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[\[PDF \(649K\)\]](#) [\[References\]](#)**Level of Active Oxygen Species and Antioxidative Enzymes in Broccoli Florets of Cultivars with Different Storability**[Jincai Li](#)¹⁾, [Yasuyo Nishimura](#)²⁾, [Xiheng Zhao](#)¹⁾ and [Shigenori Maezawa](#)³⁾

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The level of active oxygen species and antioxidative enzymes were investigated in broccoli florets of cultivars ('Youxiu' and 'Patriot' which have high storability, and 'Cuiguang' and 'Heights' which have low storability) with different storability. 'Youxiu' in spring and 'Patriot' in autumn have low respiration rates at the beginning of storage compared with those of 'Cuiguang' and 'Heights'. The superoxide anion and hydrogen peroxide content in 'Youxiu' was less than in 'Cuiguang', while the activities of superoxide dismutase, catalase, ascorbate peroxidase and peroxidase were low at the beginning of storage. The hydrogen peroxide content in 'Patriot' was less than that in 'Heights', while the activities of catalase, ascorbate peroxidase and peroxidase were low at the beginning of storage. The change in the value of the quality indicator $-a^*/b^*$ for 'Youxiu' and 'Patriot' was greater than for 'Cuiguang' and 'Heights' after 4 days of storage at 20°C. Therefore, it is suggested that active oxygen species and antioxidative enzymes have low physiological properties in broccoli cultivars with high storability.

Key Words: [activities of antioxidative enzymes](#), [quality change](#), [respiration metabolism](#)[\[PDF \(649K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)

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