

Title Effects of some treatments on quality change of granny smith apples during cold storage
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Abstract

This research was carried out to determine the effects of lovastatin, 1-MCP and hot water treatments on the fruit quality of Granny Smith apple stored in normal (air) and controlled atmosphere conditions. Fruits were picked at the optimum harvest time and transported to Postharvest Physiology Laboratory of Horticulture Department immediately. Lovastatin, 1-MCP, hot water treated and control groups fruits were stored at 0°C temperature and $90 \pm 5\%$ relative humidity conditions during 6 months in normal (air) and 10 months in controlled atmosphere conditions. Weight loss, fruit flesh firmness, fruit colour, titratable acidity, soluble solid contents, respiration rate, ethylene production and sensory analyses (external appearance, superficial scald and internal browning) were determined at the beginning of cold storage and at monthly intervals for normal (air) and two months intervals for controlled atmosphere storage. Superficial scald was detected higher on fruits treated with lovastatin, hot water and control fruits than those treated with 1-MCP. As a result, fruits treated with 1-MCP were stored with a higher quality than hot water and lovastatin treated and control fruits.