

Title Color parameters during cold storage and ripening of tomatoes
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Abstract

Results are presented from a two years study on the color parameters determining the fruit quality and consumer acceptance of tomatoes of three hybrids – ‘Joker F₁’, ‘Townsville F₁’ and ‘Nikolina F₁’. After postharvest ripening at 12°C the fruits picked in mature green stage of ripeness were stored for 6 weeks at 1°C. Tomatoes harvested in red stage were stored under the same temperature conditions for 6 weeks. Color parameters: brightness L*, +a* – red spectral color, +b* – yellow spectral color and the ratio a*/b* – the color hue were studied. It was established that tomatoes acquired a typical colour during ripening. The values of parameter which characterizes red color of tomatoes ripened at low temperature were lower compared with tomatoes in red stage during harvesting, but near the values of the same tomatoes after six weeks of storage. The values of parameter b were higher, which could be associated with the synthesis of higher β-carotene content during the process of non-field ripening.