

Abstract:

Superficial scald is an important physiological disorder of stored apple fruit (*Malus domestica* Borkh). The reduction of apple scald with natural antioxidants has been reported by Anet and Coggiola (1974). Whitaker and Saftner (2000) reported that inefficient antioxidant system in the fruit can lead to the induction of superficial scald. The role of naturally occurring antioxidant enzymes, such as, superoxide dismutase (SOD; EC 1.1.1.1), catalase (EC 1.11.1.6), and peroxidase (POD; EC 1.11.1.7) in scald development is not fully understood. These enzymes have been reported to minimize exposure of cells to reactive intermediates of dioxygen reduction (Forney, 2003). The objective of this study was to determine the role of these enzymes in scald development.