

## **CHAPTER 5**

### **CONCLUSIONS**

1. HCP has positive effect on the post harvest quality of longan fruit stored at 10°C, 85% RH. The most effective combine treatment is a carbon dioxide pressure 2 kg-cm<sup>-2</sup> for 1 hour, as this treatment delays an increase in pericarp browning, weight loss, and reduces the respiration rate and fruit decay.

2. The HCP treatment has an effect on some of the biochemical changes in longan fruit, and reduces PFK, PFP, PK, ACC synthase, ACC oxidase, PG and PPO activities. However, TA and pH level (aril and pericarp) are not significantly different from the untreated. Reducing sugar levels tend to increase during storage, and in the untreated fruit revealed the largest reducing sugar content. HCP was neither inhibit *Pestalotiopsis* sp. infection in inoculated longan fruit, nor mycelium growth. A combination of HCP and low storage temperatures are therefore recommended for controlling and maintaining longan fruit quality and decreasing the rate of fruit decay. HCP (2 kg-cm<sup>-2</sup> for 1 hour) and a storage temperature of 5°C, should prolong the shelf-life of treated fruit to 30 days, while untreated fruit remains only 21 days.