

### **Abstract**

Litchi pericarp is highly perishable turning brown quickly within 2-3 days after harvesting at room temperature storage. The effects of chitosan concentrations on inhibiting pericarp browning of litchi cv. Chakrapud were investigated. The experiment was conducted at 4°C with 95% relative humidity using chitosan coating in five concentrations: 0, 0.5, 1.0, 1.5 and 2.0%. The result shown that 1.5% and 2.0% chitosan coating were the most effecting in retarding browning and decreasing respiration rate, ethylene production, weight loss, relative water content, activity of polyphenol oxidase, loss of total phenolic content. The storage life of coated fruit was prolonged up to 19 days, while shelf life of un-coated fruit was 9 days.