

### Abstract

'Paan' lime (*Citrus anrantifolia* Swingle L.) containing distinguished flavour is one of popular varieties in Thailand. A previous study found that green peel colour was decently maintained by dipping in gibberellic acid (GA<sub>3</sub>) before storage. In this study, 200 ppm GA<sub>3</sub> treated lime were coated with 0.5 and 1.0 % (w/v) chitosan and kept on a foam-tray wrapped with LLDPE shrink film and then stored at 13°C (92±2% RH in the room). Levels of internal O<sub>2</sub> were not less than 18% while internal CO<sub>2</sub> concentrations were raised by 4% in lime fruit under MA conditions during storage. MAP showed a great effect on a reduction of weight loss compared to use of chitosan coating. However GA<sub>3</sub> combined with chitosan coating performed a synergic action on chlorophyll preservation in lime peel, related to slowness of L values increasing. Titratable acids of all treatments increased modestly after 50 days while ascorbic acid increased after storage and reduced sharply after 50 days.