

#### Abstract:

'Conference' pears were harvested at pre-climacteric stage. After pre-cooling they were placed in cold storage at  $-1^{\circ}\text{C}$  and in controlled atmosphere (CA). After 120, 150, 180 and 210 days of storage the pears were ripened at  $18^{\circ}\text{C}$ . Immediately after removal from cold storage and after 3 and 6 days ripening the contents of chlorophyll and carotene pigments were determined. Chlorophyll (a+b) degradation was fastest at  $-1^{\circ}\text{C}$  and considerably slower in CA. After 180 or 210 days storage breakdown of chlorophyll pigments was generally faster during the first three days of ripening. With 3%  $\text{CO}_2$  and 2%  $\text{O}_2$  degradation of chlorophyll pigments after 3 days was slower than at any date of analysis. A significant increase in carotene pigment contents was observed after 180 days of pears storage in 0%  $\text{CO}_2$  + 2%  $\text{O}_2$  atmosphere and in 2%  $\text{CO}_2$  + 2%  $\text{O}_2$ . CA did not influence changes in carotene pigment concentration in pears ripening for 3 days.