

#### Abstract:

The freezing process of sweet pepper cultivars chosen after preliminary selection was studied. Pepper was frozen at 0.7, 1.8 and 8.5 cm/h rate determining characteristic freezing curves. The samples not blanched and blanched in water (85 °C for 90 sec or 95 °C for 60 sec) were examined. Thawing was performed in water at 20 °C. The initial cryoscopic temperatures of pepper ranged from -0.8 °C to -1.1 °C and the final ones from -3.9 °C to -4.3 °C. As a result of studies on peroxidase activity, cutting force, penetration tests, microscopic examinations of tissue structure and sensory assessment, the unfavourable effect of blanching on the frozen pepper quality became evident. The favourable influence of high freezing rate was confirmed for all the pepper quality indicators. 'King Arthur' proved to have the best suitability for freezing among the cultivars examined.