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Controlled Atmosphere and Subsequent Air Storage of Broccoli Florets at Various Temperatures

[Hidemi IZUMI](#)¹⁾, [Alley E. WATADA](#)¹⁾ and [Willard DOUGLAS](#)¹⁾
1) Horticultural Crops Quality Laboratory, Beltsville Agricultural Research Center, Agricultural Research Service, U.S. Department of Agriculture

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The physiology and quality of 'Greenbelt' broccoli florets (*Brassica oleracea* L. *italica*) were monitored during CA storage in 0.5% O₂ and 10% CO₂ at 0 and 5°C and in 1% O₂ and 10% CO₂ at 10°C and subsequent air storage at the same temperature. The CA reduced respiration, weight loss, and decay at all temperatures, yellowing and L-ascorbic acid loss at 5 and 10°C, and ethylene production and microbial growth at 10°C. Upon transfer of the florets to air following CA storage for 4, 3, and 1 weeks at 0, 5, and 10°C, respectively, respiration rate increased initially and then remained constant. Ethylene production continually increased. Decay, microbial count, odor, color, and L-ascorbic acid content remained essentially unchanged for a few days after the samples were transferred to air regardless of temperature.

Keywords: [broccoli florets](#), [controlled atmosphere](#), [aeration](#), [respiration](#), [microbial population](#), [hue angle](#), [ascorbic acid](#)


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