Title Post-harvest treatments of apples with calcium chloride

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Abstract

From 2003 to 2006 the efficacy of post-harvest dips in calcium chloride solution was investigated for apples. Aim of these investigations was to find out the influence of different factors on the Ca-uptake of apples after harvest.

The Ca-uptake of the fruit was influenced by following factors:

- the calcium chloride concentration of the dip solution,
- the duration of the dip,
- the duration of fruits' wetting,
- the apple cultivar,
- the addition of a wetting agent and
- the maturity of the fruit.

To get an appreciable Ca-uptake, the addition of a wetting agent is necessary. For a dip time of two minutes calcium chloride concentrations of 7 or 7.5% are needed. Apparently injuries of the apple skin don't appear. An elongation of the dip time or the duration of wetting increased the Ca-uptake. Cultivar and maturity of the fruit affect the Ca-uptake. The increase of the Ca-content can proved only close to the apple skin (skin to 2 cm depth).