

### Abstract:

Fresh-cut products are becoming popular due to the increasing consumer demand for convenience food. Green papaya shreds have always been popular in Thailand for being used in making the delicious 'Som-tam' salad. A primary postharvest problem is the short shelf life of the shreds due to rapid surface color and texture loss, aggravated by safety concern due to microbial contamination. Previous studies have shown that controlled atmospheres (CA) of low oxygen (see related paper) or high carbon dioxide alone could significantly improve shelf life during low temperature holding (Techavuthiporn et al., 2003). Combined low O<sub>2</sub> and high CO<sub>2</sub> may be more effective in maintaining quality of the shreds. This has been shown in shredded lettuce (Barriga et al., 1991; Hamza et al., 1995) and carrot slices, sticks and shreds (Izumi et al., 1996). This study determined the effects of 1-5% O<sub>2</sub> in combination with 5-10% CO<sub>2</sub> on the microbiological and sensory quality changes in green papaya shreds.