Abstract Data on chromatic parameters allow objective assessment of fruit color at maturity of consumption, by analyzing hydroalcoholic extracts obtained and monitoring color development during their storage. This paper aims to determine the chromatic parameters (L, a, b, C, H°) and anthocyanin content of ethanolic extracts obtained from fruits of four varieties of sour cherry (Prunus cerasus L.) and six varieties of cherry (Prunus avium L.) grown in the experimental field of Research Development Station for Fruit growing, Iasi, using CIE Lab-76 method and data digitization program Vincolor modified. Bitter cherry variety Amar de Maxut, presented the most important content in anthocyanins (443.72±1.54 mg/100g) and total phenolic compounds (794.62±0.08 mg GAE/100g), this variety having the most intensely colored fruits of the analyzed varieties. The color of each extract was simulated electronically using the program Digital Colour Atlas ® 3.0 Demoversion, based on values obtained from spectral analysis (λ 380-780 nm).

Key words: chromatic parameters, cherry, sour cherry, anthocyanins