

Title Effect of harvest age and processing on some of the biochemical degradations of ready to eat chinese cabbage (*Brassica campestris* L. ssp. *pekinensis* Lour.) during chilled storage

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Abstract

The stage of harvest and different modified atmosphere packaging solutions were tested to study their effect on colour, total polyphenol content and activities of polyphenol oxidase (PPO) in a local cultivar of Chinese cabbage. To this purpose, in the first step of the experiment samples were harvested at different maturity stages: 40, 50, 60 days from sowing and immediately were cut, washed with chlorinated water and packaged under ordinary atmospheric conditions and finally stored at 4°C for 15 days. In a second experiment, heads were harvested 60 days from sowing and wrapped in different modified atmosphere packages. All samples were analyzed at the production day, at the 4th and at the 8th day of storage to check the physical (color), chemical (total polyphenol content), and enzymatic (PPO activity) parameters. Samples harvested at different ripening steps showed appreciable differences in all parameters tested at the production day and during chilled storage, while samples wrapped on modified atmosphere showed differences just in PPO activity and browning during chilled storage.