

### **Abstract**

Broccoli (*Brassica oleracea* L. Italica Group) heads cv. Top Greens were dipped in 47°C water for 7 min and then stored at 20°C (non-chilling) or 4°C (chilling). Ascorbic acid content sharply decreased after 2 days of storage and remained almost unchanged thereafter. Storage at 4°C generally maintained higher ascorbic acid content than at 20°C. Heat treatment resulted to lower ascorbic acid content than the unheated control both at 20°C and 4°C. It increased ascorbate peroxidase (APX) activity, particularly at 4°C, and decreased dehydroascorbate reductase (DHAR) and monodehydroascorbate reductase (MDHAR) activities. DHAR and MDHAR decreased at a more rapid rate at 20°C than at 4°C.