

## **RESULTS REGARDING THE ECOPHYSIOLOGICAL DEVELOPMENT OF SOME SWEET CHERRY CULTIVARS UNDER THE IMPACT OF CLIMATE CHANGE**

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### **Abstract**

The research of this study presents some aspects regarding the influence of ecologic conditions of agricultural year 2022 on the development and fruiting of three sweet cherry cultivars ('Van', 'Andreiș' and 'Margonia') located at the Research Station for Fruit Growing Iasi (N-E of Romania). Phenological stages, fruit quality traits and the dynamic of pigment content of shoot leaves during growth and fructification processes were studied. Observations and determinations were performed in regards the unfolding of the phenophases: the active thermal balance (°C) and rainfall quantity (mm) on period between bud swelling (51 BBCH) to fruit ripening (89 BBCH), physical and chemical traits of the fruit (the equatorial diameter, the thickness, the length, weight and soluble dry solids SDS%) and the photosynthetic pigments content which was appreciated spectrophotometrically, by light absorption of the acetone pigment extract. All three cultivars presented productivity, fruit quality and a good adaptability to the pedoclimatic conditions in the area of Romania.

**Key words:** *Prunus avium* L., temperature, rainfall, phenology, pigment content