

# BOOK OF ABSTRACTS



*XIV International Scientific Agriculture Symposium  
"Agrosym 2023"  
Jahorina, October 05-08, 2023*



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## NEWLY CREATED ČAČAK'S SOUR CHERRY VARIETIES AS A RAW MATERIAL FOR SPIRIT PRODUCTION

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### Abstract

According to the average annual production, sour cherries take the third place in Serbian fruit production. In the assortment, the most represented is the autochthonous variety 'Oblačinska', which is characterized by a very small fruit. In recent decades, large-fruited varieties bred at the Fruit Research Institute in Čačak, have become more widespread in sour cherry orchards. Some of the newly bred varieties, similar to 'Oblačinska', are characterized by combined properties and can be used as fresh fruit and/or for various types of processing. Sour cherries are mainly used in Serbia as raw material for obtaining numerous products. Frozen cherries dominate, but juices, sour cherry in brine, dried fruits, candied fruits, compote, wine, vinegar, liqueurs are also produced, and in recent years, sour cherry spirit is gaining interest. The paper presents the results of two-year examinations of the suitability of two varieties of sour cherries with combined properties - 'Šumadinka' ('Köröser Weichsel' × 'Heimanns Konservenweichsel') and 'Sofija' ('Čačanski rubin' × 'Heimanns Konservenweichsel'), bred in Čačak, and standard variety 'Heimanns Konservenweichsel', for the production of spirits. The sour cherry spirits were produced from spontaneously fermented mashes of sour cherry fruits with stones, followed by double distillation in alembic of traditional design. The obtained monovarietal sour cherry spirits differed significantly in spirit yields and contents of the ten major volatile components. Based on the results of sensory analysis in both years, all obtained monovarietal sour cherry spirits can be classified as high-quality spirit drinks.

**Keywords:** *Prunus cerasus*, sour cherry spirit, yield of distillate, volatile components, sensory characteristics.