Research concerning quality parameters change of early sweet cherry cultivars during maturation

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During May-June 2009, 5 early sweet cherry cultivars ("Cetaţuia", "Cătălina", "Rivan", "Bigarreau Moreau" and "Bigarreau Burlat") were considered for the study of existing experimental plot of Fruit Growing Research Station Iași- Romania, who sought modification of quality parameters during maturation: equatorial diameter, fruit weight and soluble solids content. For analized fruit size, determinations were made on the equatorial diameter and fruit weight in 5 dates corresponding to different stages of maturation between 20 and 50 days after full bloom. There have been changes of these parameters between the first and the 5th date of harvest, as follows: fruit weight increased in "Cetățuia" from 0.76 g to 3.13 g and "Bigarreau Moreau" from 1.01 g to 5.63 g; equatorial diameter of "Bigarreau Moreau" increased from 10.55 mm to 21.62 mm, and "Cetățuia" increased from 10.28 mm to 16.28 mm. To determine the sweet taste, was analyzed soluble solids content in 3 different stages of maturation between 30 and 50 days after full bloom. "Cetățuia" has increased from 10.2° Brix to 14.6° Brix and "Bigarreau Moreau" from 9.9° Brix to 13° Brix. "Catalina" noted compared with the varieties studied, the average fruit weight and soluble solids content with values of 6.45 g and 15.63° Brix respectively in the last stage of maturation and "Bigarreau Moreau" was noted by equatorial diameter which averaged 21.62 mm at the last stage of maturation.

Catalina, Bigarreau Burlat and Bigarreau Moreau have optimum harvest period in the range 38-42 days after full bloom, but Catalina have better fruit quality.