P-149 (250)

ASSESSMENT OF FRUIT ANTHOCYANIN CHANGES OF SOME IRANIAN SOUR-CHERRY GENOTYPES COMPARED TO MONTMORENCY CULTIVAR IN COLD STORAGE

Hadis Goodarzi, Department of Horticultural Science, Islamic Azad University, Karaj Branch, Karaj, Iran; <u>h.godarzi1393@gmail.com</u> (Presenting author)

Assoc. Prof. Naser Bouzari, Horticultural Science Researcher Institute, Karaj, Iran; bouzari1111@yahoo.com

Assoc. Prof. Syamak Kalantari, Department of Horticultural Science, University of Tehran, Karaj, Iran; <u>kalantaris@ut.ac.ir</u>

More red, blue, purple and violet colours in fruits are depending anthocyanin pigments. The study was conducted to compare anthocyanin content between three native genotypes with the Montmorency cultivar. Storage conditions were including: temperature \pm 5°C, relative humidity (RH) 95-90% and sampling times (days 0, 7, 14 and 21). Results indicated that the highest anthocyanin content was revealed in genotype 5155 whereas had not statistically significant differences rather than genotypes 5193 and 5259. In addition the lowest anthocyanin content was observed in Montmorency cultivar. Also, the highest anthocyanin content was observed in day 21, nonetheless was not statistically significant difference with days 14 and the lowest anthocyanin content related to storage time at days 7. Finally it can be said that these native genotypes have more quality than Montmorency cultivar and high ability maintaining anthocyanin during storage.

Keywords: sour cherry, anthocyanin, cold storage, Montmorency