugar contents in tomato, there were a little change in TSS value which meant that sodium hypochlorite did not effect the TSS value on tomato. The effectiveness of sodium hypochlorite on inactivation of fungi and bacteria on tomato was investigated. Result showed that, sodium hypochlorite was effective to reduce the postharvest contamination on tomato fruits compared with untreated tomato. Sodium hypochlorite also decreased the microbial growth and prolong the shelf life of stored at ambient temperature. The quality of tomato was found to be good after 9 days of storage. The 1.0% concentration of sodium hypochlorite was found to be effective to use as a sterilant on tomato surface.