

Title Effects of harvest time and low temperature storage on the texture of cabbage leaves
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Abstract

Leaf textures of four cabbage cultivars (T-520, Fuyu-nobori, Satsuki-ou, and Kinkei-201) harvested in winter and spring were evaluated. Acoustic vibration signals generated during penetration of four stacked cabbage leaves were measured using a novel texture measurement system. Texture was quantified using a texture index (TI). The TI of T-520 was higher than that of Fuyu-nobori and continually declined during the entire investigation period (between February and May). However, Fuyu-nobori's TI persisted after early April. This implied that Fuyu-nobori was superior to T-520 in terms of preservation of quality. Satsuki-ou showed either an equivalent or higher TI than T-520 in May. Kinkei-201 had a much lower TI than the other cultivars. TIs of T-520 and Fuyu-nobori stored at a 5 °C for 4 weeks were lower than those of samples without storage. This implied that low temperature storage did not effectively retain the texture quality of the cabbages.